



National Pollutant Discharge Elimination System General Permit for Discharge of Stormwater from the Connecticut Department of Transportation Separate Storm Sewer Systems

Permit No: CTR040000

This National Pollutant Discharge Elimination System General Permit for the Discharge of Stormwater from the Connecticut Department of Transportation Separate Storm Sewer System is issued in accordance with Section 22a 430 of Chapter 446k, Connecticut General Statutes (“CGS”), and Regulations of Connecticut State Agencies (“RCSA”) adopted thereunder, as amended, and Section 402(b) of the Clean Water Act (“CWA”), as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a NPDES permit program. This general permit authorizes discharges to surface and ground waters of the State of Connecticut. Persons shall comply with all conditions of this permit.

This general permit becomes effective July 1, 2025. This permit and the authorization to discharge shall expire five (5) years from the effective date. This permit expires on June 30, 2030.

Issued: June 23, 2025

Emma Cimino
Deputy Commissioner

This page is intentionally left blank.

Table of Contents

Section 1	Authority	6
Section 2	Definitions	6
Section 3	Authorization Under this General Permit	11
3.1	Eligible Activities	11
3.2	Requirements for Authorization	11
3.3	Geographic Area	15
3.4	Effective Date and Expiration Date of this General Permit	15
3.5	Effective Date of Authorization	15
3.6	Transition to and from an Individual Permit	15
Section 4	Registration Requirements	17
4.1	Who Must File a Registration	17
4.2	Scope of Registration	17
4.3	Contents of Registration	17
4.4	Additional Information	18
4.5	Where to File a Registration and Stormwater Management Plan	18
4.6	Availability of Registrations, Stormwater Management Plans, and Annual Reports	19
4.7	Actions by Commissioner	20
4.8	Termination of Discharge	20
Section 5	Requirements of this General Permit	21
5.1	Conditions Applicable to Certain Discharges	21
5.2	Stormwater Management Plan	23
Section 6	Development of Stormwater Management Plan	24
6.1	Minimum Control Measures	24
6.2	Impaired Waters Monitoring Program	44
6.3	Sharing Responsibility	46
6.4	Proper Operation and Maintenance	46
6.5	Signatory Requirements	47
6.6	Plan Review Fee	47
6.7	Maintenance and Implementation of a Current SMP	47
6.8	Failure to Prepare or Amend Stormwater Management Plan	47
6.9	Stormwater Management Plan Certification	47
6.10	Recordkeeping & Reporting Requirements	47
Section 7	Duty to Correct, Record, and Report Violations	50
7.1	Corrective Actions	50

7.2	Reporting Violations	50
Section 8	Additional Requirements of this General Permit.....	52
8.1	Regulations of Connecticut State Agencies Incorporated into this General Permit.....	52
Section 9	Standard Conditions	53
9.1	Inspection and Entry	53
9.2	Reliance on Registration	53
9.3	Submission of Documents	53
9.4	Violations.....	53
9.5	Enforcement.....	53
9.6	Need to Halt or Reduce Activity Not a Defense	53
9.7	No Assurance	53
9.8	Relief.....	53
9.9	Duty to Provide Information	53
9.10	Duty to Comply.....	53
9.11	Duty to Mitigate.....	54
9.12	Sludge Disposal.....	54
9.13	Resource Conservation	54
9.14	Spill Prevention and Control.....	54
9.15	Duty to Reapply	54
9.16	Equalization	54
9.17	Effect of an Upset	55
9.18	Bypass	55
9.19	Necessary Bypass.....	55
9.20	Bypass Prevention.....	55
9.21	Notification to DEEP	55
9.22	Proper Operation and Maintenance.....	56
9.23	Instrumentation, Alarms, and Flow Records.....	56
9.24	Signatory Requirements.....	56
9.25	Duly Authorized Representative	56
9.26	Notification to DEEP	57
9.27	Certification	57
9.28	Date of Filing	57
9.29	False Statements.....	57
9.30	Correction of Inaccuracies	57
9.31	Transfer of Authorization.....	58

9.32	Other Applicable Law	58
9.33	Duty to Reapply	58
9.34	Other Rights	58
9.35	Effect of a Permit	58
Section 10	Commissioner's Powers.....	59
10.1	Abatement of Violations	59
10.2	General Permit Revocation, Suspension, or Modification.....	59
10.3	Filing of an Individual Application.....	59
APPENDIX A: Small MS4 Municipalities.....		60
APPENDIX B: Illicit Discharge Detection and Elimination (IDDE) Protocol		61
APPENDIX C: Guidance for Aquifer Protection Areas and Other Groundwater Drinking Supply Areas		69
APPENDIX D: Impaired Waters Guidance		71
APPENDIX E: DCIA Reduction Program Crediting and Guidance.....		74

General Permit for Discharge of Stormwater from the Connecticut Department of Transportation Separate Storm Sewer System

Section 1 Authority

This general permit is issued under the authority of Section 22a-430b of the Connecticut General Statutes.

Section 2 Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in Sections 22a-423 of the Connecticut General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

“x-year, 24-hour Rainfall Event” means the maximum 24-hour precipitation event with a probable recurrence interval of once in the given number of years (i.e., x=2, 25, or 100), as defined by the National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 10 Point Precipitation Frequency (PF) Estimates: CT (http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ct), or equivalent regional or state rainfall probability information developed therefrom.

“Aquifer Protection Area” means aquifer protection area as defined in Section 22a-354h of the Connecticut General Statutes.

“Best engineering practices” means the design of engineered control measures to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable.

“Best Management Practices” or “BMPs” means schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the state consistent with state, federal or other equivalent and technically supported guidance. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from material storage.

“CFR” means the Code of Federal Regulations.

“CGS” means Connecticut General Statutes.

“Clean Water” means water which in the judgment of the Commissioner is of a quality substantially similar to that occurring naturally in the receiving stream under consideration. Clean water may include minor cooling waters, residential swimming pool water, and stormwater.

“Coastal Area” means coastal area as defined in Section 22a-93(3) of the Connecticut General Statutes.

“Coastal Jurisdiction Line” or “JDL” means coastal jurisdiction line as defined in Section 22a-359(c) of the Connecticut General Statutes.

“Coastal Waters” means coastal waters as defined in Section 22a-93(3) of the Connecticut General Statutes.

“Commissioner” means Commissioner as defined in Section 22a-2(a) of the Connecticut General Statutes.

“Control Measures” means any BMPs or other methods (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the state.

“CTDOT” or “DOT” means the Connecticut Department of Transportation.

“*CTDOT MS4*” means conveyances for stormwater including, but not limited to, roads with drainage systems, streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains owned or operated by the Connecticut Department of Transportation and discharging directly to surface waters of the state.

“*Day*” means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

“*DEEP*” or “*Department*” means the Department of Energy & Environmental Protection.

“*Directly Connected Impervious Area*” or “*DCIA*” means that impervious area from which stormwater runoff discharges directly to waters of the state or directly to a storm sewer system that discharges to waters of the state. Impervious areas that discharge through a system designed to retain and/or treat the appropriate portion of the Water Quality Volume (pursuant to Section 6.1.6.2 and Appendix E of this general permit) are not considered DCIA.

“*Discharge*” means the emission of any water, substance, or material into the waters of the state, whether or not such substance causes pollution as defined in Section 22a-423 of the Connecticut General Statutes.

“*Fresh-tidal Wetland*” means a tidal wetland located outside of coastal waters.

“*Grab Sample*” means an individual sample collected in less than fifteen minutes.

“*Groundwater*” means those waters of the state that naturally exist or flow below the surface of the ground.

“*Guidelines*” means the Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, established pursuant to Section 22a-328 of the Connecticut General Statutes.

“*High Quality Waters*” means those waters defined as high quality waters in the Connecticut Water Quality Standards pursuant to Section 22a-426-1 of the Regulations of Connecticut State Agencies.

“*Illicit Discharge*” means any unpermitted discharge to waters of the state that does not consist entirely of stormwater or uncontaminated ground water except those discharges identified in Section 3.1.1 of this general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

“*Impaired water(s)*” for the purposes of this permit, means any waterbody that does not meet applicable water quality standards, including but not limited to waters listed in categories 5 or 4b on the Connecticut Integrated Report of waters listed pursuant to Clean Water Act Section 303(d) and 305(b). Impaired Waters are also known as “Water Quality Limited Waters.”

“*Individual Permit*” means a permit issued to a named Permittee under Section 22a-430 of the Connecticut General Statutes.

“*Inland Wetland*” means wetlands as that term is defined in Section 22a-38 of the Connecticut General Statutes.

“*Legal Authority*” or “*Legal Authorities*” means statutes, rules, regulations, permits, easements, policies, procedures, contracts, orders, standard conditions of approval, construction requirements, and/or other appropriate authority or regulatory mechanism.

“*Low Impact Development*” or “*LID*” means a site design strategy that maintains, mimics, or replicates pre-development hydrology through the use of numerous site design principles and small-scale treatment practices distributed throughout a site to manage runoff volume and water quality at the source.

“MCM” means Minimum Control Measure.

“MEA” means Maximum Extent Achievable.

“MEP” means Maximum Extent Practicable.

“Minimize”, for purposes of implementing the Minimum Control Measures in Section 6 of this general permit, means to reduce and/or eliminate to the Maximum Extent Practicable (MEP).

“Municipal Separate Storm Sewer System” or “MS4” means conveyances for stormwater (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by any municipality or by any state or federal institution or other public body created by or pursuant to state law and discharging to surface waters of the state.

“Municipality” means any metropolitan district, town, consolidated town and city, consolidated town and borough, city, borough, village, fire and sewer district, sewer district, and each municipal organization having authority to levy and collect taxes or make charges for its authorized function as defined by Section 22a-423 of the Connecticut General Statutes.

“New discharger” means 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 has never received a finally effective NPDES permit for discharges at that “site.”

“New or Increased Discharge” means new discharge or activity as defined in Section 22a-426-8(b)(3) and increased discharge or activity as defined in Section 22a-426-8(b)(2), as referenced to the Regulations of Connecticut State Agencies.

“New source” means any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced after February 1, 2010.

“NPDES Permit” means a permit authorizing a discharge to the surface waters of the state either directly, or indirectly by means other than through a POTW or the ground waters, which is issued by the Commissioner pursuant to Section 22a-430 of the Connecticut General Statutes.

“Permittee” means the Connecticut Department of Transportation that initiates, creates, originates, or maintains a discharge authorized by this general permit and that has filed a registration pursuant to Section 4 of this permit.

“Person” means person as defined by Section 22a-2(b) of the General Statutes.

“Point Source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. Point source does not include agricultural stormwater discharges and return flows from irrigated agriculture.

“Qualified Professional Engineer” means a professional engineer licensed in accordance with chapter 391 of the Connecticut General Statutes who: (1) has, for a minimum of eight (8) years, engaged in the planning and designing of engineered stormwater management systems for (i) municipal separate storm sewer systems and (ii) residential and commercial construction projects in accordance with the Guidelines and the Stormwater Quality Manual including, but not limited to, a minimum of four (4) years in responsible charge of the planning and designing of engineered stormwater management systems for such projects; or (2) is currently certified as a

Professional in MS4 Stormwater Compliance as designated by EnviroCert International, Incorporated, or other certifying organization acceptable to the Commissioner, and for a minimum of six (6) years, has engaged in the planning and designing of engineered stormwater management systems for (i) municipal separate storm sewer systems and (ii) residential and commercial construction projects in accordance with the Guidelines and the Stormwater Quality Manual including, but not limited to, a minimum of two (2) years in responsible charge of the planning and designing of engineered stormwater management systems for such projects; or (3) currently provides engineering services for the Permittee by employ or by contract.

“*RCSA*” means the Regulations of Connecticut State Agencies.

“*Redevelopment*” means any construction activity (including, but not limited to, clearing and grubbing, grading, excavation, and dewatering) within existing drainage infrastructure or at an existing site to modify or expand or add onto existing buildings or structures, grounds, or infrastructure.

“*Registrant*” means Connecticut Department of Transportation which files a registration.

“*Registration*” means a registration form filed with the Commissioner.

“*Retain*” or “*Retention*” means to hold runoff on-site to promote vegetative uptake and groundwater recharge through the use of runoff reduction or LID practices or other applicable Best Management Practices described in the Stormwater Quality Manual or as approved by the Commissioner in writing.

“*Runoff Reduction Practices*” means those post-construction stormwater management practices used to reduce post-development runoff volume delivered to the receiving water, as defined by retaining the volume of runoff from a storm in accordance with Sections 6.1.5.3.a or 6.1.5.3.b, respectively. Runoff reduction is quantified as the total annual post-development runoff volume reduced through canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration, or evapotranspiration.

“*Scupper*” means a stormwater drainage outlet from a bridge, viaduct, or other elevated structure that discharges directly to land or water surface without connection to a storm sewer system or other stormwater collection system.

“*Small MS4*” means any MS4 located partially or entirely within an Urban Area that has at least 1,000 residents in the Urban Area as determined by the 2020 census, all state or federally operated MS4s (except CTDOT) with an average daily population of at least 1,000 people within an Urban Area, all registrants authorized under any previous version of the DEEP *General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems*, and any other MS4s located outside an Urban Area as may be designated by the Commissioner under Residual Designation Authority (pursuant to 40CFR 122.26(a)(9)(i)(C) and (D)). A list of Small MS4 municipalities can be found in Appendix A of this general permit. These municipalities are authorized under a different NPDES permit.

“*Standard of Care*”, as used in Section 3.1.10, means to endeavor to perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

“*State or Federal Institution*” or “*Institution*” means any facility (including, but not limited to, state and federal prisons, office complexes, hospitals; university campuses, public housing authorities, schools, or other special districts) consisting of more than one building that is owned by an agency or department of the State of Connecticut (except the Department of Transportation) or a federal agency.

“*Stormwater*” means waters consisting of rainfall runoff, including snow or ice melt during a rain event.

“Stormwater Quality Manual” means the Connecticut Stormwater Quality Manual published by the Connecticut Department of Energy & Environmental Protection, as amended and maintained at <http://www.ct.gov/deep/stormwaterqualitymanual>.

“Surface Waters” means the waters of Long Island Sound, its harbors, embayments, tidal wetlands, and creeks; rivers and streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs, federal jurisdictional wetlands, and other natural or artificial, public or private, vernal or intermittent bodies of water. Surface water does not include ground water.

“Surface Water Discharge” means any discharge which is discharged directly to a surface water body or stormwater collection system, including, but not limited to, direct pipe discharges and ground surface run-off discharges which are not totally absorbed by the soil.

“Tidal Wetland” means a wetland as that term is defined in Section 22a-29(2) of the Connecticut General Statutes.

“Total Maximum Daily Load” or *“TMDL”* means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (“WLAs”) for point source discharges, load allocations (“LAs”) for nonpoint sources and/or natural background, and must include a margin of safety (“MOS”) and account for seasonal variations.

“Treat” or *“Treatment”* means to reduce the pollutants in stormwater runoff through the implementation of Best Management Practices that have measurable pollutant reduction efficiencies using the methodology in Appendix E or other criteria approved by the Commissioner in writing.

“Urban Area” or *“UA”* means the areas of the State of Connecticut so defined by the U.S. Census Bureau for the 2020 census.

“Watercourse” means watercourse as defined in Section 22a-38 of the Connecticut General Statutes.

“Water Quality Standards or Classifications” means those water quality standards or classifications contained in Sections 22a-426 -1 through 22a-426-9, inclusive, of the Regulations of Connecticut State Agencies and the Classification Maps adopted pursuant to Section 22a-426 of the Connecticut General Statutes, which together constitute the Connecticut Water Quality Standards, as may be amended.

“Water Quality Volume” or *“WQV”* means the volume of runoff generated on a site by the Water Quality Storm as defined in the Connecticut Stormwater Quality Manual, as amended.

“Wetland” means both tidal wetland as that term is defined in Section 22a-29(2) of the Connecticut General Statutes and inland wetlands as that term is defined in Section 22a-38(15) of the Connecticut General Statutes.

Section 3 Authorization Under this General Permit

3.1 Eligible Activities

This general permit authorizes the discharge of stormwater from or associated with the Connecticut Department of Transportation (“CTDOT”) Municipal Separate Storm Sewer System (“MS4”), provided the requirements of Section 3.2 are satisfied and the activity is conducted in accordance with the conditions listed in Section 5 of this general permit to the Maximum Extent Practicable (“MEP”).

3.1.1 Allowable Non-stormwater Discharges

This permit authorizes the following non-stormwater discharges provided: the Permittee controls such non-stormwater discharges to the MEP, do not contribute to a violation of instream Water Quality Standards, and are documented in the Stormwater Management Plan (“SMP”):

- uncontaminated ground water discharges including, but not limited to, uncontaminated pumped ground water, foundation drains, water from crawl space pumps and footing drains.
- irrigation water including, but not limited to, landscape irrigation and turf watering runoff.
- residual street wash water associated with sweeping.
- water generated from operations conducted under the CTDOT Structure Cleaning Program.
- discharges or flows from firefighting activities (except training).
- naturally occurring discharges such as rising ground waters, uncontaminated ground water infiltration, springs, diverted stream flows and flows from riparian habitats and wetlands.

Any non-stormwater discharge to the MS4 authorized by a permit issued by DEEP pursuant to Section 22a-430 or 22a-430b of the Connecticut General Statutes is also authorized under this general permit.

All other non-stormwater discharges except those specifically listed are not authorized by this permit.

3.2 Requirements for Authorization

This general permit authorizes the activity listed in Section 3.1 of this general permit provided:

3.2.1 Limitations of Coverage

Prohibited discharges under this general permit are as follows:

- discharges of water, substances, or material into the waters of the state other than eligible discharges specified in this general permit.
- discharges of polychlorinated biphenyl (“PCB”) compounds.
- discharges of mercury.

3.2.2 Complete Registration

A completed registration pursuant to Section 4 of this general permit shall be filed with the Commissioner.

3.2.3 Coastal Management Act

Such activity is consistent with all applicable goals and policies in Section 22a-92 of the Connecticut General Statutes and must not cause adverse impacts to coastal resources as defined in Section 22a-93(15) of the Connecticut General Statutes.

3.2.4 Endangered and Threatened Species

Such activity shall not threaten the continued existence of any species listed as endangered or threatened pursuant to Section 26-306 of the Connecticut General Statutes and must not result in the destruction or adverse modification of habitat designated as essential to such species.

3.2.5 Aquifer Protection Areas

Such activity, if it is located within an aquifer protection area as mapped under Section 22a-354b of the Connecticut General Statutes, must comply with regulations adopted pursuant to Section 22a-354i of the Connecticut General Statutes.

3.2.6 Conservation and Preservation Restrictions

Such activity, if located within a conservation or preservation restriction area, complies with Section 47-42d of the CGS, by providing the following documentation to the Commissioner: proof of written notice to the holder of such restriction of the proposed activity's registration pursuant to this general permit or a letter from the holder of such restriction verifying that the proposed activity is in compliance with the terms of the restriction.

3.2.7 Wild and Scenic Rivers Act

Such activity must be consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) for those river components and tributaries which have been designated as Wild and Scenic by the United States Congress. Further, such activity must not have a direct and adverse effect on the values for which such river designation was established.

3.2.8 Discharge to Publicly Owned Treatment Works

The stormwater is not discharged to a Publicly Owned Treatment Works ("POTW").

3.2.9 Discharge to Groundwater

The stormwater is not discharged entirely to groundwater.

3.2.10 Antidegradation

Such activity is consistent with the Antidegradation Standards of Section 22a-426 of the RCSA.

3.2.11 New or Increased Discharges to High Quality Waters

On or before thirty (30) days prior to the commencement of a new or increased discharge to High Quality Waters from its MS4, the Permittee must document compliance with the Connecticut Antidegradation Implementation Policy in the Water Quality Standards, as amended. Before commencing any new or increased discharge, the Permittee shall identify in its Stormwater Management Plan ("SMP"), the control measures it will implement to ensure compliance with antidegradation provisions and the terms of this permit. At minimum, the Permittee shall evaluate and implement, to the Maximum Extent Practicable, practices which will prevent the discharge of the Water Quality Volume to a surface water body or implement other practices necessary to protect and maintain designated uses and meet standards and criteria contained in the Water Quality Standards.

3.2.12 New or Increased Discharges to Impaired Waters

A new or increased discharge is not authorized to an impaired waterbody that is listed in the most recent Connecticut Integrated Water Quality Report pursuant to Clean Water Act Sections 303(d) and 305(b) unless the Permittee provides in their Annual Report the following documentation demonstrating that the discharge is not expected to cause or contribute to an exceedance of the Water Quality Standard(s) that caused the impairment:

- 3.2.12.1 For discharges of pollutants which cause or contribute to the impairment of a water body segment without an established Total Maximum Daily Load (TMDL)

The Permittee must document in their Annual Report that they have implemented the control measures in Section 6.1 and the screening and monitoring requirements in Section 6.2 to the MEP. Such documentation shall be deemed sufficient to demonstrate that the discharge of the pollutant identified as an indicator of the impairment will meet in-stream water quality standards and criteria at the point of discharge to the waterbody.

- 3.2.12.2 For discharges to waterbody segments impaired for Aquatic Life Uses

Discharges shall not contain concentrations of any pollutants with a Water Quality Criteria ("WQC") identified in Table 3 of Section 22a-426-9 of the RCSA in concentrations greater than the more restrictive of the chronic aquatic life criteria or applicable human health criteria. Compliance with Sections 6.1 and 6.2 to the MEP shall be deemed to meet this requirement unless the Permittee is aware of conditions that may result in an exceedance of such criteria

- 3.2.12.3 For discharges to waters with an established TMDL

The Commissioner must determine if there are sufficient allocations in the TMDL to allow the discharge. The Commissioner may notify the Permittee that they must implement additional measures in order to authorize the discharge.

3.2.13 Certification Requirements for Registrants and Other Individuals

As part of the registration for this general permit, the Registrant and any other individual or individuals principally responsible for preparing the registration shall submit to the Commissioner a written certification which, at minimum, complies with the following requirements:

- 3.2.13.1 Review

The Registrant and any other individual(s) responsible for preparing the registration and signing the certification have completely and thoroughly reviewed this general permit and the following regarding the activities to be authorized under such general permit:

- a. all registration information provided in accordance with Section 4.3.2 of such general permit.
- b. the Stormwater Management Plan.
- c. any plans, specifications, and Department approvals regarding such Stormwater Management Plan.

- 3.2.13.2 Affirmative Determination

The Registrant and any other individual(s) responsible for preparing the registration and signing the certification pursuant to this general permit have, based on the review described in Section 3.2.13.1 of this general permit, made an affirmative determination to:

- a. comply with the terms and conditions of this general permit.
- b. maintain compliance with all plans and documents prepared pursuant to this general permit, including, but not limited to, the Stormwater Management Plan.
- c. properly implement and maintain the elements of the Stormwater Management Plan.
- d. properly operate and maintain all stormwater management measures and systems in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution.

- 3.2.13.3 Certification Statement

Such Registrant and any other individual(s) responsible for preparing the registration certifies to the following statement:

"I hereby certify that I am making this certification in connection with a registration under the *General Permit for the Discharge of Stormwater from the Department of Transportation Separate Storm Sewer Systems*, submitted to the Commissioner by the Connecticut Department of Transportation for an activity located at or within the State of Connecticut and that all terms and conditions of the general permit are being met for all discharges which have been created, initiated or maintained and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3.2.13.1 of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3.2.13.2 of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

3.2.14 Stormwater Management Plan Certification

As part of the Stormwater Management Plan, the Registrant shall submit to the Commissioner a written certification by a Qualified Professional Engineer who has reviewed the SMP in accordance with the following requirements:

3.2.14.1 Review

The Qualified Professional Engineer has, at minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under such general permit:

- a. all registration information provided in accordance with Section 4.3.2 of such general permit.
- b. the Stormwater Management Plan.
- c. all non-engineered and engineered stormwater management measures and systems, including any plans, specifications and Department approvals regarding such stormwater management measures and systems.

3.2.14.2 Affirmative Determination

A Qualified Professional Engineer signing the certification must have made an affirmative determination, based on the review described in Section 3.2.14.1 of this general permit and on best engineering practices, that the SMP and control measures therein are adequate to assure that the activity authorized under this general permit will comply with the terms and conditions of such general permit and that all non-engineered and engineered stormwater management measures and systems:

- a. have been designed in accordance with best engineering practices.;
- b. will function properly as designed;
- c. are adequate to ensure compliance with the terms and conditions of this general permit; and
- d. will protect the waters of the state from pollution.

3.2.14.3 Certification Statement

The qualified professional engineer, as specified in Section 3.2.14.1, shall certify to the following statement:

"I hereby certify that I am a qualified professional engineer, as defined in the *General Permit for the Discharge of Stormwater from the Department of Transportation Separate Storm Sewer Systems*. I am making this certification in connection with a registration under such general permit, submitted to the Commissioner by the Connecticut Department of Transportation for an activity located at or within the State of Connecticut. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3.2.14.1 of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify, based on my review of all information described in Section 3.2.14.1 of such general permit and on the standard of care for such projects, that I have made an affirmative determination in accordance with Section 3.2.14.2 of this general permit. I understand that this certification is part of a registration submitted in accordance with Section 22a-430b of Connecticut General Statutes and is subject to the requirements and responsibilities for a qualified professional in such statute. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under Section 53a-157b of the Connecticut General Statutes and any other applicable law."

3.3 Geographic Area

This general permit applies throughout the State of Connecticut.

3.4 Effective Date and Expiration Date of this General Permit

This general permit is effective on the date it is issued by the Commissioner and expires five (5) years from such date. The general permit may be administratively continued in effect until the Department has reissued the permit in accordance with the CGS and RCSA. If the permit is administratively continued, the Permittee is required to comply with all permit terms and conditions, including the monitoring requirements and submittal of reports at the original frequency during the continuance of the permit.

3.5 Effective Date of Authorization

Upon the effective date of this general permit, Permittees that had existing authorization shall have continued authorization to discharge under the terms and conditions of this general permit upon the effective date of this general permit, provided a complete registration for this general permit is submitted to the Commissioner on or before ninety (90) days of the effective date of this general permit.

If the Existing Permittee does not submit an appropriate, complete, and accurate registration requesting authorization to discharge under this general permit or a Notice of Termination, if applicable, on or before ninety (90) days following the effective date of this permit, authorization under this permit will terminate on such due date. The Permittee must then submit a new registration in compliance with the full terms and conditions of this permit. The Commissioner will review and approve, reject, or deny such registrations in writing.

3.6 Transition to and from an Individual Permit

No person shall operate or conduct an activity authorized by both an individual permit and this general permit. The requirements for transitioning authorization are as follows:

3.6.1 Transition from an Individual Permit to Authorization Under this General Permit

If an activity meets the requirements of authorization of this general permit and such operation or activity is presently authorized by an individual permit, the Permittee may seek a modification to the individual permit to exclude such operation or activity from that permit. If the operation or activity is the sole operation

or activity authorized by such permit, the Permittee shall surrender its permit in writing to the Commissioner. In either event, such Permittee's individual permit shall continue to apply and remain in effect until authorization of such operation or activity under this general permit takes effect.

3.6.2 Transition from Authorization Under this General Permit to an Individual Permit

If an activity or operation is authorized under this general permit and the Commissioner subsequently issues an individual permit for the same activity, then on the date any such individual permit is issued by the Commissioner, the authorization issued under this general permit shall automatically expire.

Section 4 Registration Requirements

4.1 Who Must File a Registration

The Connecticut Department of Transportation shall file with the Commissioner a registration using the prescribed form that meets the requirements of this section of this general permit. Such form shall be submitted within the timeframe specified in Section 3.5.

4.2 Scope of Registration

A Permittee shall register on one (1) registration form for all discharges that are owned or operated by the Connecticut Department of Transportation. CTDOT may not submit more than one (1) registration under this general permit.

4.3 Contents of Registration

4.3.1 Fees

No registration fee is required for this general permit.

4.3.2 Registration Form

The registration shall be filed on a form prescribed and provided by the Commissioner and shall include the following:

- 4.3.2.1 The name, title, address, e-mail address, and telephone number of the Commissioner of Transportation.
- 4.3.2.2 Name, address, email address, and telephone number of the primary and district contact persons for the CTDOT.
- 4.3.2.3 Name, primary contact, address, email address, and telephone number of any consultant(s) or engineer(s) retained by the CTDOT to prepare the registration,
- 4.3.2.4 Assurance that the Stormwater Management Plan for the MS4 is consistent with the following provisions of state statutes and regulations, as appropriate:
 - a. For sites within the Coastal Jurisdiction Line, the Permittee must address all applicable goals and policies in Section 22a-92 of the Connecticut General Statutes and must not cause adverse impacts to coastal resources as defined in Section 22a-93(15) of the Connecticut General Statutes.
 - b. The Permittee's Stormwater Management Plan will not threaten the continued existence of any species listed pursuant to Section 26-306 of the Connecticut General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species.
 - c. The implementation of the Permittee's Stormwater Management Plan for any part of the MS4 located within an aquifer protection area (see Appendix C) as mapped under Section 22a-354b of the Connecticut General Statutes will comply with regulations adopted pursuant to Section 22a-354i of the Connecticut General Statutes. For any activity regulated pursuant to Sections 8(c) and 9(b) of the Aquifer Protection Regulations (Section 22a-354i(1)-(10) of the Regulations of Connecticut State Agencies), the Stormwater Management Plan must assure that stormwater run-off generated from the MS4 is managed in a manner so as to prevent pollution of groundwater.
 - d. The Stormwater Management Plan has been reviewed for consistency with state Historic Preservation statutes, regulations, and policies including identification of any potential impacts on property listed or eligible for listing on the Connecticut Register of Historic Places. A review conducted for an Army Corps of Engineers Section 404 wetland permit would meet this qualification.

- e. The Stormwater Management Plan appropriately addresses new or increased discharges to high quality waters, as specified in Section 3.2.11.
 - f. The Stormwater Management Plan appropriately addresses new or increased discharges to impaired waters, as specified in Section 3.2.12.
- 4.3.2.5 For each of the Minimum Control Measures in Section 6.1, the following information shall be included:
- a. each Best Management Practice (“BMP”) to be implemented.
 - b. the person(s) responsible for implementing and maintaining each BMP.
 - c. the date by which each BMP will be implemented.
 - d. the measurable goal(s) by which each BMP will be evaluated.
- 4.3.2.6 Provide an internet address where the Stormwater Management Plan required by Section 5.2 and the Annual Reports required by Section 6.10 are accessible for public review. Also provide a physical address where a paper copy of the SMP and Annual Reports are available for inspection. If the Registrant claims that certain elements of their SMP constitute secure information (pursuant to Section 4.3.3) or are otherwise exempt from the disclosure requirements of the state Freedom of Information Act (Section 1-210 et seq of the Connecticut General Statutes) as specified in that Act, the Registrant shall follow the procedures provided in the registration form instructions for this general permit regarding information subject to the Act requirements. The process of complying with the Act requirements does not exempt the Registrant from the registration and SMP preparation deadlines of this general permit.
- 4.3.2.7 The certification of the Registrant and of the individual(s) responsible for preparing the registration, in accordance with Section 3.2.13.
- 4.3.2.8 Certification pursuant to the requirements and conditions of Section 3.2.14 that the Stormwater Management Plan has been reviewed by a Qualified Professional Engineer as defined in Section 2 licensed in the State of Connecticut.

4.3.3 Secure Information

If the Registrant claims that certain elements of their registration constitute secure information subject to restrictions related to Homeland Security or other security issues exempt from the disclosure requirements of the state Freedom of Information Act, they shall follow the procedures for information subject to Act requirements provided in the registration form instructions for this general permit. The process of complying with the Act requirements does not exempt the Registrant from the registration and Stormwater Management Plan preparation deadlines in this general permit.

4.4 Additional Information

The Commissioner may require the Permittee to submit additional information that the Commissioner reasonably deems necessary to evaluate the consistency of the subject activity with the requirements for authorization under this general permit. A response to the Commissioner’s request for additional information shall be submitted to the Department within thirty (30) days of the Commissioner’s request.

4.5 Where to File a Registration and Stormwater Management Plan

A registration shall be filed with the Commissioner on forms available through the DEEP website and submitted at the following address:

Central Permit Processing Unit
 Department of Energy & Environmental Protection
 79 Elm Street

The Stormwater Management Plan shall be submitted via email to DEEP.StormwaterStaff@ct.gov.

4.6 Availability of Registrations, Stormwater Management Plans, and Annual Reports

4.6.1 Registration & Stormwater Management Plan Availability

The registration and SMP shall be made available for public review and comments by both the Commissioner and the Permittee.

4.6.1.1 The registration shall be made available for public comment by the Commissioner.

- a. On or before thirty (30) days of receipt of a registration, the Commissioner shall post on the DEEP website a list of registrations submitted.
- b. On or before thirty (30) days from the date of posting the list of registrations by the Commissioner, members of the public may review the registration and submit written comments to the Commissioner. Comments shall be sent via email to DEEP.StormwaterStaff@ct.gov with the subject line "CTDOT GP Comments [INSERT NAME OF PERMITTEE]."

4.6.1.2 Availability by the Permittee

- a. The Permittee shall make available the registration electronically on the Permittee's official website for public review.
- b. A completed registration shall be provided to the following persons immediately upon request:
 - i. If the stormwater discharges through a municipal separate storm sewer system, the municipal operator of the system.
 - ii. If the stormwater discharge is located within a public drinking water supply watershed or aquifer protection area, the water company or entity responsible for that water supply.
 - iii. If the stormwater discharge is to a river segment(s) and tributaries that have been designated as Wild and Scenic under the Wild and Scenic Rivers Act, the applicable Wild and Scenic Coordinating Committee.

4.6.1 Stormwater Management Plan Availability

4.6.2 The Stormwater Management Plan shall be made available for public comment by both the Commissioner and the Permittee.

4.6.2.1 Availability by the Commissioner

- a. The Commissioner shall post the location of the SMP within thirty (30) days of receipt.
- b. On or before thirty (30) days from the date of posting by the Commissioner, members of the public may submit written comments to the Commissioner. Comments shall be sent via email to DEEP.StormwaterStaff@ct.gov with the subject line "MS4 GP Comments [INSERT NAME OF PERMITTEE]."

4.6.2.2 Availability by the Permittee

- a. The Permittee shall provide the internet address where the SMP is located and provide an electronic copy to the Commissioner.
- b. The SMP shall be made available electronically on the permittee's official website and at publicly available location(s), for public review and comment for at least ninety (90) days from the effective date of this general permit. The SMP should be made available at the main office or

other designated municipal or institutional office, a local library, or other central publicly available location.

- c. On or before sixty (60) days from the date of the availability of the SMP, members of the public may review the SMP and submit written comments to the permittee. The permittee will provide information to the public on how to submit comments.
- d. Following the comment period specified above, the final SMP shall remain available for public inspection on-line and a paper copy made available at the location(s) specified above during regular business hours.

4.7 Actions by Commissioner

4.7.1 Approval with Permit Conditions

The Commissioner may approve a registration with reasonable permit conditions. If the Commissioner approves a registration with conditions, the Permittee shall be bound by such conditions as if they are part of this general permit.

4.7.2 Rejection or Denial

The Commissioner may reject or deny without prejudice a registration if it is determined that it does not satisfy the registration requirements in Section 4 of this general permit, or if more than seven (7) days have elapsed since the Commissioner requested the Permittee submit additional information to determine eligibility for permit coverage for authorization to discharge under this general permit.

4.7.3 Require Individual Permit

The Commissioner may require that a Permittee obtain an individual permit for any discharge authorized by this permit in accordance with Section 22a-430b(c) of the Connecticut General Statutes.

4.7.4 Activity Inconsistent with Authorization Requirements

The Commissioner may reject or deny a registration if he or she finds that the subject activity is inconsistent with the “Requirements for Authorization” in Section 3.2 of this general permit, or for any other reason provided by law.

4.7.5 Notice to Registrant

Denial or rejection of a registration under this subsection shall constitute notice to the Registrant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit in accordance with Section 22a-430 of RCSA.

4.7.6 Notice in Writing

Rejection or denial of a registration shall be provided to the Registrant in writing and state the reasons for such rejection or disapproval.

4.8 Termination of Discharge

A Notice of Termination form shall be submitted to the Commissioner on a prescribed form on or before fourteen (14) days of the cessation of the discharge or the transfer of facility ownership. Notices of Termination shall be e-mailed to DEEP.StormwaterStaff@ct.gov. Failure to submit the Notice of Termination may result in enforcement action.

Section 5 Requirements of this General Permit

The Permittee shall at all times continue to meet the requirements for authorization set forth in Section 3 of this general permit.

In the absence of information demonstrating otherwise, DEEP expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time the Permittee becomes aware, or DEEP determines, that discharges are not being controlled as necessary to meet applicable water quality standards, the Permittee must take corrective actions and document those actions. If during coverage under a previous permit, the Permittee was required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA-approved or established TMDL (for any parameter) or to otherwise control discharges to meet water quality standards, the Permittee must continue to implement such controls as part of their coverage under this permit.

In addition, a Permittee shall ensure to the Maximum Extent Practicable (“MEP”) that authorized activities are conducted in accordance with the following conditions:

5.1 Conditions Applicable to Certain Discharges

5.1.1 Proximity to Tidal Wetlands

Any person who or municipality which initiates, creates, or originates a discharge of stormwater from an MS4 after the date of issuance of this permit, which discharge is located less than 500 feet from a tidal wetland which is not a fresh tidal wetland, shall discharge such stormwater through a system designed to retain and infiltrate the Water Quality Volume of stormwater runoff as defined in the Stormwater Quality Manual, as amended. If there are site constraints that would prevent retention of this volume on-site (e.g., brownfields, capped landfills, bedrock, elevated groundwater, etc.), documentation shall be included in the Annual Report which explains the site limitations and offers, to the MEP, an alternative retention volume. In such cases, the portion of the Water Quality Volume that cannot be retained must be provided with additional stormwater treatment so as to protect water quality. Any such treatment shall be designed, installed, and maintained in accordance with the Stormwater Quality Manual, as amended.

5.1.2 Structures and Dredging in Coastal and Tidal Areas

If the Permittee wishes to initiate, create, or originate a discharge of stormwater below the coastal jurisdiction line into coastal, tidal, or navigable waters for which a permit is required under the Structures and Dredging Act in accordance with Section 22a-361(a) of the Connecticut General Statutes or into tidal wetlands for which a permit is required under the Tidal Wetlands Act in accordance with Section 22a-32 of the Connecticut General Statutes, the Permittee shall obtain such permit(s) from the Commissioner prior to initiating, creating or originating such discharge.

5.1.3 Quality of Discharge

The discharge shall not contain floating scum, oil, trash, or other matter contained in the stormwater discharge. Excluded from this are naturally occurring substances such as leaves and twigs provided that no person has placed such substances in or near the discharge.

5.1.4 Toxicity to Aquatic and Marine Life & Risk to Human Health

The discharge shall not result in pollution which may cause or contribute to acute or chronic toxicity to aquatic life, impair the biological integrity of aquatic or marine ecosystems, or result in unacceptable bioaccumulation or risk to human health or ecological communities.

5.1.5 Water Quality Standards

The stormwater discharge shall not cause or contribute to an exceedance of the applicable Water Quality Standards in the receiving water.

5.1.6 High Quality Waters

Any new stormwater discharge to high quality waters (as identified by the Commissioner consistent with the Water Quality Standards) shall be discharged in accordance with the Connecticut Anti-Degradation Implementation Policy in the Water Quality Standards manual. At minimum, the Permittee shall evaluate and implement to the Maximum Extent Practicable practices which will prevent the discharge of the Water Quality Volume to a surface water body or other practices necessary to protect and maintain designated uses and meet standards and criteria contained in the Water Quality Standards.

5.1.7 Management of Pollutants of Concern

Any stormwater discharge to waters identified in Appendix D shall be managed for the Pollutant of Concern(s) identified in the appendix consistent with the requirements in Section 6 of this permit.

5.1.8 Discharges to Impaired Waters or Waterbodies Subject to a Load Allocation Within a TMDL

MS4s which discharge to impaired waters (with or without a TMDL), waters for which nitrogen, phosphorus, bacteria, or mercury are pollutants of concern, or waters which have pollution load allocations specified within a TMDL are required to meet certain criteria identified in this Section and other Sections of this general permit.

5.1.8.1 Existing Discharges to a Waterbody Without an Approved TMDL

If the Permittee discharges to an impaired water without an established TMDL, the Permittee must follow:

- the Control Measures in Section 6.1 and the screening and monitoring requirements of Section 6.2 for waters for which phosphorus, nitrogen, bacteria, or mercury are pollutants of concern.
- for all other impairments, implement Control Measures to reduce the discharge of the pollutants associated with the impairment and follow the requirements of Section 6.2, or as may be directed by the Commissioner.

5.1.8.2 Existing Discharges to a Waterbody with an Approved TMDL

If the Permittee discharges to a waterbody included in a TMDL, the Permittee must follow:

- the Control Measures in Section 6.1 and the screening and monitoring requirements of Section 6.2 for waters for which phosphorus, nitrogen, bacteria, or mercury is a pollutant of concern.
- for all other discharges subject to a load allocation in a TMDL(s), implement additional or alternative Control Measures to be consistent with the load allocation in the specific TMDL(s), if notified by the Commissioner.

5.1.8.3 New Discharge to an Impaired Water without an Established TMDL

If a new discharge to an impaired water without a TMDL is authorized pursuant to the conditions of Section 3.2.12, the Permittee must implement and maintain any Control Measures or conditions on the site that enabled such authorization and modify such measures or conditions as necessary to maintain such authorization. The Permittee must also maintain compliance with this subsection and Section 6.2 and maintain documentation of these measures and conditions in their SMP and Annual Reports.

5.1.8.4 New Discharge to a Waterbody with an Established TMDL

If a new discharge to a waterbody with a TMDL is authorized pursuant to the conditions of Section 3.2.12, the Permittee must follow the discharge requirements consistent with the applicable allocation for that TMDL, if notified by the Commissioner.

5.2 Stormwater Management Plan

The Permittee shall develop, implement, and enforce a Stormwater Management Plan (“SMP”) designed to reduce the discharge of pollutants from the CTDOT MS4 to the Maximum Extent Practicable (“MEP”), to protect water quality, and to satisfy the appropriate water quality requirements of the State of Connecticut and federal Clean Water Act.

Under this permit, the Permittee shall prepare a Stormwater Management Plan pursuant to Section 6 of this general permit. The Permittee shall continue to implement the Stormwater Management Plan and all Minimum Control Measures required by this general permit throughout the entire term of the general permit. The Permittee shall continue to provide for adequate staffing and economic resources for such implementation throughout the entire term of the general permit. If at any time the Commissioner finds that the SMP is not adequate to protect the waters of the state from pollution, the Commissioner may terminate authorization under this permit and require the Permittee to submit an individual permit application.

Maximum Extent Practicable is a technology-based standard established by Congress in the Clean Water Act Section 402(p)(3)(B)(iii). Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop their programs. (40CFR 122.2, See also: Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000). When trying to reduce pollutants to the MEP, the Permittee must make a reasonable and serious attempt to comply with the general permit, and practical solutions may not be lightly rejected. Factors such as the conditions of receiving waters, specific local concerns, MS4 size, climate, implementation schedules, current ability to finance the program, beneficial uses of receiving water, hydrology, geology, and capacity to perform operation and maintenance should be considered by the Commissioner in determining whether the Permittee has complied with this general permit to the MEP.

Failure to implement all elements of the Stormwater Management Plan to the MEP constitutes a violation of this permit. If the Permittee maintains that they are unable to implement any element of this permit based on their MEP, they shall provide documentation of their rationale for such failure pursuant to the description, above, of the elements of MEP.

Section 6 Development of Stormwater Management Plan

The Stormwater Management Plan (“SMP”) shall address the Minimum Control Measures (“MCMs”) as indicated in this section. The MCMs shall be implemented to the MEP throughout the boundaries of the CTDOT MS4 that are within the jurisdiction of any Small MS4 authorized by the *General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems* (“Small MS4 General Permit”) except as otherwise indicated in this section.

The SMP shall identify and provide supporting justification for any of the MCMs which, in whole or in part, are not applicable to the CTDOT MS4 or which cannot otherwise be met. If, as of the effective date of this permit, CTDOT does not have or is otherwise unable to obtain the Legal Authority required for a particular MCM, CTDOT shall develop policies and procedures in the SMP to address the requirements of the measure including, but not limited to, coordination with adjacent and/or interconnected MS4s and/or with the Commissioner.

For the purposes of Section 6 of this general permit, “Priority Area” is defined as areas within the Urban Area (“UA”), areas outside the UA with impervious cover of greater than eleven percent (11%) (as identified on maps available via links at www.ct.gov/deep/municipalstormwater), or within those watershed basins which discharge to impaired waters.

6.1 Minimum Control Measures

For each Minimum Control Measure, the Stormwater Management Plan should clearly define appropriate BMPs and designate a person(s) and/or job title responsible for each BMP. Measurable goals should be provided for each BMP and a timeline to attain such goal should be clearly stated. Where appropriate, such as for structural BMPs, the SMP should identify the location of such BMP by address and latitude and longitude.

Elements of the MCMs may be implemented by parties other than the Permittee (see Qualifying Local Program, Section 6.3.1 or Qualifying State or Federal Program, Section 6.3.2). In such cases, the Permittee shall include these measures in their MCMs and report on them in their Annual Report.

6.1.1 The MCMs in the SMP include, but are not limited to: Public Education and Outreach

The goal of this Minimum Control Measure is to raise awareness about the impact of stormwater runoff on water quality and motivate community members to consider the role they play in reducing the impacts of stormwater runoff. Public education and awareness allow for broader public support and motivation for the community to utilize Best Management Practices to reduce potential pollutant contributions.

6.1.1.1 Failure to implement all elements of this Minimum Control Measure to the MEP constitutes a violation of this permit. Public Education Program

The Permittee shall continue implementation of a public education program to distribute educational materials to the Permittee’s community and conduct appropriate outreach activities about the sources and impacts of stormwater discharges on waterbodies along with steps the public can take to reduce pollutants in stormwater runoff. The education program shall include, but not be limited to, the following topics:

- information on management of pet waste.
- application of fertilizers, herbicides, and pesticides.
- impervious cover.
- impacts of illicit discharges and improper disposal of waste into the MS4.

The form and content of the education program will be dependent on the audience and identified areas of concern. CTDOT may coordinate with other MS4 Permittees in the same area to develop and implement a public education program. Educational information may be developed and/or acquired from municipal or institutional MS4 Permittees, governmental agencies, community and non-governmental organizations, councils of government, academia, and/or environmental advocacy

organizations. Outreach resources will be available from the DEEP stormwater webpage at www.ct.gov/deep/stormwater. Information shall be communicated to an audience including, but not limited to, citizens utilizing CTDOT roadways and/or facilities (e.g., parking facilities, rest areas and service areas) utilizing methods such as flyers, brochures, signage, billboards, storm drain labeling, television or radio public service announcements, and web-based tools.

Each Annual Report shall summarize the types, sources, number of, and methods by which materials are disseminated.

6.1.1.2 Educational Materials

To implement the public education and outreach program, the Permittee shall develop or acquire current educational material from DEEP and other sources that identifies the pollutants (such as pathogens/bacteria, nitrogen, phosphorus, sediments, metals, oils & greases) associated with stormwater discharges, the potential sources of the pollutants, the environmental impacts of these pollutants, and related pollution reduction practices.

6.1.1.3 Additional Outreach Measures and Materials for Discharges to Impaired Waters (With or Without a TMDL)

These measures may be implemented solely by the Permittee or as part of a collaborative regional or statewide program to address the issue. However, the Permittee retains sole responsibility for compliance with this section. The method of implementation shall be indicated in the Permittee's SMP.

- a. For waters for which phosphorus is a Stormwater Pollutant of Concern (as identified by the Connecticut Integrated Water Quality Report), educational materials shall be specifically tailored and targeted to educate on the sources, impacts, and available pollution reduction practices from the following:
 - Subsurface Disposal Systems
 - fertilizer use
 - pet waste
 - grass clippings and leaf management
 - detergent use
 - discharge of sediment (to which phosphorus binds)
 - other erosive surfaces
- b. For waters for which nitrogen is a Stormwater Pollutant of Concern (as identified by the Connecticut Integrated Water Quality Report), educational materials shall be specifically tailored and targeted to educate on the sources, impacts, and available pollution reduction practices from the following:
 - Subsurface Disposal Systems
 - fertilizer use
 - pet waste
 - grass clippings and leaf management
 - discharge of sediment (to which nitrogen binds)
 - other erosive surfaces
- c. For waters for which bacteria is a Stormwater Pollutant of Concern (as identified by the Connecticut Integrated Water Quality Report), educational materials shall be specifically tailored

and targeted to educate on the sources, impacts, and available pollution reduction practices from the following:

- Subsurface Disposal Systems
 - sanitary cross connections
 - waterfowl
 - pet waste
 - manure piles associated with livestock and horses
 - discharge of sediment (to which Bacteria binds)
- d. For waters for which mercury is a Stormwater Pollutant of Concern (as identified by the most recent Connecticut Integrated Water Quality Report), educational materials shall be specifically tailored and targeted to educate on the sources, impacts and available recycling programs for elemental mercury and mercury containing items such as:
- thermometers
 - thermostats
 - fluorescent lights
 - button cell batteries

6.1.1.4 Suggested Strategies to Engage Communities

- a. The Permittee is encouraged to direct outreach programs and/or materials at specific populations. Such target populations may include, for example, school age populations, farming populations, contractors, urban populations, suburban populations, and environmental justice communities.
- b. The Permittee may wish to include in its outreach efforts various local organizations or municipal/institutional MS4 Permittees which may be able to assist in helping to spread the stormwater message.
- c. Utilize educational materials in the relevant language(s) for non-English speaking communities, where appropriate.

6.1.2 Public Involvement/Participation

The Permittee shall provide opportunities to engage their community to participate in the review and implementation of the Permittee's SMP.

The goal of this MCM is to involve the community in both the planning and implementation process of improving water quality. Public participation is beneficial to the successful implementation of a Stormwater Management Program because it allows for broader public support, additional expertise, and a conduit to other programs. Community members are also more likely to apply these measures at home if they are a part of the process.

Failure to implement all elements of this Minimum Control Measure to the MEP constitutes a violation of this permit.

6.1.2.1 Public Notice of the Stormwater Management Plan and Annual Reports

The Permittee shall publish a public notice on the CTDOT website, through an email or mailing list (if the Permittee maintains one) or in newspapers with general circulation in the state to inform the public of the SMP, draft and final Annual Report required by Section 6.10 of this permit. CTDOT will solicit comments on the SMP and Annual Report. The notice shall provide a contact name (with phone number, mailing address, and email) to whom the public can send comments and publicly accessible

locations (such as the CTDOT Headquarters and district offices, rest areas, service areas, or local libraries or other publicly available locations) and a URL where the SMP and Annual Report are available for public review. The public notice shall, at a minimum, allow for a forty-five (45) day comment period. Proof of this notice shall be maintained in the SMP.

6.1.2.2 Public Participation Events

The Permittee shall, once per year host, conduct, or otherwise provide support for one (1) public event and enact one (1) public education program tailored to meet the needs of the state of Connecticut. The following are possible events and programs:

- provide logistical support for third party clean up events.
- billboards.
- radio announcements.
- webinars.
- state-wide TV public service announcements.
- other events or programs approved by the Commissioner.

6.1.2.3 Coordination with Municipal Partners

The Permittee shall, at least once per year, host a meeting with municipal partners to coordinate implementation of MS4 permit requirements. The Permittee shall utilize its regularly scheduled meetings with the Connecticut Councils of Government (“COGs”), Metropolitan Planning Organizations (“MPOs”), and existing municipal and municipal partner meetings as the venue for MS4 coordination with municipal partners or shall make reasonable efforts to host a separate meeting on a date and at a time that is convenient for the partners to ensure maximum participation. The Permittee shall distribute to the COGs/MPOs the proposed meeting agendas in advance of each meeting. At the first such meeting the Permittee shall present an overview of its MS4 program, provide time for questions, and solicit feedback from the attendees for topics of focus at subsequent meetings. The Permittee shall coordinate with municipal partners for additional meetings if requested. Municipalities may comment on the meetings’ effectiveness as part of the Permittee’s solicitation of public comments on its annual reports.

6.1.2.4 Disclaimer

The Permittee is encouraged to enlist local organizations to help implement the elements of their SMP. However, the Permittee retains sole responsibility for permit compliance.

6.1.2.5 Additional Measures for Discharges to Impaired Waters (With or Without a TMDL)

No requirements in addition to those specified in Sections 6.1.2.1-4, above, are specified for discharges to waters impaired for phosphorus, nitrogen, bacteria, or mercury.

6.1.3 Illicit Discharge Detection and Elimination

The goal of this Minimum Control Measure is to identify and eliminate discharges to the MS4 that do not consist solely of stormwater. This is accomplished through developing the legal authority to prohibit and eliminate illicit discharges to the MS4, mapping of the MS4 storm sewer system, identification and evaluation of dry weather discharges from the system that may indicate the presence of non-stormwater pollutants, tracking the source of these discharges, and eliminating the source of the discharge. Guidance for this process is included in this Section and in Appendix B. There are certain allowable non-stormwater discharges that are exempt from this prohibition (see Section 3.1.1).

Failure to implement all elements of this Minimum Control Measure to the MEP constitutes a violation of this permit.

The Permittee shall continue to maintain and implement a current written Illicit Discharge Detection and Elimination (IDDE) Program designed to: provide the Legal Authority to prohibit and eliminate illicit discharges (as defined in Section 2 except for those discharges noted in the Section 3.1.1 of this permit) to its MS4; find the source of any illicit discharges; eliminate those illicit discharges; and ensure ongoing screening and tracking to prevent and/or eliminate future illicit discharges.

6.1.3.1 IDDE Program Elements

- a. The Permittee shall, at minimum, implement the IDDE program elements in this section and the IDDE protocol in Appendix B within the Priority Area of the MS4. The Permittee is encouraged to develop a prioritizing strategy to identify areas outside the Priority Area to further implement these IDDE measures. This prioritizing strategy should utilize the prioritizing elements included in Appendix B.
- b. Illicit discharges to the CTDOT MS4 by any person are prohibited. Any such discharges are not authorized by the general permit, are unlawful, and remain unlawful until they are eliminated. The Permittee shall prohibit all illicit discharges from entering its MS4. Upon detection, the Permittee shall eliminate illicit discharges as soon as possible and require the immediate cessation of such discharges upon confirmation of responsible parties in accordance with its Legal Authorities established pursuant to Section 6.1.3.2. When elimination of an illicit discharge within sixty (60) days of its confirmation is not possible, the Permittee shall establish a schedule for its elimination not to exceed one-hundred-eighty (180) days. The Permittee shall immediately commence actions necessary for elimination and shall diligently pursue the elimination of all illicit discharges. In the interim, the Permittee shall take all reasonable and prudent measures to minimize the discharge of pollutants to its MS4.
- c. The Permittee shall develop a program for citizens and municipal partners to report illicit discharges. This may include maintaining a website, email list or mailing program that provides clear instructions for the public describing how citizens can submit an illicit discharge report. The reporting program shall provide an email address and/or a phone number or other means for submissions. The Permittee shall affirmatively investigate and eliminate any illicit discharges reported to it by any citizen or organization, provided that such report incorporates a time and location of an observed discharge. The Permittee shall commence an inspection of such a reported outfall or manhole promptly after receiving a report, and incorporate those reported outfalls into its IDDE program subject to all provisions of this subsection and of Appendix B. All citizen reports and the response to those reports shall be included in the Annual Report.
- d. The Permittee shall implement outfall screening and an illicit discharge detection protocol pursuant to Appendix B to identify, prioritize, and investigate separate storm sewer catchments for suspected illicit discharges of pollutants.
- e. The Permittee shall maintain a record of illicit discharge abatement activities including, at a minimum: location (identified with an address or latitude and longitude), description, date(s) of inspection, sampling data (if applicable), action(s) taken, date of removal or repair and responsible party(ies). This information shall be included in the Permittee's Annual Report pursuant to the Section 6.10 of this permit.
- f. Timelines – Permittees shall implement IDDE program elements in accordance with the schedules included in this section and in Appendix B.

6.1.3.2 IDDE Legal Authority

The Permittee shall continue to establish and implement the necessary Legal Authorities to eliminate illicit discharges, which shall:

- a. prohibit illicit discharges to its storm sewer system and require removal of such discharges consistent with Section 6.1.3.1, above; and

- b. control the discharge of spills and prohibit the dumping or disposal of materials including, but not limited to, residential, industrial, and commercial wastes, trash, used motor vehicle fluids, pesticides, fertilizers, food preparation waste, leaf litter, grass clippings, and animal wastes into its MS4; and
- c. authorize pursuit of penalties and/or recoup costs incurred by the Permittee from anyone creating an illicit discharge, spilling, or dumping as specified in Section 6.1.3.1, above.

6.1.3.3 System Mapping

By July 1, 2029, develop a list (spreadsheet or database) and map or series of maps at a minimum scale of 1"=2000' and maximum scale of 1"=100' showing all stormwater discharges from a pipe or conduit located within the CTDOT MS4 and owned or operated by the CTDOT and all interconnections with other MS4s. The map(s) should, if possible, be developed in a GIS format.

- a. The list and map(s) shall include the following for each discharge:
 - i. type, material, size, and location (identified with a latitude and longitude) of conveyance, outfall, or channelized flow (e.g., 24" concrete pipe).
 - ii. the name, water body ID and Surface Water Quality Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges.
 - iii. if the outfall does not discharge directly to a named waterbody, the name and water body ID of the nearest named waterbody to which the outfall eventually discharges.
 - iv. the name of the watershed, including the subregional drainage basin number (available from [CTDEEP Water Quality Plans and Assessments mapping](#)) in which the discharge is located.
 - v. the spreadsheet or database should, if possible, be prepared in a format compatible with Microsoft Excel.
- b. The following information and features, where currently available, shall be included in the mapping:
 - i. Infrastructure
 - Municipal separate storm sewer system (including inter-municipal and private connections where available)
 - Thematic representation of sewer material, size, and age
 - Storm sewer flow direction
 - Select rim and invert elevations
 - Aerial delineations of MS4 outfall drainage areas
 - Areas served by on-site subsurface disposal systems
 - Storm sewer alignments to which known or suspected underdrain systems may discharge
 - ii. Water Resources and Topographic Features
 - Water bodies and watercourses identified by name and water quality classification
 - Impaired waters (including type of impairment)
 - Inland wetlands
 - Tidal wetlands
 - Topography

- Orthophotography

iii. O&M, Investigations, Remediation, and Capital Projects

- Alignments, dates, and thematic representation of work completed (with legend) of past illicit discharge investigations (e.g., flow isolation, dye testing, closed-circuit television (CCTV))
- Locations of suspected, confirmed, and corrected illicit discharges (with dates and flow estimates)
- Water quality monitoring locations with representation of water quality indicator concentrations
- Recent and planned storm sewer infrastructure cleaning and repair projects
- Planned capital projects relative to utility and roadway rehabilitation or replacement
- Proposed phasing of future illicit discharge investigations

6.1.3.4 Additional Measures for Discharges to Impaired Waters (With or Without a TMDL)

a. For Waters for Which Phosphorus, Nitrogen, or Bacteria is a Stormwater Pollutant of Concern

To address subsurface disposal system (“SSDS”) failures, the IDDE program shall give highest priority for areas with the highest potential to discharge bacteria, phosphorus, and nitrogen to the MS4. Such areas shall be identified based on assessment of the following criteria: historic on-site sanitary system failures, proximity to waters for which bacteria is a Stormwater Pollutant of Concern, low infiltrative soils, and shallow groundwater. Consultation with local or state health officials is strongly encouraged. The Annual Report shall include a summary of the program, the number of areas identified with failing systems, actions taken by the Permittee to respond to and address the failures, and the anticipated pollutant reduction.

b. Additional Requirements Associated with Mercury as a Stormwater Pollutant of Concern

No requirements in addition to those specified in Sections 6.1.3.1-4 exist for discharges to waters for which mercury or other pollutants are Stormwater Pollutant(s) of Concern.

6.1.4 Construction Site Stormwater Runoff Control

The goal of this Minimum Control Measure is to eliminate or reduce the discharge of sediment and other runoff pollutants from construction sites. The Permittee shall implement and enforce a program to control stormwater discharges to its MS4 associated with land disturbance or development (including redevelopment) activities from sites (as defined in the *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* (“Construction Stormwater GP”)) with one (1) acre or more of soil disturbance whether considered individually or collectively as part of a larger common plan.

Failure to implement all elements of this Minimum Control Measure to the MEP constitutes a violation of this permit.

The Permittee shall continue to implement and enforce a program to control stormwater discharges to its MS4 associated with land disturbance or development. Such program shall include the following elements:

6.1.4.1 Construction Site Legal Authority

The Permittee shall continue to maintain Legal Authorities that require each of the following:

- a. All discharges to or from the CTDOT MS4 to maintain consistency with the Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual, as amended, and all stormwater discharge permits issued by the DEEP for discharges to the CTDOT MS4 pursuant to CGS 22a-430 and 22a-430b. This shall include:

- i. developers and construction site operators for projects that discharge to the CTDOT MS4; and
 - ii. engineers, consultants, and contractors employed by, or under contract to the CTDOT for discharges from the CTDOT MS4.
- b. the implementation of additional measures to protect/improve water quality (in addition to those requirements set forth in Section 6.1.4.1.a) as deemed necessary by CTDOT,
- c. CTDOT or its consultant or contractor to carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance with CTDOT or state regulations, ordinances, programs, or institutional requirements related to the management of the Permittee's MS4. Specifically, inspections shall be conducted, where allowed, to inventory the number of privately-owned retention ponds, detention ponds and other stormwater basins that discharge to or receive drainage from the Permittee's MS4.
- d. the owner of a site seeking approval to connect to the CTDOT MS4 to provide and comply with a long term maintenance plan and schedule to ensure the performance and pollutant removal efficiency of retention ponds, detention ponds and other stormwater basins that discharge to the Permittee's MS4 including short-term and long-term inspection and maintenance measures to be implemented by the private owner.
- e. the Permittee to control through interagency or inter-jurisdictional agreements, the contribution of pollutants between the Permittee's MS4 and MS4s owned or operated by others.

6.1.4.2 Consistency with DEEP Requirements

The Permittee shall ensure that all CTDOT manuals are, and remain, consistent with the construction measures in the Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual, as amended, and the Construction General Permit. These manuals shall include, but are not limited to, the following CTDOT manuals (as amended) and all supplements thereto: CTDOT Construction Manual, CTDOT Highway Design Manual, CTDOT Consultant Engineers Manual, CTDOT Bridge Design Manual, CTDOT Drainage Manual, and CTDOT Form 818.

6.1.4.3 Interdepartmental Coordination

The Permittee will continue to implement and, as necessary, modify a plan outlining how all internal departments with jurisdiction over the review, permitting, or approval of land disturbance and development projects within the CTDOT MS4 will coordinate their functions with one another.

- a. This measure shall be implemented upon the effective date of this permit.

6.1.4.4 Site Review and Inspection

For all construction projects that discharge to the CTDOT MS4:

- a. The Permittee shall confirm that a site plan review was conducted by the appropriate authority (i.e., CTDOT, DEEP or adjacent MS4) that incorporates consideration of stormwater controls or management practices to prevent or minimize impacts to water quality; and
- b. The Permittee shall confirm that the site inspection(s) and enforcement by the appropriate authority (i.e., CTDOT, DEEP or adjacent MS4) to assess the adequacy of the installation, maintenance, operation, and repair of construction and post construction control measures will be performed; and
- c. The Permittee shall implement this measure to the MEP upon the effective date of this permit.

6.1.4.5 State Permit Notification

The Permittee will implement a procedure for notifying developers conducting projects that will connect to the CTDOT MS4s, and any consultants or contractors working under contract to CTDOT, of their obligation to comply with the Construction Stormwater GP if their development or redevelopment project disturbs one (1) or more acres of land, either individually or collectively, as part of a larger common plan, and results in a point source discharge to the surface waters of the state directly to the Permittee's MS4. The notification shall include a provision informing the developer/contractor of their obligation to provide a copy of the Stormwater Pollution Control Plan (required by the Construction Stormwater GP) to the Permittee upon request.

a. The Permittee shall implement this procedure upon the effective date of this permit.

6.1.4.6 Additional Measures for Discharges to Impaired Waters (With or Without a TMDL)

For construction discharges to waters for which phosphorus, nitrogen, bacteria, mercury, or other pollutants is a Stormwater Pollutant of Concern no additional measures are included in this section except as may be required by Sections 3.2.12 or 6.2.

6.1.5 Post-construction Stormwater Management in New Development or Redevelopment

The goal of this Minimum Control Measure is to reduce or eliminate the discharge of stormwater pollutants to the MS4 from existing storm sewer systems and those systems created or modified by new development or redevelopment projects. The primary means of providing these benefits is through the implementation of land-use regulations and/or policies to require low impact development ("LID") practices and runoff reduction measures for new development and redevelopment projects in a strategy to limit and reduce the MS4's Directly Connected Impervious Area ("DCIA"). This measure requires the Permittee to create a base map of the MS4's existing impervious area and develop legal authority to implement the land-use provisions of this Minimum Control Measure.

Failure to implement all elements of this Minimum Control Measure to the MEP constitutes a violation of this permit.

6.1.5.1 Post-construction Legal Authority

In order to meet or exceed the Low Impact Development ("LID") and runoff reduction practices identified in the Stormwater Quality Manual, the Permittee shall establish and maintain Legal Authority that requires, to the MEP: (1) developers or contractors seeking the Permittee's approval for discharges to the CTDOT MS4 consider the use of LID and runoff reduction site planning and development practices prior to the consideration of other practices, and; (2) CTDOT, for construction projects that affect drainage, consider the use of LID and runoff reduction site planning and development practices prior to the consideration of other practices. Such Legal Authority shall include the following standards:

- for redevelopment of sites that are currently developed with impervious cover of forty percent (40%) or more, retain on-site half (1/2) the Water Quality Volume for the site, or
- for new development and redevelopment of sites with less than forty percent (40%) impervious cover, retain the Water Quality Volume for the site, or
- an alternate retention/treatment standard as outlined in Section 6.1.5.3.a below.

The Permittee shall identify and, where appropriate, reduce or eliminate, to the MEP, existing barriers to implementing LID and runoff reduction practices. These barriers may include site planning requirements, road design criteria, or infrastructure specifications that address minimal dimensional criteria for the creation of roadways, parking lots, and other Directly Connected Impervious Areas ("DCIA"). If such barriers cannot be eliminated within the timeframe dictated, the Permittee shall provide in the Annual Report(s) required by Section 6.10 a justification and a revised schedule for implementation.

- a. In establishing such Legal Authority, the Permittee shall consider the following watershed protection elements to manage the impacts of stormwater on receiving waters, except where noted:
 - i. Minimize the amount of DCIA (roads, parking lots, roofs, etc.) by minimizing the creation, extension, and widening of parking lots, roads, and associated development and encouraging the use of Low Impact Development or green infrastructure practices.
 - ii. Preserve, protect, create, and restore ecologically sensitive areas that provide water quality benefits and serve critical watershed functions. These areas may include, but are not limited to: riparian corridors, headwaters, floodplains, and wetlands.
 - iii. Implement stormwater management practices that prevent or reduce thermal impacts to streams, including requiring vegetated buffers along waterways, and disconnecting discharges to surface waters from impervious surfaces such as parking lots.
 - iv. Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges.
 - v. Implement standards to protect trees and other vegetation with evapotranspirative qualities.
 - vi. Implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils.

6.1.5.2 Consistency with DEEP Requirements

The Permittee shall ensure that all CTDOT manuals are, and remain, consistent with the post-construction measures in the Connecticut Stormwater Quality Manual and the Construction General Permit. These manuals shall include, but are not limited to, the following CTDOT manuals (as amended) and all supplements thereto: CTDOT Construction Manual, CTDOT Highway Design Manual, CTDOT Consultant Engineers Manual, CTDOT Bridge Design Manual, CTDOT Drainage Manual, and CTDOT Form 818.

6.1.5.3 Runoff Reduction and Low Impact Development Measures

Pursuant to the requirements of Section 6.1.5.1, above, the Permittee shall require the party responsible (i.e., the Permittee, municipality, interconnecting MS4, or any developer/contractor seeking connection to the CTDOT MS4) for development and redevelopment projects of one (1) acre or more within its MS4 to do the following:

a. Requirements for Non-CTDOT Projects

For projects not conducted by, or through contract to, CTDOT, the Permittee shall document that the municipality approving the project has confirmed that such project has met the requirements of the Construction General Permit and, if applicable, the requirements of the Small MS4 General Permit.

b. Requirements for CTDOT Projects

For projects conducted by, or through contract to, CTDOT, the Permittee shall document that the requirements of the Construction General Permit and the applicable runoff reduction, retention, and alternative requirements specified below have been met.

- i. For development or redevelopment of sites that are currently developed with impervious cover of forty percent (40%) or more, the Permittee shall retain fifty percent (50%) of the Water Quality Volume ("WQV") at the site.
- ii. For all new development and for redevelopment of sites with impervious cover of less than forty percent (40%), the Permittee shall retain one-hundred percent (100%) of the Water Quality Volume at the site.

- iii. For any project that may be unable to meet the retention requirement specified in Section 6.1.5.3.b.i-ii, above, the Permittee shall implement the applicable retention requirement at the site to the Maximum Extent Achievable (“MEA”) using control measures that are technologically available, economically practicable, and achievable in light of best industry practice, and shall also provide additional stormwater treatment to the MEA using control measures that are technologically available, economically practicable, and achievable in light of best industry practice at the project site for the removal of sediment, floatables, and nutrients for the volume above that which can be retained up to the Water Quality Volume.

In such cases, the Permittee shall include in the Annual Report a discussion of what percentage of the retention requirement has been met and why the remainder could not be achieved based on the MEP standard. Additionally, in such cases, the Permittee shall track any increases in DCIA not otherwise credited as reduced, pursuant to Section 6.1.5.5. The additional DCIA shall be accounted for in the Permittee’s statewide DCIA Reduction reporting, pursuant to Section 6.1.5.5.

- iv. For linear redevelopment projects that connect to the CTDOT MS4 (e.g., roadway reconstruction or widening) for the developed portion of the right of way, the Permittee shall implement either: (1) one of the retention requirements specified in Sections 6.1.5.3.b.i-iii; or (2) if such project will not increase the DCIA within a given watershed, the applicable retention requirement will not be required to be met if the Permittee implements measures for the treatment of stormwater for the removal of sediment, floatables, and nutrients up to one-hundred percent (100%) of the WQV.
- v. If there are site constraints that would prevent meeting the retention requirements in Sections 6.1.5.3.b.i-ii and the Permittee is implementing the requirements of Section 6.1.5.3.b.iii, above, (e.g., brownfields, capped landfills, bedrock, elevated groundwater, proximity to drinking water wells, etc.), documentation must be maintained for such project, which: explains the site limitations; provides a description of the runoff reduction practices implemented; provides an explanation of why this constitutes the maximum extent achievable; offers an alternative retention volume; provides a description of any stormwater mitigation project or the reason such project is not achievable; and provides a description of any measures used to provide additional stormwater treatment for sediment, floatables, and nutrients above the alternate volume up to the WQV, including estimated pollutant removal efficiencies.
- vi. Consider the limitation of turf areas to those areas necessary to construct buildings, utilities, stormwater management measures, parking, access ways, reasonable lawn areas, and contouring necessary to prevent future site erosion.
- vii. Maintain consistency with the Connecticut Stormwater Quality Manual, or if inconsistent, provide an explanation of why consistency is not feasible or practicable and information that the proposed plan of development is adequately protective.
- viii. In areas served by on-site sewage disposal systems, the Permittee should coordinate with the state or local health official, as appropriate, to confirm that any infiltration measures are appropriately sized, located, and constructed in a manner consistent with the Connecticut Department of Public Health’s *Technical Standards for Subsurface Sewage Disposal Systems*, Section 19-13-B100A of the Regulations of Connecticut State Agencies and/or DEEP requirements for on-site sewage disposal systems.

6.1.5.4 Directly Connected Impervious Area

Beginning on the effective date of this permit, using digital mapping provided by the Commissioner (available through www.ct.gov/deep/municipalstormwater) or other equivalent source, the Permittee shall maintain an estimate of the DCIA that contributes stormwater runoff to its MS4 outfalls. The

DCIA calculation shall be based upon the criteria available through the DEEP stormwater webpage (www.ct.gov/deep/municipalstormwater) and the precise methodology and assumptions shall be described in the Permittee's Stormwater Management Plan and initial Annual Report. Each Annual Report shall document the status of this task. The Permittee shall revise its DCIA estimate as development, redevelopment, or retrofit projects effectively add or remove DCIA to its MS4.

6.1.5.5 Directly Connected Impervious Area Reduction Program

The goal of the DCIA Reduction Program is to “reduce,” to the MEP, the impact of stormwater pollutants from existing DCIA to a state in which stormwater runoff pollutant loadings from such areas would be similar to those of the same area had such areas remained undeveloped. This may be accomplished through retention of stormwater runoff from existing DCIA and through treatment of stormwater runoff from existing DCIA to remove or reduce pollutants.

Credit for reduction of DCIA shall be determined as follows:

- One-hundred percent (100%) area credit shall be given when the appropriate portion of the Water Quality Volume has been retained for the entire area in accordance with the requirements of Section 6.1.5.3.b.i and ii. A credit of greater than one-hundred percent (100%) may be obtained by retaining more than the WQV. A credit of less than one-hundred percent (100%) may be obtained by retaining a portion of the WQV as indicated by Appendix E.
- Credit from treatment BMPs (e.g., filtering, swirl concentrator, wet basin, swale, etc.) shall be given only when retention BMPs are implemented to the MEP or documented to be infeasible based on site constraints. Credit will be given based on the removal efficiency of the treatment measure(s) as indicated in Appendix E.

A combination of WQV retention and treatment may be used to determine an area's DCIA reduction credit. See Appendix E for DCIA Reduction Crediting. Credit from treatment BMPs is only given if retention BMPs are implemented to the MEP or documented to be infeasible based on site constraints.

Retention may be accomplished through retrofits or redevelopment projects (public or private) that utilize Low Impact Development and runoff reduction measures or any other means by which stormwater is infiltrated into the ground or reused for other purposes. A redevelopment project, as that term is used here and in Section 6.1.5.3.b.i and ii, is one that modifies an existing developed site for the purpose of enhancing, expanding, or otherwise modifying its function or purpose. A retrofit project is one that modifies an existing developed site for the primary purpose of disconnecting DCIA.

Treatment may be provided by a stormwater management measure that reduces stormwater runoff pollutant loadings to a surface waterbody. A summary of these measures is included in Appendix E. Reduction credits for these measures are based on the efficiency of the given treatment measure for pollutant removal. The method for calculation of these credits is included in Appendix E.

a. DCIA Reduction Tracking

Starting with the first Annual Report to be submitted after the effective date of this permit, and continuing in each subsequent Annual Report submitted by CTDOT in accordance with Section 6.10 of the Permit, each Annual Report shall specify the amount of DCIA in CTDOT's MS4 and include a list of retrofit and reconstruction projects completed in the previous permit year and the DCIA reduction credit claimed for each such project, the total of DCIA reduction credit claimed for all such projects completed in the previous permit year, the cumulative total DCIA reduction credit claimed for all prior years since July 1, 2014, and current progress towards the 2027 and 2030 DCIA reduction goals in Section 6.1.5.5.b.ii, below. The first Annual Report following the effective date of this general permit shall include totals for all DCIA reduction credit claimed for projects the Permittee completed since July 1, 2014.

Reduction credit for disconnection and treatment of DCIA does not apply for sites that were previously undeveloped, as there were no existing impervious surfaces on those sites.

b. DCIA Reduction Planning

Starting with the Annual Report to be submitted after the effective date of this permit and continuing in each subsequent Annual Report submitted in accordance with Section 6.10 of this permit, the Permittee shall submit an updated DCIA Reduction Plan. The DCIA Reduction Plan shall be due on the same date as each year's Annual Report under Section 6.10 of this permit. The DCIA Reduction Plan submitted in each Annual Report shall cover the current permit year and subsequent years, and shall include the following information:

- i. A list and description of stormwater control retrofit projects planned by Permittee and any planned redevelopment projects that are expected to receive DCIA reduction credit, the proposed schedule for completing such projects, and the expected amount of DCIA reduction credit each project will receive. As project designs and schedules are revised during planning and construction, each year's DCIA Reduction Plan shall include updated estimates of DCIA reduction credit and updated construction schedules for each project based on current designs.
- ii. A list of proposed retrofit projects sufficient to ensure that by June 30, 2027, the Permittee will complete retrofits or reconstruction with DCIA reduction credits equal to forty (40) acres of the Permittee's DCIA (the "2027 DCIA Goal") and by June 30, 2030, the Permittee will complete retrofits or reconstruction with DCIA reduction credits equal to eighty (80) acres of the Permittee's DCIA (the "2030 DCIA Goal").
- iii. These goals are each cumulative covering all DCIA reduction credits for projects the Permittee completed from July 1, 2014 to the end of the 2027 or 2030 permit year, respectively. Each DCIA Reduction Plan shall include the total DCIA reduction credit from projects expected to be completed in each permit year covered by the Plan.
- iv. A list and description of all mapped outfalls that discharge to impaired waters that were evaluated for identification of potential proposed reduction projects not listed in Sections 6.1.5.5.b.i & ii, above, that could be completed within the subsequent permit years, to the MEP. To the extent that any such projects are not achievable based on the MEP standard or chosen in a way that deviates from its priority ranking, an explanation shall be included in the DCIA Reduction Plan and in each Annual Report. Such list of proposed retrofit and redevelopment projects shall be prioritized by CTDOT.
- v. By the end of the permit term, all mapped outfalls that discharge to impaired waters shall have been evaluated to identify and prioritize potential reduction projects (including but not limited to planned capital projects), that could be implemented after 2030 through 2033. In the Annual Report for the third year of the permit term, all such potential reduction opportunities that have been evaluated shall be listed in order of their priority along with a proposed schedule for completing such projects to achieve the MEP standard, and the expected amount of reduction credit each project will receive. This information may be used to inform commitments in the next permit.
- vi. CTDOT shall identify new DCIA reduction goals, including the specific acreage to be reduced, to the MEP, to be completed by three (3) years following the permit term ("2033 DCIA Goal") and shall include this information in the DCIA Reduction Plan for the third year of the permit term. CTDOT shall include the proposed schedule for completing such projects, and the expected amount of DCIA reduction credit each project will receive. As project designs and schedules are revised during planning and construction, each year's DCIA Reduction Plan shall include updated estimates of DCIA reduction credit and updated construction schedules for each project based on current designs.

6.1.5.6 Additional Measures for Discharges to Impaired Waters (With or Without a TMDL)

For discharges to waters for which phosphorus, nitrogen, bacteria, mercury, or other pollutants is a Stormwater Pollutant of Concern no additional measures are included in this section except as may be required by Sections 3.2.12 or 6.2.

6.1.6 Pollution Prevention/Good Housekeeping

The goal of this Minimum Control Measure is to prevent the accumulation of pollutants on surfaces and in subsequent runoff through good housekeeping measures on Permittee-owned or -operated properties including but not limited to buildings, roads, parks, parking lots, and other facilities that are otherwise the legal responsibility of the Permittee. Measures like street sweeping, infrastructure maintenance, and fertilizer optimization help to reduce accumulated pollutants while staff training ensures consistent execution of the measures and programs included in the Stormwater Management Plan.

Failure to implement all elements of this Minimum Control Measure to the MEP constitutes a violation of this permit.

6.1.6.1 Employee Training

Upon the effective date of this permit, the Permittee shall continue to maintain a formal Employee Training Program to increase awareness of water quality related issues in management of its MS4. In addition to providing key staff with topical training regarding standard operating procedures and other activities necessary to comply with the provisions of this permit, the training program shall also establish an awareness of the general goals and objectives of the Stormwater Management Plan; identification and reporting of illicit discharges and improper disposal; spill response protocols; and respective responsibilities of involved personnel.

6.1.6.2 Stormwater Infrastructure Repair and Maintenance Programs

a. Stormwater Infrastructure Repair Program

The Permittee shall repair and rehabilitate its MS4 infrastructure in a timely manner to reduce or eliminate the discharge of pollutants from its MS4 to receiving waters. Upon the effective date of this permit, the Permittee shall continue to maintain a program to identify conveyances, structures, and outfalls in need of repairing, retrofitting, or upgrading utilizing new and existing information on outfalls discharging pollutants, impaired waters, or inspection observations.

b. Long Term Maintenance

- i. Within one-hundred-eighty (180) days following the effective date of this permit, the Permittee shall complete an inspection of all retention and detention ponds and other stormwater treatment structures or measures (such as swirl concentrators, oil/grit separators, water quality wetlands or swales, but excluding catch basins) owned or maintained by the Permittee which have been mapped by the Permittee as of the effective date of this permit and are located within the Priority Area. The inspections required by this subsection shall be sufficient to assess the current condition of such structures or measures, assess what short-term or medium-term maintenance is required to ensure proper operation of the structure or measure, and provide sufficient information to develop a long-term maintenance plan for the structure or measure in accordance with this Section. Inspections performed since July 1, 2019, that meet the preceding requirements may be used to satisfy this subsection.
- ii. As the Permittee completes the required mapping for additional areas of its MS4 in accordance with Section 6.1.3.3, it shall inspect, within one (1) year of mapping, all retention

and detention ponds and other stormwater treatment structures or measures (excluding catch basins) owned or maintained by the Permittee which are located in the Priority Area.

- iii. Within one-hundred-eighty (180) days following the effective date of this permit, the Permittee shall submit to the Commissioner for review a Stormwater Treatment Structure and Measure Maintenance Plan (“Maintenance Plan”) to ensure the long-term effectiveness of all stormwater treatment structures and measures owned or maintained by the Permittee within the Priority Area, including retention and detention ponds, swirl concentrators, oil/grit separators, water quality wetlands or swales, but excluding catch basins. The Maintenance Plan shall include for each type of stormwater treatment structure or measure a schedule for regular inspections, a schedule for, and description of, the regular maintenance to be performed, and a method for documenting the inspections and maintenance performed. Maintenance must be specific to each type of stormwater treatment structure or measure, including activities such as mowing basin walls, checking for and removing sediment accumulation, and ensuring structural integrity.
- iv. Except as provided below, at minimum, the Maintenance Plan shall specify that the Permittee will annually inspect all Permittee-owned or -maintained stormwater treatment structures or measures and remove accumulated pollutants (such as trash, sediment, oils, leaves, etc.) to restore full solids capture design capacity where found to be in excess of fifty percent (50%) design capacity. If a stormwater treatment structure or measure requires maintenance as a result of the inspections in Section 6.1.6.2.b.i, above, the Permittee may delay future inspections and routine maintenance under the Maintenance Plan, until the required maintenance is complete.
- v. The Permittee shall complete any short-term and medium-term maintenance (including removing sediment if at more than fifty percent (50%) of design capacity) required to ensure proper functioning at stormwater treatment structures covered in Section 6.1.6.2.b.i, above, by November 1, 2027 for such structures mapped as of the effective date of this permit. For stormwater treatment structures newly mapped in accordance with Section 6.1.3.3, maintenance of these structures shall be completed within three (3) years of the inspection date. For wet basins greater than two (2) feet deep, assessment of accumulated sediment depth and removal of sediment shall be considered long-term maintenance.

6.1.6.3 MS4 Property and Operations Maintenance

The Permittee shall establish, implement, and maintain a program to maintain Permittee-owned or -operated properties, parks, and other facilities that are owned, operated, or otherwise the legal responsibility of the Permittee so as to minimize the discharge of pollutants to its MS4. The program shall be outlined in the Stormwater Management Plan and annual progress of maintenance efforts shall be documented in the Annual Report. Such maintenance shall include, but not be limited to:

a. Parks and Open Space

The Permittee shall optimize the application of fertilizers by CTDOT employees or private contractors on lands and easements for which it is responsible for maintenance. Optimization practices considered may include conducting soil testing and analysis to determine soil phosphorus levels, the reduction or elimination of fertilizers, reduction of usage by adhering to the manufacturers’ instructions, and use of alternative fertilizers forms (i.e., products with reduced, slow-releasing, or insoluble phosphorus compositions).

Additional optimization practices to be considered include:

- proper storage and application practices (i.e., avoid impervious surfaces).
- appropriate application based on the season or month in coordination with climatic conditions to minimize runoff potential.

- development and implementation of standard operating practices for the handling, storage, application, and disposal of pesticides and herbicides in compliance with applicable state and federal laws.
- evaluation of lawn maintenance and landscaping activities to promote water quality, such protective practices include reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials like drought resistant and native plantings.
- establishment of procedures for management of trash and recycling containers at parks to ensure there are a sufficient number of containers and such containers are routinely emptied and cleaned.

The Permittee shall establish practices for the proper disposal of grass clippings and leaves at Permittee-owned lands. Clippings shall be either composted or otherwise appropriately disposed. Clippings should not enter the MS4 system or waters of the state.

b. Pet Waste Management Program

The Permittee shall establish, maintain, and implement a Pet Waste Management Program. The Permittee shall identify locations within its jurisdiction (e.g., parking facilities, rest areas, service areas, etc.) where inappropriate pet waste management practices are apparent and pose a threat to receiving water quality due to proximity and potential for direct conveyance of waste to its storm system and waters. In such areas, the Permittee shall implement targeted management efforts such as public education and enforcement (e.g., increased patrol, penalties for violators, etc.). In Permittee-owned areas where dog walking is allowed, the Permittee shall install educational signage, pet waste baggies, and disposal receptacles (or require carry-out).

The Permittee shall document its efforts in its Annual Reports and should consider including information regarding the scope and extent of its education, compliance, and enforcement efforts (including the number of violations pursued and penalties or other enforcement taken).

c. Waterfowl Management Program

The Permittee shall establish, maintain, and implement a Waterfowl Management Program. The Permittee shall identify lands under Permittee jurisdiction where waterfowl congregate and feeding by the public occurs. To raise awareness regarding the water quality impacts, the Permittee shall install signage or use other targeted techniques to educate the public about the detrimental impacts of feeding waterfowl (including the resulting feces deposition) and discourage such feeding practices.

The Permittee shall also implement practices that discourage the undesirable congregation of waterfowl in these areas, or otherwise isolate the direct drainage from these areas away from its storm system and waters.

d. Buildings, Parking Facilities, Rest Areas, Service Areas, and Other Facilities Under the Jurisdiction of the Permittee

For buildings, facilities, and utilities owned or operated by the Permittee, the Permittee shall complete each of the following:

- evaluate the use, storage, and disposal of both petroleum and non-petroleum products.
- ensure, through employee training, that those responsible for handling these products know proper procedures.
- ensure that Spill Prevention Plans are in place, if applicable, and coordinate with the local fire officials as necessary.
- develop management procedures for dumpsters and other waste management equipment.

- sweep parking lots and keep areas surrounding the facilities clean to minimize runoff of pollutants.
- ensure that all interior building floor drains are not connected to the MS4. Wastewaters from interior floor drains must be appropriately permitted as they are not authorized under this general permit.

e. Vehicles and Equipment

For Permittee-owned or -operated vehicle and equipment storage or maintenance, the Permittee shall complete each of the following:

- establish procedures for the storage of Permittee-owned or -operated vehicles.
- require vehicles with fluid leaks to be stored indoors or in contained areas until repaired.
- evaluate fueling areas owned by the Permittee and used by Permittee-owned or -operated vehicles and if possible, place fueling areas under cover in order to minimize exposure.
- establish procedures to ensure that vehicle wash waters are not discharged to the CTDOT MS4 or to surface waters. Wastewaters from interior floor drains must be appropriately permitted as they are not authorized under this general permit.

f. Leaf Management Program

For roadways other than limited access highways, the Permittee shall establish, implement, and maintain a Leaf Management Program, including routine inspections, with a goal to minimize or prevent the deposition of leaves in catch basins, streets, parking lots, driveways, sidewalks, or other paved surfaces that may interfere with drainage to the MS4.

6.1.6.4 Street, Parking, and CTDOT MS4 Infrastructure Maintenance Program

The Permittee shall establish, implement, and maintain a Street, Parking, and CTDOT MS4 Infrastructure Maintenance Program to provide for regular inspection and maintenance of Permittee-owned or -operated streets, parking facilities, rest areas, service areas and other CTDOT MS4 infrastructure with the goal to minimize conveyance of debris associated with impervious surfaces to the CTDOT MS4.

a. Sweeping Program

- i. The Permittee shall establish, implement, and maintain a Sweeping program including procedures for sweeping Permittee-owned or -operated streets and parking lots to the MEP.

All streets and parking lots within the Priority Area shall be inspected annually and swept and/or cleaned, as necessary, in the spring following the cessation of winter maintenance activities (i.e., sanding, deicing, etc.) unless the Commissioner approves in writing an alternate Sweeping Program for specific areas. The procedures shall also include more frequent inspections, cleaning, and/or sweeping of targeted areas determined by the Permittee to have increased pollutant potential based on the presence of active construction activity or other potential pollutant sources. The Permittee shall identify such potential pollutant sources based upon surface inspections, catch basin cleaning or inspection results, land use, winter road deicing and/or sand application, impaired or TMDL waters, or other relevant factors as determined by the Permittee. If wet dust suppression is conducted, the use of water should be minimized so that a discharge of excess water to surface waters and/or the storm sewer system does not occur.

For highways, roads, rest areas, service areas and parking facilities outside the Priority Area, including any rural uncurbed streets and parking lots with no catch basins, the Permittee shall either meet the minimum frequencies in this subsection, or develop and implement an inspection, documentation, and targeted sweeping and/or cleaning plan upon the effective

date of the general permit, and submit such plan with its first Annual Report. For new and redeveloped parking facilities, rest areas or service areas, evaluate options from reducing stormwater runoff to surface waters and/or the storm sewer system by installing pervious pavements and/or other measures to promote stormwater sheet flow to vegetated buffers.

- ii. Ensure the proper disposal of street sweepings in accordance with DEEP policies, guidance, and regulations. Sweepings shall not be discharged back into the storm drain system and/or surface waters.
- iii. In its Annual Report, the Permittee shall document results of its sweeping program including, at a minimum: a summary of inspection results, curb miles swept, dates of cleaning, volume or mass of material collected, and method(s) of reuse or disposal. The Permittee shall also include documentation of any alternate sweeping plan for rural uncurbed streets and any runoff reduction measures implemented.

b. Catch Basin Cleaning Program

The Permittee shall establish, implement, and maintain a Catch Basin Cleaning Program. The Permittee shall conduct routine cleaning of catch basins within the MS4 to the MEP. The Permittee shall track catch basin inspection observations. Utilizing information compiled through its inventory of catch basins, operational staff and public complaints, the Permittee shall optimize routine cleaning frequencies for particular structures or drainage areas as follows to maintain acceptable sediment removal efficiencies:

- i. By August 1, 2031, the Permittee shall complete at least one (1) inspection of all Permittee-owned or -maintained catch basins within the Priority Area. Any catch basin where the inspection reveals a catch basin sump to be more than fifty percent (50%) full of sediment or debris shall be scheduled for cleaning. In each permit year after the one ending in 2031, the Permittee shall inspect (and clean if necessary) at least ten percent (10%) of the Permittee-owned or -maintained catch basins in the Priority Area. The inspections shall be arranged so that every catch basin shall be inspected by the end of the permit year ending in 2042, and every catch basin shall be inspected at least once in each subsequent ten (10) year cycle.
- ii. Prioritize inspection and maintenance for Permittee-owned catch basins located near impaired waters and construction activities. Clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.
- iii. Establish a schedule where the frequency of routine cleaning will ensure that no catch basin at any time will be more than fifty percent (50%) full.
- iv. For the purposes of this subsection, an excessive sediment or debris loading is a catch basin sump more than fifty percent (50%) full. A catch basin sump is more than fifty percent (50%) full if the contents within the sump exceed one-half (1/2) the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin.
- v. If a catch basin sump is more than fifty percent (50%) full during two (2) 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 MEP, abate contributing sources. The Permittee shall describe any actions taken in its Annual Report.
- vi. The Permittee shall document in the Stormwater Management Plan and its first Annual Report its plan for optimizing catch basin cleaning and inspection plans. Documentation shall include metrics and other information used to reach the determination that the established plan for cleaning and maintenance meets the requirements of this subsection. The Permittee shall keep a log of catch basins cleaned or inspected.

- vii. The Permittee shall report in each Annual Report the total number of catch basins, number inspected, and number cleaned.

- c. Structure Rinsing Operations

Any and all structure rinsing conducted by the Permittee shall minimize the discharge of pollutants to the MS4 or waters of the state to the MEP and shall be in accordance with the *Department of Transportation Structure Rinsing Program*, dated March 2013, or as amended.

6.1.6.5 Snow Management Practices

- a. Deicing Material Management

The Permittee shall develop, implement, and maintain standard operating practices for the use, handling, storage, application, and disposal of deicing products to minimize exposure to stormwater; consider means to minimize the use and optimize the application of chloride-based salts or other salts or deicing products (while maintaining public safety) and consider opportunities for use of alternative materials; for any exterior containers of liquid deicing materials installed after the effective date of this permit, provide secondary containment of at least one-hundred-ten percent (110%) of the largest container or ten percent (10%) of the total volume of all containers, whichever is larger, without overflow from the containment area.

- b. Snow and Ice Control Practices

The Permittee shall implement and refine its standard operating practices regarding its snow and ice control to minimize the discharge of sand, anti-icing or de-icing chemicals and other pollutants (while maintaining public safety) to the MEP. The Permittee shall establish goals for the optimization of sand and/or chemical application rates through the use, where practicable, of automated application equipment (e.g., zero-velocity spreaders), anti-icing and pre-wetting techniques, implementation of pavement management systems, snow melting operations, and alternate chemicals. The Permittee shall maintain records of the application of sand, anti-icing and/or de-icing chemicals to document the reduction of chemicals to meet established goals. The Permittee shall ensure the proper training for deicing applications for municipal employees, institutional staff, or private contractors on lands and easements for which it is responsible for maintenance.

The Permittee shall manage and dispose of snow accumulations in accordance with DEEP's Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots, revised February 4, 2011 and as amended (see link at: www.ct.gov/deep/stormwater). In the Annual Report, the Permittee shall document results of its snow removal program including, at a minimum:

- the type of staff training conducted on application methods and equipment.
- type(s) of deicing materials used.
- total amount of each deicing material used.
- type(s) of deicing equipment used.
- lane-miles treated.
- any changes in deicing practices (and the reasons for the change).
- snow disposal methods.

- c. Snow Melting Operations

Any and all snow melting operations conducted by the Permittee utilizing a snow melting unit shall minimize the discharge of pollutants to the MS4 or waters of the state. Snow melting operations utilizing a snow melting unit will only be utilized by the Permittee for the disposal of

snow accumulations in the event winter storm(s) accumulations exceed the snow storage capacity available both on-site and in the nearby right of way. The Permittee shall ensure that the discharge from the snow melting unit is directed to an existing stormwater drainage system that is capable of handling the additional runoff volume from the snow melting unit without impacting the receiving waterbody.

The discharge from the snow melting unit must be clear and not contain any floating or solid materials. If any floatables, solids, and/or oily (or otherwise discolored snow/ice) runoff is observed from the snow melting units then the Permittee shall utilize additional Best Management Practices to treat the runoff. The following BMPs may be implemented when utilizing snow melting units:

- filter bags or similar filtration (i.e., settling ponds, portable tanks, etc.) devices to collect suspended solids.
- silt sacks for the receiving catch basin(s).
- absorbent oil pad/boom or similar devices that will help eliminate oily/discolored runoff.

If these BMPs do not suffice, the Permittee will properly collect, contain, and dispose the material generated. The Permittee shall make every effort to ensure that the runoff temperature from the snow melting unit does not exceed forty-eight (48) degrees Fahrenheit. All snow melting operations shall be conducted by the Permittee in accordance with their Stormwater Management Plan to the MEP.

6.1.6.6 Interconnected MS4s

As part of interagency agreements established pursuant to Section 6.3.3 of this general permit, the Permittee shall coordinate with operators of interconnected MS4s (such as neighboring municipalities and institutions) regarding the contribution of potential pollutants from the storm sewer systems, contributing land use areas and stormwater control measures in the respective MS4s. This same coordination shall be conducted regarding operation and maintenance procedures utilized in the respective systems.

6.1.6.7 Sources Contributing Pollutants to the MS4

The Permittee shall develop and implement a program to control the contribution of pollutants to its MS4 from commercial, industrial, municipal, institutional, or other facilities, not otherwise authorized by a permit issued pursuant to Sections 22a-430 or 22a-430b of the Connecticut General Statutes.

6.1.6.8 Additional Measures for Discharges to Impaired Waters (With or Without a TMDL)

- a. For waters for which nitrogen or phosphorus is a Stormwater Pollutant of Concern:

On Permittee-owned or -operated lands, implement a Turf Management Practices and Procedures Program which includes, but is not limited to, procedures for proper fertilizer application and the planting of native plant materials to lessen the amount of turf area requiring mowing and the application of chemicals. The Annual Report shall discuss the actions taken to implement this program with an estimate of fertilizer and turf reduction.

- b. For waters for which bacteria is a Stormwater Pollutant of Concern

On Permittee-owned or -operated lands with a high potential to contribute bacteria (such as rest areas, service areas, parks with open water, sites with failing septic systems), the Permittee shall develop, fund, implement, and prioritize a retrofit or source management program to correct the problem(s) within a specific timeframe. The Annual Report shall identify problem areas for which a retrofit or source management program were developed, the location of the closest outfall monitored in accordance with Section 6.9, the cost of such retrofit or program, and the anticipated pollutant reduction.

On Permittee-owned or -operated lands, prohibit the feeding of geese or waterfowl and implement a program to manage geese and waterfowl populations. The Annual Report shall discuss the actions taken to implement this program.

- c. No additional requirements in addition to those specified in Sections 6.1.6.1-8, above, exist for discharges to waters for which mercury is a Stormwater Pollutant of Concern.

6.2 Impaired Waters Monitoring Program

6.2.1 Outfall Sampling Protocol

The Permittee shall comply with the screening and monitoring requirements in this section for outfalls that discharge directly to impaired water. The Permittee shall utilize an outfall sampling modeling program similar or equal to the Stochastic Empirical Dilution Model (“SELDM”) by the United States Geological Service (“USGS”) and any data collected from previous sampling activities as outlined in Section 6.2.2, below. The Permittee’s model shall be used to assess impaired water body segments to determine whether highway runoff may be contributing to the impairment in question and whether stormwater runoff from the Permittee’s roadways, including documentation of existing treatment BMPs, have a reasonable potential to cause an exceedance of Water Quality Standards.

6.2.1.1 Utilization of Data

The Permittee shall assess each of its mapped discharge locations to Impaired Waters in MS4-regulated municipalities using SELDM to determine if the modeling supports a potential link between the impairment and the Permittee’s contribution to the outfall discharge. The Permittee shall document the criteria for making this determination in the SMP. In each Annual Report, the Permittee shall document the SELDM assessments performed pursuant to this Section during the reporting period.

All the Permittee’s mapped impaired waters discharges located in MS4-regulated municipalities shall have been assessed by the end of the permit term.

The determination of whether a potential link is supported between the impairment and the Permittee’s contribution to the outfall discharge shall be based on the following criteria and in coordination with DEEP considering existing and future TMDLs and watershed action plans.

- a. The criteria under which a location shall initially be determined to support a potential link between the impairment and the Permittee’s contribution to the outfall discharge shall be based on SELDM results that indicate an increase in the concentration of the constituent(s) associated with the impairment in downstream water quality compared to upstream water quality.
 - i. At a minimum, the Permittee shall perform follow-up investigations on locations where SELDM indicates that the Permittee’s contribution to the outfall discharge is likely to increase the concentration of the constituent(s) associated with the impairment in downstream water quality for ten percent (10%) or more of modeled precipitation events.
 - ii. The Permittee shall identify discharge locations for which SELDM predicts that the Permittee’s contribution to the outfall discharge is likely to increase the concentration of the constituent(s) associated with the impairment in downstream water quality for less than ten percent (10%) of modeled precipitation events and create a priority ranking of these outfalls based on the highest percentage impacts. This ranking shall be documented in the Permittee’s Annual Report submitted for the reporting period covering the third year following issuance of this permit.
 - iii. Upon completion of the assessments required by subparagraphs i and ii above, DEEP recommends the Permittee perform SELDM assessments of its discharges to impaired waters in municipalities that are not regulated as MS4 communities.

6.2.1.2 Follow-up Investigations

The Permittee shall conduct follow-up investigations for the drainage areas associated with the outfalls identified by SELDM as potentially contributing to an impairment pursuant to the factors enumerated in Section 6.2.1.1, above.

a. **Drainage Area Investigation**

The Permittee shall investigate activities within the drainage area contributing to all outfalls described in Section 6.2.1.1.a.i. This investigation shall include factors potentially associated with the cause of the related stream impairment. Such factors may include land use or development patterns, business or commercial activities, industrial activities, DCIA, natural contributors potential MS4 maintenance issues, residential activities, and any other activities out of the Permittee's control identified as potentially contributing to the related impairment.

- i. The Permittee shall document the results of the follow-up investigation and indicate if the investigation supports the SELDM assessment result. If the follow-up investigation does not support the original SELDM modeling result, the Permittee shall document the justification for this conclusion.
- ii. If the Permittee identifies factors potentially associated with the cause of the impairment during the field investigation, the Permittee shall identify those outfalls potentially contributing to impairments and factors for control measure implementation in Section 6.2.1.2.b, below.

b. **Control Measure Implementation**

In each outfall drainage area for which the follow-up investigation supports the SELDM assessment that the Permittee's contribution to the impaired water outfall is linked to the water's impairment, the Permittee shall implement a BMP program focusing on the impaired waters provisions of each of the Minimum Control Measures in Section 6.1 of this general permit and on the findings of the drainage area investigation in Section 6.2.1.2.a, above.

Potential measures to reduce the pollutant of concern may include non-structural BMPs or structural BMPs. The Permittee shall document all follow up investigations, any potential control measures to be taken to reduce the pollutant of concern, the feasibility of the control measure implementation, and a timeline for their implementation in each Annual Report.

6.2.2 Monitoring Schedule and Reporting

6.2.2.1 Schedule

a. **Impaired Waters Discharge Mapping**

The Permittee shall plan to complete the inventory and mapping of the CTDOT MS4 discharges to impaired waters by the end of the fifth (5th) year following the effective date of this general permit.

b. **Follow-up Investigations**

The Permittee shall continue follow-up investigations identified pursuant to Section 6.2.1.2.c, above for the full term of the permit.

6.2.2.2 Reporting

The Permittee shall report on the progress of their impaired waters investigation and monitoring program, as appropriate, in their Annual Report. The report shall include a listing of the number of outfalls identified for follow-up investigation, the progress of drainage area investigations, and a description of the control measure implementation for the different impairments.

Within one-hundred-eighty (180) days following the effective date of this general permit, the Permittee shall submit to the Commissioner a report documenting the protocol and summarizing the results of the monitoring program during the period of July 1, 2019 through June 30, 2024.

6.3 Sharing Responsibility

6.3.1 Qualifying Local Program

The Permittee may satisfy the requirement to implement a BMP for a Minimum Control Measure by having a third party implement the BMP. See note below.

When the Permittee is relying on a third party to implement one or more BMP(s), the Permittee shall note that fact in the registration and in the Annual Report required in Section 6.10 of this general permit. If the third party fails to implement the BMP(s), the Permittee remains responsible for its implementation.

Note: For example, if a local watershed organization performs an annual “river clean-up,” this event may be used to satisfy a BMP for the Public Education Minimum Control Measure.

6.3.2 Qualifying Municipal, State, or Federal Program

If a BMP or Minimum Control Measure is the responsibility of a third party under another NPDES stormwater permit, the Permittee is not required to include such BMP or Minimum Control Measure in its Stormwater Management Plan. The Permittee shall reference this qualifying program in their Stormwater Management Plan. However, the Permittee is not responsible for its implementation if the third party fails to perform. The Permittee shall periodically confirm that the third party is still implementing this measure. If the third party fails to implement the measure, the Stormwater Management Plan may be modified to address the measure, if necessary. See note below.

In the case of a permitted CTDOT industrial activity that is covered by the *General Permit for the Discharge of Stormwater Associated with Industrial Activity*, the Permittee may reference the activity’s Stormwater Pollution Prevention Plan to address a portion of the Permittee’s Stormwater Management Plan.

Note: For example, the Permittee may reference a municipality’s written agreement to perform maintenance activities on CTDOT property abutting the town’s property or a CTDOT maintenance garage covered under the General Permit for the Discharge of Stormwater Associated with Industrial Activity. These types of actions may be used to address a portion of the Permittee’s requirement under the Good Housekeeping and Pollution Prevention Minimum Control Measure.

6.3.3 Coordination of Permit Responsibilities

Where a portion of the separate storm sewer system within the CTDOT MS4 is owned or otherwise the responsibility of a municipality, an institution, or a state or federal agency, the entities shall coordinate the development, implementation, and maintenance of their respective Stormwater Management Plans to address all the elements of Section 6. A description of the respective responsibilities for these elements shall be included in the Stormwater Management Plan for such MS4.

Note: For example, a storm sewer system within a municipality may be operated and maintained by the CTDOT. In cases such as these, the two entities shall coordinate their Stormwater Management Plans to address the Minimum Control Measures, particularly at the interface between the two storm sewer systems.

6.4 Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control, including related appurtenances, which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures in accordance with 40 CFR Part 136. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a Permittee when necessary to achieve compliance with this permit.

6.5 Signatory Requirements

The Stormwater Management Plan shall be signed by the Commissioner of Transportation or his/her agent. The SMP shall be retained by the Commissioner of Transportation and copies retained by CTDOT district offices and employees responsible for implementation of the SMP.

6.6 Plan Review Fee

No plan review fee is required for this general permit.

6.7 Maintenance and Implementation of a Current SMP

The Permittee shall amend the Stormwater Management Plan whenever; (1) there is a change that has the potential to cause pollution of the waters of the state; or (2) the actions required by the SMP fail to prevent pollution of the waters of the state or fail to otherwise comply with any other provision of this general permit; or (3) the Commissioner requests modification of the SMP. The amended SMP and all actions required by such SMP shall be completed within a time period determined by the Commissioner.

The Commissioner may notify the Permittee in writing at any time that the Stormwater Management Plan does not meet one or more requirements of this general permit. Within thirty (30) days of such notification, unless otherwise specified by the Commissioner in writing, the Permittee shall respond to the Commissioner indicating how they plan to modify the SMP to address these requirements. Within ninety (90) days of this response or within one-hundred-twenty (120) days of the original notification, whichever is less, unless otherwise specified by the Commissioner in writing, the Permittee shall then revise the SMP, perform all actions required by the revised SMP, and shall certify to the Commissioner that the requested changes have been made and implemented. The Permittee shall provide such information as the Commissioner requires to evaluate the SMP and its implementation. If at any time the Commissioner finds that the SMP is not adequate to protect the waters of the state from pollution, the Commissioner may terminate authorization under this permit and require the Permittee to submit an individual permit application.

6.8 Failure to Prepare or Amend Stormwater Management Plan

In no event shall failure to complete or update a Stormwater Management Plan in accordance with Sections 5.2 and 6 of this general permit relieve a Permittee of responsibility to implement actions required to protect the waters of the state and to comply with all conditions of this general permit.

6.9 Stormwater Management Plan Certification

A copy of the Stormwater Management Plan review certification made in accordance with Section 3.2.14 shall be maintained with the SMP.

6.10 Recordkeeping & Reporting Requirements

6.10.1 Recordkeeping & Retention

The Permittee shall retain copies of all application documents, laboratory analysis, calibration records, reports required by the permit, and documents required under the Stormwater Management Plan; including but not limited to inspection records, the site map, schedule and records, stormwater structure cleaning schedule and records, and employee training schedule for a period five (5) years following the expiration date of the general permit.

Records required by this general permit shall be retained on-site, or at the Permittee's principal place of business in Connecticut, as required by Section 22a-430-3(j). Records shall be made available to the Commissioner for inspection immediately (within five (5) business days) upon request.

The Commissioner may extend this period as he or she deems necessary upon written notice to the Permittee, and this period is automatically extended for as long as a Permittee is under an active order from the Commissioner under Chapter 446K of the Connecticut General Statutes or if the Permittee is in litigation for any violation of any permit or order issued by the Commissioner under Chapter 446K of the Connecticut General Statutes.

6.10.2 Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the discharger shall record, or maintain records of, all of the following information:

- the place, date, and time of sampling and the time the discharge started.
- the person(s) collecting samples.
- the dates and times the analyses were initiated.
- the person(s) or laboratory who performed the analyses.
- the analytical techniques or methods used.
- the results of all required analyses.

6.10.3 Annual Report

By October 1st of each year, the Permittee shall electronically submit an Annual Report for the preceding permit year to the Department in a format acceptable to the Commissioner. The DEEP MS4 stormwater webpage (www.ct.gov/deep/municipalstormwater) will provide guidance on Annual Report submittal. The Annual Report must be in Microsoft Word®, Adobe Acrobat®, or another format acceptable to the Commissioner.

The Annual Report shall include the following:

6.10.3.1 Narrative Description of Implementation

A written discussion of the status of compliance with this general permit including, but not limited to:

- a. a listing and brief description (including, where appropriate, the address or latitude and longitude) of all BMPs within each Minimum Control Measure.
- b. any reporting requirements enumerated in the controls measures Section 6.1 and its subsections.
- c. an implementation schedule for each BMP and an indication of whether or not the BMP or any portion of the BMP was scheduled to be implemented during the year covered by the Annual Report.
- d. the status of implementation for each BMP scheduled to be completely or partially implemented during the year covered by the Annual Report, including an assessment of the appropriateness of the BMP and progress towards achieving the implementation dates and measurable goals for that BMP.
- e. for any portion of a BMP implementation scheduled for the year covered by the Annual Report that was not completed as scheduled, a discussion of the circumstances and reasons for non-implementation, a modified implementation schedule, and, if necessary, a modified or alternate BMP to replace the BMP not implemented including the rationale for such modification or alternate BMP.
- f. the overall status of each of the six (6) categories of the Minimum Control Measures and a discussion of the effectiveness of each category in achieving its goals.
- g. a discussion of any changes to personnel responsible for the SMP or BMP implementation.

- h. a description of any new BMPs added to the SMP during the year along with a description of the BMP, the reason or rationale for adding the BMP, the timeline for implementation, the party responsible for implementation and the measurable goal for the BMP and, where appropriate, the location for each BMP, including the address and latitude and longitude.
 - i. a discussion of the progress and status of the MS4's IDDE program (Section 6.1.3) including outfall screening, mapping, drainage area evaluation and prioritization, illicit discharge tracking activities, IDDE field monitoring results, number and type of illicit discharges detected, and number of illicit discharges eliminated.
 - j. a discussion of measures included in the SMP for the control of discharges to impaired waters (Section 6.2) including a list of BMPs in the Minimum Control Measures that are targeted for such discharges, progress in implementing these measures, any evaluation of the effectiveness of these measures in meeting the goals of the SMP's impaired waters program, and any new or modified BMPs to be added to the SMP to improve its effectiveness.
 - k. a discussion of the MS4's stormwater monitoring program describing the status of monitoring for the year of the report, the overall status of the monitoring program, a summary of the findings, any significant observations regarding the results, any modifications to the SMP as a result of the monitoring results.
 - l. a discussion of any planned BMP implementation in the coming year, including a discussion of any new or modified BMPs planned for future implementation.
- 6.10.3.2 All monitoring data collected and/or analyzed pursuant to Section 6.2.
- 6.10.3.3 All other information collected and analyzed, including data collected under the Illicit Discharge Detection Protocol (Appendix B), during the reporting period.
- 6.10.3.4 The Permittee shall annually publish a public notice of availability of the Annual Report no later than August 1st of each calendar year.
- 6.10.3.5 The Permittee shall submit a copy of each Annual Report to EPA upon submission to CT DEEP.

Section 7 Duty to Correct, Record, and Report Violations

7.1 Corrective Actions

Immediately upon learning of a violation of a condition of this general permit, the Permittee shall immediately take all reasonable actions to determine the cause of the violation, correct the violation, mitigate the impact of the violation, and prevent its recurrence.

7.2 Reporting Violations

7.2.1 Noncompliance with Permit Terms or Conditions

In accordance with Section 22a-430-3(j)(8), 22a-430-3(j)(11)(D), 22a-430-3(k)(4), and 22a-430-3(i)(3) of the RSCA, the Permittee shall notify the Commissioner of the following actual or anticipated noncompliance with the terms or conditions of this permit within two hours of becoming aware of the circumstances. All other actual or anticipated violations of the permit shall be reported to the Commissioner within 24 hours of becoming aware of the circumstances:

- a noncompliance that is greater than two times an effluent limitation.
- a noncompliance of any minimum or maximum daily limitation or excursion beyond a minimum or maximum daily range.
- any condition that may endanger human health or the environment.
- a failure or malfunction of monitoring equipment used to comply with the monitoring requirements of this permit.
- any actual or potential bypass of the Permittee's collection system or treatment facilities.
- expansions or significant alterations of any wastewater collection, treatment facility, or its method of operation for the purpose of correcting or avoiding a permit violation.
- notifications shall be submitted via the Commissioner's online Noncompliance Notification Form: <https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements>.

7.2.2 Five-Day Follow Up Report

Within five (5) days of any notification of noncompliance in accordance with this permit, the Permittee shall submit a follow-up report within five days of the noncompliance using the Commissioner's online Noncompliance Follow-up Report Form:

<https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/compliance-assistance/notification-requirements>.

The follow-up report shall contain, at a minimum, the following information:

- a description of the noncompliance and its cause.
- the period of noncompliance, including exact dates and times.
- if the noncompliance has not been corrected, the anticipated time it is expected to continue.
- steps taken or planned to correct the noncompliance and reduce, eliminate and prevent recurrence of the noncompliance.

Notification of an actual or anticipated noncompliance or facility modification does not stay any term or condition of this permit.

7.2.3 Additional Notification Requirements

In accordance with Section 22a-430-3(j)(11)(ED) of the RSCA, the Permittee shall notify the Commissioner within 72 hours and in writing within 30 days when he or she knows or has reason to believe that the concentration in the discharge of any substance listed in the application, or any toxic substance as listed in Appendix B or D of RSCA Section 22a-430-4, has exceeded or will exceed the highest of the following levels:

- one hundred micrograms per liter.
- two hundred micrograms per liter for acrolein and acrylonitrile, five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter for antimony.
- an alternative level specified by the Commissioner, provided such level shall not exceed the level which can be achieved by the Permittee's treatment system.

The 72-hour initial notifications and 30-day follow-up reports shall be submitted via the Commissioner's online Noncompliance Follow-up Report Form. The Forms are available on the DEEP website here:

<https://portal.ct.gov/deep/water-regulating-and-discharges/industrial-wastewater/complianceassistance/notification-requirements>.

Section 8 Additional Requirements of this General Permit

8.1 Regulations of Connecticut State Agencies Incorporated into this General Permit

The Permittee shall comply with all laws applicable to the subject discharges, including but not limited to, the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

8.1.1 Section 22a-430-3:

- Subsection (b) General - subparagraph (1)(D) and subdivisions (2), (3), (4) and (5)
- Subsection (c) Inspection and Entry
- Subsection (d) Effect of a Permit - subdivisions (1) and (4)
- Subsection (e) Duty to Comply
- Subsection (f) Proper Operation and Maintenance
- Subsection (g) Sludge Disposal
- Subsection (h) Duty to Mitigate
- Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)
- Subsection (j) Monitoring, Records and Report Requirements - subdivisions (1), (6), (7), (8), (9) and (11) (except subparagraphs (9)(A)(2) and (9)(c))
- Subsection (k) Bypass
- Subsection (m) Effluent Limitation Violations
- Subsection (n) Enforcement
- Subsection (p) Spill Prevention and Control
- Subsection (q) Instrumentation, Alarms, Flow Recorders
- Subsection (r) Equalization

8.1.2 Section 22a-430-4

- Subsection (t) Prohibitions
- Subsection (p) Revocation, Denial, Modification
- Appendices

Section 9 Standard Conditions

9.1 Inspection and Entry

The Commissioner or his or her authorized representative may take any actions authorized by Sections 22a-6(5), 22a-425 or 22a-336 of the CGS as amended.

9.2 Reliance on Registration

When evaluating a registration, the Commissioner relies on information provided by the Registrant. If such information proves to be false or incomplete, the authorization issued under this general permit may be suspended or revoked in accordance with law, and the Commissioner may take any other legal action provided by law.

9.3 Submission of Documents

Any document, other than a DMR, required to be submitted to the Commissioner under this Section of the permit will, unless otherwise specified in writing by the Commissioner or through this general permit, be directed to DEEP.StormwaterStaff@ct.gov with the subject line: "ATTN: DOT MS4 GP".

9.4 Violations

Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable Sections of the Connecticut General Statutes and RCSA.

9.5 Enforcement

The Commissioner may take any enforcement action provided by law, including but not limited to seeking injunctions, penalties and forfeitures as provided in Sections 22a-6, 22a-7, 22a-430, 22a-432, 22a-435, 22a-438, and 22a-471 of the Connecticut General Statutes as amended, for any violations or acts of noncompliance with chapter 446k of the Connecticut General Statutes or any regulation, order, permit or approval issued there under.

9.6 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

9.7 No Assurance

No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

9.8 Relief

Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state, and local law.

9.9 Duty to Provide Information

The Commissioner may require any Permittee to provide within a reasonable time (30 days) any information which the Commissioner may request to determine whether cause exists for modifying or revoking the permit or to determine compliance with the permit, including but not limited to copies of records required to be kept by the Permittee.

9.10 Duty to Comply

The Permittee shall comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of Chapter 446k of the Connecticut General Statutes. Permit noncompliance is grounds for enforcement action, permit revocation or modification, or denial of a permit renewal application.

The Permittee shall comply with effluent limitations, standards or prohibitions established under Section 307(a) CWA which are adopted in subsection (I) of Section 22a-430-4 of the Regulations of Connecticut State Agencies for toxic substances upon adoption, even if the permit has not yet been modified to incorporate the requirement.

Except for any toxic effluent standards and prohibitions imposed under Section 307 CWA, compliance with a permit during its term shall constitute compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403, and 405 of the Clean Water Act.

The Commissioner may modify or revoke a permit during its term for cause as provided in Section 22a-430-4 of the RCSA.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

9.11 Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of the permit or any discharge which has a reasonable likelihood of adversely affecting human health or the environment.

9.12 Sludge Disposal

The Permittee shall dispose of screenings, sludges, chemicals, and oils and any solid or liquid wastes resulting from the wastewater treatment processes at locations approved by the Commissioner for disposal of such materials, or by means of a waste hauler licensed under the provisions of the Connecticut General Statutes.

9.13 Resource Conservation

All Permittees shall implement and maintain practices and/or facilities which, to the maximum extent practicable, result in the minimum amount of wastewater discharged. Such results may be achieved by methods including but not limited to water conservation, resource recovery, waste recycling, wastewater reuse, and material or product substitution. Excessive use of water or the addition of water to dilute an effluent in order to meet any permit limitations or conditions is prohibited.

9.14 Spill Prevention and Control

The Permittee shall maintain practices, procedures and facilities designed to prevent, minimize and control spills, leaks, or such other unplanned releases of all toxic or hazardous substances and any other substances as the Commissioner deems necessary to prevent pollution of the waters of the state. Such requirements shall, unless otherwise allowed by the Commissioner, apply to all facilities used for storing, handling transferring, loading, or unloading such substances, including manufacturing areas.

The requirements of this Section do not apply to facility components or systems already covered by plans prepared or approved under the Resource Conservation and Recovery Act and the Spill Prevention, Control and Countermeasure program.

9.15 Duty to Reapply

The permit shall be effective for a fixed term not to exceed five (5) years unless administratively extended. The general permit will include instructions to reapply for permit coverage.

9.16 Equalization

All treatment facilities shall be designed to prevent upsets, malfunctions or instances of noncompliance resulting from variations in wastewater strength or flow rate, and shall include, as the Commissioner deems necessary, equalization facilities separate from the treatment facilities.

9.17 Effect of an Upset

An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- an upset occurred and the Permittee can identify the cause(s) of the upset.
- the permitted facility was at the time being properly operated.
- the Permittee submitted notice of the upset timely as required in Section 7.2 of this general permit.
- the Permittee complied with all remedial measures.

9.18 Bypass

The Permittee shall not at any time bypass the collection system or treatment facilities or any part thereof unless such bypass is unanticipated, unavoidable, and necessary to prevent loss of life, personal injury or severe property damage, and there were no feasible alternatives to the bypass, including but not limited to the use of auxiliary or back-up treatment facilities, retention of untreated wastes, stopping the discharges, or maintenance during normal periods of equipment downtime; or the Permittee receives prior written approval of the bypass from the Commissioner in order to perform essential maintenance, and the bypass does not cause effluent limitations to be exceeded.

9.19 Necessary Bypass

In the event such a bypass is necessary, the Permittee shall to the extent possible minimize or halt production and/or all discharges until the facility is restored or an alternative method of treatment is provided.

9.20 Bypass Prevention

In order to prevent a bypass, the Permittee may schedule maintenance during periods when no discharge is occurring or employ any necessary means, including but not limited to duplicate units and systems or alternative collection and treatment or pretreatment schemes. Any such means shall ensure that the effluent limitations specified in the permit are achieved; be approved by DEEP in writing prior to its use, which approval shall include an alternative schedule for monitoring if appropriate; and be discontinued upon completion of the performance of the essential maintenance.

9.21 Notification to DEEP

The Permittee shall provide notice to DEEP not less than twenty-four (24) hours prior to the use of any alternative scheme and monitor and record the quality and quantity of the discharge in accordance with permit terms and conditions or an approved alternative schedule. Such monitoring shall be submitted with the next monitoring report required by the permit and shall not be used to meet routine scheduled monitoring report requirements of the permit.

If any bypass occurs or may occur, the Permittee shall, within two hours of becoming aware of such condition or need, notify DEEP during normal business hours (860-424-3021), and the department's Emergency Response Unit at all other times (860-424-3338 or 866-337-7745) and submit within five days a written report including

the cause of the problem, duration including dates and times and corrective action taken or planned to prevent other such occurrences.

If the Permittee has reason to believe that any effluent limitation specified in the permit may be violated, the Permittee shall immediately take steps to prevent or correct such violation, including but not limited to employing an alternative scheme of collection or treatment, and/or control the production of the wastewater and shall monitor and record the quality and quantity of the discharge in accordance with the permit terms and conditions or an approved alternative schedule. Such monitoring shall be submitted with the next monitoring report required by the permit and shall not be used to meet the routine monitoring requirements of the permit.

9.22 Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems and parts thereof for wastewater collection, storage, treatment, and control which are installed or used by the Permittee to achieve compliance with the terms and conditions of the permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, and adequate operator staffing and training, including the employment of certified operators as may be required by the Commissioner pursuant to Sections 22a-416-1 through 22a-416-10 of the RCSA, as amended, and adequate laboratory and process controls, including appropriate quality assurance procedures.

In accordance with Sections 22a-416 through 22a-471 of the Connecticut General Statutes as amended, the Permittee is required to install and operate a back-up or auxiliary facilities or similar systems or the inventory of spare parts and appurtenances.

9.23 Instrumentation, Alarms, and Flow Records

Except for batch treatment systems unless required by the Commissioner, process wastewater treatment systems shall include instrumentation to automatically and continuously indicate, record and/or control those functions of the system and characteristics of the discharge which the Commissioner deems necessary to assure protection of the waters of the state.

9.24 Signatory Requirements

All permit applications and permit modification requests submitted to the Commissioner shall be signed as follows:

9.24.1 For a corporation the signatory shall be a responsible corporate officer.

For the purposes of this Section, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function; any other person who performs similar policy-or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

9.24.2 For a partnership or sole proprietorship, the signatory shall be a general partner or the proprietor, respectively.

9.24.3 For a municipality, State, Federal, or other public agency the signatory shall be either a principal executive officer or a ranking elected official.

For purposes of this Section, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

9.25 Duly Authorized Representative

All reports required by permits, and other information submitted to the Commissioner shall be signed by a person described in Section 7.24 of this general permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- the authorization is made in writing by a person described in Section 7.24 of this general permit.
- the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- the written authorization is submitted to the Commissioner.

9.26 Notification to DEEP

If an authorization under this subsection is no longer accurate because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of this Section must be submitted to the Commissioner prior to or together with any reports or other information to be signed by an authorized representative.

9.27 Certification

Any person signing a document under this Section shall make the following certifications:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with Section 22a- 6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.”

9.28 Date of Filing

For the purposes of this general permit, the date of filing with the Commissioner of any document is the date such document is received by the Commissioner.

9.29 False Statements

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute.

9.30 Correction of Inaccuracies

Within fifteen (15) days after the date a Permittee becomes aware of a change in any of the information submitted pursuant to this general permit, becomes aware that any such information is inaccurate or misleading, or that any relevant information has been omitted, such Permittee shall correct the inaccurate or misleading information

or supply the omitted information in writing to the Commissioner. Such information shall be certified in accordance with this general permit.

9.31 Transfer of Authorization

Any authorization under this general permit shall not be transferable.

9.32 Other Applicable Law

Nothing in this general permit shall relieve the Permittee of the obligation to comply with any other applicable federal, state, and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

9.33 Duty to Reapply

The permit will be effective for a fixed term not to exceed five (5) years unless administratively extended. The general permit will provide instructions on how and when to reapply.

9.34 Other Rights

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the Permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

9.35 Effect of a Permit

The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege, authorize any injury to persons or property or invasion of other private rights, authorize any infringement of the Connecticut General Statutes, Regulations of Connecticut State Agencies or municipal ordinances, or affect the responsibility of the Permittee to obtain all applicable federal, State and municipal authorizations or permits for the discharge and activities which generate the discharge.

Section 10 Commissioner's Powers

10.1 Abatement of Violations

The Commissioner may take any action provided by law to abate a violation of this general permit, including but not limited to penalties of up to \$25,000 per violation per day under Chapter 446k of the Connecticut General Statutes, for such violation. The Commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a Permittee's authorization hereunder in accordance with Sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the Commissioner by law.

10.2 General Permit Revocation, Suspension, or Modification

The Commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

10.3 Filing of an Individual Application

If the Commissioner notifies a Permittee in writing that such Permittee shall obtain an individual permit under Section 22a-430 of the Connecticut General Statutes if he wishes to continue lawfully conducting the authorized activity, the Permittee shall file an application for an individual permit within thirty (30) days of receiving the Commissioner's notice, or at such other date as the Commissioner may allow. While such application is pending before the Commissioner, the Permittee shall comply with the terms and conditions of this general permit and the subject approval of registration. If the Commissioner issues an individual permit to a Permittee under this general permit, this general permit, as it applies to such Permittee, shall automatically terminate on the date such individual permit is issued. Nothing herein shall affect the Commissioner's power to revoke a Permittee's authorization under this general permit at any time.

APPENDIX A: Small MS4 Municipalities

The following are municipalities registered under the *NPDES General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems* ("Small MS4 GP") issued September 29, 2023. This list is subject to change during the permit term.

Small MS4 Municipalities		
Ansonia	Groton (City & Town)	Plymouth
Avon	Guilford	Portland
Beacon Falls	Haddam	Prospect
Berlin	Hamden	Putnam
Bethany	Hartford	Redding
Bethel	Hebron	Ridgefield
Bloomfield	Killingly	Rocky Hill
Bolton	Ledyard	Seymour
Branford	Lisbon	Shelton
Bridgeport	Madison	Simsbury
Bristol	Manchester	Somers
Brookfield	Marlborough	South Windsor
Brooklyn	Meriden	Southbury
Burlington	Middlebury	Southington
Canton	Mansfield	Sprague
Cheshire	Middlefield	Stonington (Town & Borough)
Chester	Middletown	Stratford
Clinton	Milford	Suffield
Cromwell	Monroe	Thomaston
Danbury	Montville	Thompson
Darien	Naugatuck	Tolland
Deep River	New Britain	Trumbull
Derby	New Canaan	Vernon
Durham	New Fairfield	Wallingford
East Granby	New Hartford	Waterbury
East Hartford	New Haven	Waterford
East Haven	New London	Watertown
East Lyme	New Milford	West Hartford
East Windsor	Newington	West Haven
Easton	Newtown	Westbrook
Ellington	North Branford	Weston
Enfield	North Haven	Westport
Essex	Norwalk	Wethersfield
Fairfield	Norwich	Willington
Farmington	Old Lyme	Wilton
Glastonbury	Old Saybrook	Windsor
Granby	Orange	Windsor Locks
Greenwich	Oxford	Wolcott
Griswold	Plainfield	Woodbridge
Groton (City)	Plainville	Woodbury

APPENDIX B: Illicit Discharge Detection and Elimination (IDDE) Protocol

This appendix provides guidance on how to conduct outfall investigations to identify and eliminate illicit discharges as part of the IDDE program; Permittees are encouraged to use the information provided herein to develop their written IDDE plan.

B.1 Outfall Screening for Illicit Discharges

The Permittee shall screen its MS4 outfalls in the Priority Areas during dry weather conditions for physical, chemical, and biological indicators of the presence of illicit discharges.

B.1.1 Known Illicit Discharges

Whether documented by the Commissioner, the Permittee, or others, outfalls from drainage areas with known or highly suspected contributions of illicit discharges may have already been identified. Screening of outfalls serving such portions of the MS4 is not required for the purpose of prioritization as required in Section B.1.3 below, and the Permittee shall continue or initiate identification and removal procedures for illicit discharges in these areas based on the Permittee's priority ranking established pursuant to Section B.1.3. Within one-hundred-eighty (180) days of the effective date of this permit, the Permittee shall submit to the Commissioner an inventory of all mapped MS4 outfalls for which the Permittee deems screening is not required pursuant to this subsection. For each such drainage area, the Permittee shall provide:

- all available documented evidence, including monitoring results, of illicit discharges;
- completed, ongoing or planned corrective measures addressing the documented illicit discharges; and
- a schedule for completing and verifying measures correcting the documented illicit discharges.

B.1.2 Priority Ranking of Outfall Screening

The Permittee shall develop a priority ranking for the purpose of scheduling its outfall screening activities required by this part. The Commissioner recommends that the Permittee consider the current or intended designated uses of receiving waters, existence of impaired waters, and the relative likelihood of the presence of illicit discharges in the development of its priority ranking.

B.1.3 Priority Ranking for IDDE Investigation

Screening of outfalls (in the priority ranking developed in Section B.1.2, above) shall be completed to facilitate the priority ranking of individual separate storm sewer drainage areas for investigation using the Permittee's Illicit Discharge Detection Protocol ("IDDP") described in Section B.2, below. Analysis of screening results, including comparisons with benchmark values for parameters in Table B-1 and Figure B-1 in Section B.2.4.5, below, shall support such prioritization. An additional round of screening of outfalls is required after implementation of the Permittee's IDDP to verify that the correction of all illicit discharges has been completed. Such verification screening shall be completed no more than sixty (60) days after the Permittee has verified removal of all such discharges contributing to the outfall's drainage area in accordance with Section B.2.4.2 below.

B.1.4 Methodology

Outfall screening shall proceed only when no more than 0.1 inches of rainfall has occurred in the previous 48-hour period. The duration of the antecedent period may be shortened or lengthened by the Permittee as necessary or appropriate dependent upon rainfall depth or the relative extent, slope, storage, and other influences on the particular drainage area served by the outfall. Screening shall be performed according to the following procedures:

- B.1.4.1 Locate the outfall and take a photograph. At outfalls where photographs were previously taken, new photographs shall be taken from the same approximate orientation to facilitate comparison and determination of any changes.
- B.1.4.2 Collect data on physical condition of the outfall, including evidence of collapse and structural defects, and evidence of erosion or deposition in the vicinity of the outfall.

B.1.4.3 Record any indicators of illicit discharges such as odors, oil sheen, discoloration, foaming, soap suds, slimes, or presence of sanitary floatables or solids.

B.1.4.4 If the outfall is inaccessible or submerged, proceed to the first accessible upstream manhole or structure.

B.1.4.5 Outfall observation

Observe the outfall for evidence of illicit discharge and proceed as follows:

- a. If no flow is observed and there is no evidence of an illicit discharge (e.g., a residue unrelated to a stormwater discharge), this outfall will be assigned a lower priority ranking and the screening shall proceed to the next outfall.
- b. If flow is observed, estimate flow using the product of flow area and velocity or the quotient of volume discharged over time, perform the field analyses described in Section B.1.4.6 below, and collect a grab sample for enumeration of indicator bacteria (E.coli or enterococci, as appropriate) in the laboratory.
- c. If the outfall is not flowing, but shows evidence of an illicit discharge, return in four (4) to twenty-four (24) hours and screen again, completing flow estimation, field analyses, and grab sampling for indicator bacteria analysis if flow is subsequently observed. If no flow is observed initially and upon return, make note of the outfall to prioritize for future investigation and proceed to the next outfall.

B.1.4.6 Field analyses of dry weather flow samples shall include measurement of the following parameters:

- a. Conductivity
- b. Turbidity
- c. Dissolved Oxygen
- d. pH
- e. Chlorine
- f. Temperature
- g. Surfactants (as MBAS)
- h. Potassium
- i. Ammonia

B.2 Illicit Discharge Detection Protocol (“IDDE Protocol”)

B.2.1 Implementation

The Permittee shall implement an IDDP according to the priorities developed pursuant to Section B.2.2 and consistent with the methodology described in Section B.2. The Permittee shall complete implementation of its IDDP as outlined in the schedule in Section B.2.5. The drainage areas investigated shall include the highest twenty percent (20%) of the prioritized areas as determined by Section B.2.1.1, below. The Permittee shall eliminate all identified illicit discharges pursuant to the “IDDE Program Elements” section (Section 6.1.3.1).

B.2.1.1 Impaired Waters

If more than twenty percent (20%) of the outfall drainage areas in the MS4 discharge to impaired waters, the Permittee shall include in the Stormwater Management Plan a discussion of the criteria by which those areas in the highest twenty percent (20%) of prioritized drainage areas were chosen. The remaining drainage areas to impaired waters that are not included in the highest twenty percent (20%) of prioritized areas shall receive highest priority for future investigation. If the Permittee

completes the initial twenty percent (20%) of highest prioritized areas ahead of the schedule in Section B.2.5, below, the IDDP investigations shall proceed immediately to these remaining high prioritized areas discharging to impaired waters.

B.2.2 Prioritization

The Permittee shall use the results from its dry weather outfall screening required by the “Illicit Discharge Detection and Elimination” section (Section 6.1.3) to develop a priority ranking of outfall drainage areas for the purpose of scheduling its IDDP implementation. The Commissioner recommends that the Permittee consider the perceived severity of the pollution, the current or intended uses of receiving waters, impairment status, and any planned infrastructure improvements, in the development of its priority ranking. Drainage areas discharging to impaired waters will receive primary consideration when prioritizing.

B.2.3 Mapping

Through a geographic information system or other methods, the Permittee shall, in accordance with Section 6.1.3.3., prepare mapping to facilitate implementation of its IDDP. Mapping shall provide a comprehensive depiction of key infrastructure and factors influencing proper system operation and the potential for illicit discharges. Mapping themes shall include: key storm sewer infrastructure (including a latitude and longitude), investigation and study findings, monitoring data, cleaning and repair activities, capital projects, and water resource and topographic features. The required number, scale and detail of the maps shall be appropriate to facilitate a rapid understanding of the system by the Permittee or the Commissioner. In addition, the mapping shall serve as a planning tool for the implementation and phasing of the IDDP, a demonstration of the extent of complete and planned investigations and corrections, and other related capital projects. Mapping shall proceed at a rate that will not impede implementation of the IDDP. To ensure legible mapping, information shall be grouped appropriately and represented thematically (e.g., by color) with legends or schedules where possible. Mapping shall be updated as necessary to reflect new information, corrections or modifications, and progress made.

B.2.4 IDDP Methodology

The IDDP shall utilize methodologies described in this subsection to perform a thorough investigation of MS4 outfall drainage areas that relies on results from visual observation, field test kits, and portable instrumentation during dry weather conditions to isolate areas or alignments with likely illicit discharges. Internal plumbing inspections, dye or smoke testing, CCTV inspections, or other methods consistent with the Permittee’s established procedures shall then be employed to confirm the illicit and non-stormwater flow sources.

B.2.4.1 Notification

Prior to beginning an IDDP investigation that may involve smoke testing in a given drainage area, the Permittee shall notify all residents, businesses and all other property owners or occupants within that drainage area of the impending testing.

B.2.4.2 Infrastructure Verification and Preparation

Infrastructure mapping and drainage area delineations shall be verified in the field and corrected, as necessary, prior to investigations. MS4 infrastructure shall be evaluated for the need to be cleaned to remove debris or blockages that could compromise investigations. Such material shall be removed prior to investigation, where possible. However, some cleaning may occur concurrently.

B.2.4.3 Dry Weather Criteria

In order to prevent or limit the influence of stormwater runoff during the investigations, inspections and field monitoring shall not begin for at least twenty-four (24) hours after any previous storm event greater than 0.1 inches. The duration of this dry weather period may be shortened or

lengthened by the Permittee as necessary or appropriate dependent upon rainfall depth or the relative extent, slope, storage, and other influences on the particular drainage area under investigation.

B.2.4.4 Storm Sewer Inspection Methodology

Visually inspect outfalls in dry weather conditions to determine the possible presence of dry weather flows. Depending on the findings, conduct one of the procedures below. Table B-1 indicates which analytes will be used for the determination of illicit discharges.

a. No Dry Weather Flow Observed and No Evidence of Dry Weather Flow:

If no dry weather flow is observed at an outfall and there is no evidence of one (e.g., color, algae, etc.), no further inspection of the outfall is required during the term of this permit.

b. No Dry Weather Flow Observed but Evidence of Dry Weather Flow:

If there is no dry weather flow but there is evidence of one (e.g., color, algae, etc.), proceed as follows:

- i. Partially dam the outfall when no rain is forecast for at least forty-eight (48) hours;
- ii. Re-inspect the outfall within twenty-four (24) to forty-eight (48) hours of damming (prior to any precipitation or snow melt) for evidence of the capture of periodic or intermittent flows behind the inlet dam. If, upon reinspection, there is no evidence of dry weather flows, re-inspect within six (6) months. If, upon re-inspection, there is evidence of dry weather flows, visual observations and field testing pursuant to the procedures below shall be completed on any captured flow to identify alignments for additional inspections.

c. Dry Weather Flow Observed:

If a dry weather flow is observed, test the flow for the analytes in Table B-1 (pursuant to Section B.2.4.5) and inspect the flow for evidence of an illicit discharge (e.g., color, odor, sheen, etc.).

- i. If testing or visual inspection indicates that the discharge consists of groundwater, proceed as follows:
 1. Inspect upstream manholes to determine the source of the groundwater infiltration. For all inlets to upstream manholes, follow the procedures of this subsection for determination of dry weather flows. Take samples at the most upstream manhole which has flows to ensure the flow is only uncontaminated groundwater;
 2. Go to the next upstream manholes including those on tributary lines. Ensure that there is no evidence of dry weather flow, including discoloration or other indications that there may have been a dry weather flow at one time. Once the next upstream manhole exhibits no dry weather flow or evidence of one, no further upstream inspection of that alignment is required.
 3. Document all observations, take photographs, and include test results as part of the documentation. Indicate on a map which manholes have been inspected. The map will also be part of the permanent documentation.
 4. Re-inspect within six (6) months. If conditions have not changed, no further inspection of the outfall is required during the term of this permit.
- ii. If testing or visual inspection indicates that the discharge consists of something other than groundwater, proceed as follows:
 1. Inspect next upstream manhole(s) to determine which ones show signs of dry weather flow. There may be several manholes depending on the tributaries;

2. For any tributary that shows signs of dry weather flow, continue to follow that upstream using the procedures of this subsection, inspecting every manhole including sub-tributaries until no manholes show any indication of dry weather flow;
3. Repeat for all tributaries that show signs of dry weather flow.
4. Take samples whenever possible. Document all observations, take photographs, and include test results as part of the documentation. Indicate on a map which manholes have been inspected. The map will also be part of the permanent documentation.
5. For alignments that indicate an illicit discharge, smoke test the area (or utilize comparable methods) to determine the source of the discharge following the notification procedures.
 - a. If the location is identified, appropriate corrections will be made to stop the illicit discharge.
 - b. If no location is determined, dye testing of potential upstream sources shall be conducted and then the violation corrected.
 - c. If no location is still identified, the area will be monitored twice per month to establish the cause of this illicit discharge.

B.2.4.5 Field Monitoring

Where flow is observed that does not demonstrate obvious physical or olfactory evidence of the type and source of an illicit discharge, a sample shall be collected and analyzed with the field kits and instrumentation as identified in Table B-1. The Permittee shall compare the measured values with benchmark values using the flow chart in Figure B-1 to determine the likely source of the flow. Where surfactant concentrations are measured in the flow above the benchmark, ammonia and potassium shall be measured and results used in a ratio analysis to determine if the flow is likely to be governed by a sanitary or wash water component. Where surfactants are not detected above the benchmark concentration, a flow sample shall be analyzed for chlorine in an attempt to determine if the likely source is natural surface water or groundwater; or possibly a potable water source, a swimming pool, or an industrial discharge. However, the results of this analysis may not always prove conclusive as the chlorine demand found in the storm sewer may diminish or eliminate any chlorine present. The Permittee may need to adjust benchmark values found in Table B-1 during the course of investigations after a comparison and calibration of data with actual incidences of observed flow sources.

If field analysis is performed directly at the outfall, a bacteria sample only needs to be collected in the event that the field analysis indicates a potential illicit discharge from a sanitary source or if there are obvious physical or olfactory indications that the discharge is from a sanitary source. Where the ammonia to potassium ratio indicates likely sanitary wastewater connection or if there are obvious physical or olfactory indications, the Permittee shall collect a bacteria sample (*E. coli* or enterococci, as appropriate) and review the results of laboratory testing for bacteria to confirm this determination. If field samples are to be analyzed at a later time, a bacteria sample shall be collected at the same time as the field sample for laboratory analysis.

If the results of field monitoring are not conclusive or additional data is needed to confirm that the source of an illicit discharge is human-generated, alternate parameters for Pharmaceutical and Personal Care Products (“PPCP”) may be monitored as indicated in Table B-2. Any or all of these parameters may be analyzed. These samples must be analyzed by a laboratory with the appropriate capability. Advance notice to the lab may be required. Levels of these parameters above the Reporting Limit indicate the likely presence of human-generated contamination.

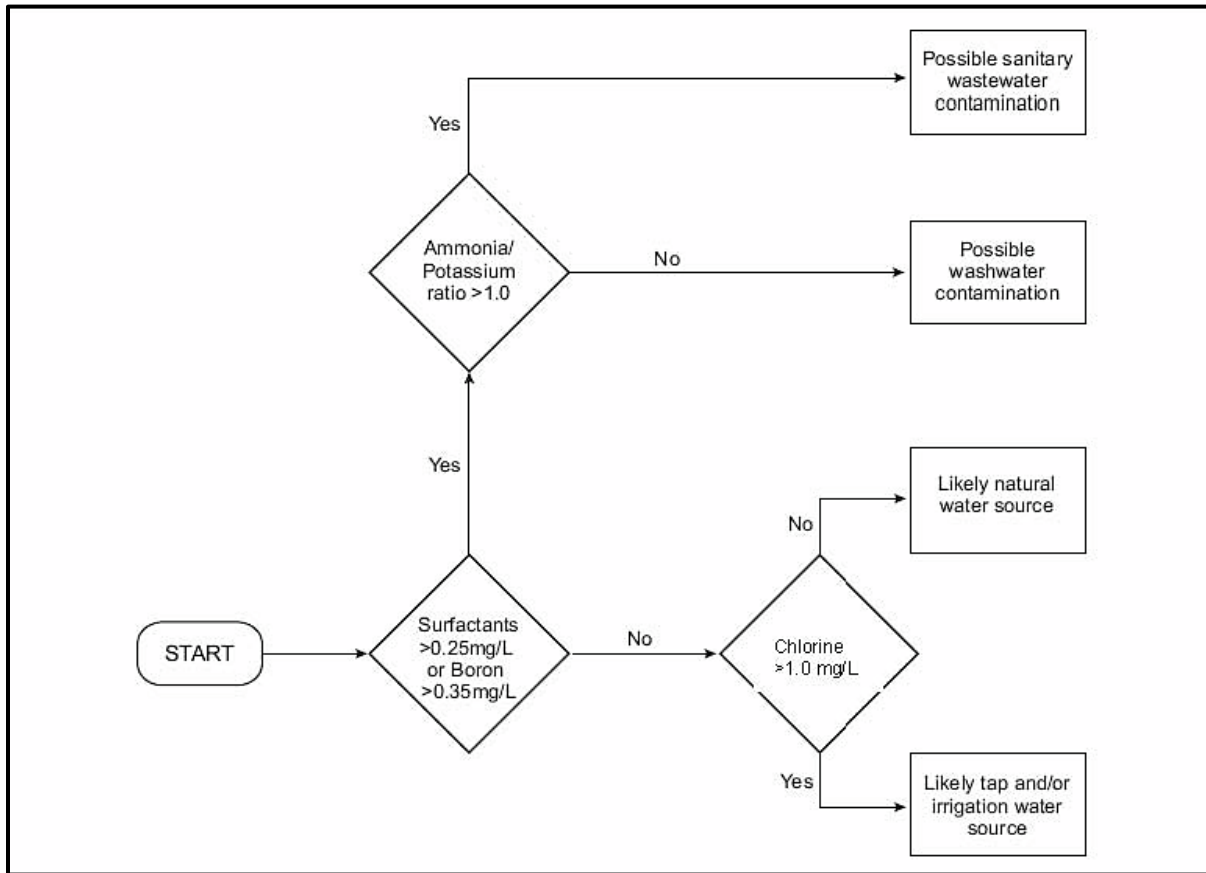
Table B-1: Field Measurements, Benchmarks, and Instrumentation

Analyte	Benchmark	Instrumentation ¹
Surfactants (as MBAS)	>0.25 mg/L	MBAS Test Kit (e.g., CHEMetrics K-9400)
Potassium (K)	ratio below	Portable Ion Meter (e.g., Horiba Cardy C131)
Ammonia (NH ₃)	NH ₃ /K > 1.0	Portable Colorimeter or Photometer (e.g., Hach DR/890, CHEMetrics V-2000)
Chlorine	>0.1 mg/L	Portable Colorimeter or Photometer (e.g., Hach DR/890, CHEMetrics V-2000)
Temperature	Abnormal	Thermometer
pH	Abnormal	pH Meter
¹ Instrumentation manufacturers and models provided for informational purposes only. Mention of specific products does not constitute or imply DEEP endorsement of same.		

Table B-2: Compounds for Pharmaceutical and Personal Care Products Analysis

Compound	Major Use	Reporting Limit
Caffeine	Natural Stimulant	5.0 ng/L
1, 7 DMX	Metabolite of caffeine	2.5 ng/L
Acetaminophen	Pain reliever	2.5 ng/L
Carbamazepine	Anti-depressant, Anti-convulsant	0.5 ng/L
Primidone	Anti-epilepsy drug	5.0 ng/L
Atenolol	Beta blocker, high blood pressure medicine	2.5 ng/L
Cotinine	Metabolite of nicotine	0.5 ng/L
Urobilin	By-product of hemoglobin breakdown	5.0 ng/L
Azithromycin	Antibiotic	1.6 ng/L

Figure B-1: Flow Chart for Determining Likely Sources of Discharge (adapted from Pitt, 2004)



B.2.4.6 Isolation and Confirmation of Illicit Discharges

Where physical evidence or field monitoring has identified storm sewer alignments influenced by illicit discharges, the Permittee shall isolate the tributary area for implementation of more detailed investigations. Additional manholes and/or catch basins along the alignment shall be inspected to refine the location of potential contamination sources (e.g., an individual home or block of homes). Targeted internal plumbing inspections, dye or smoke testing, CCTV inspections, or other methods consistent with the Permittee's established procedures shall then be employed to confirm the flow source(s).

B.2.4.7 Removal of Illicit Discharges

Where an illicit discharge is verified, the Permittee shall exercise its authority as necessary to require its removal pursuant to Section 6.1.3.2 of this permit, including prompt notification and any appropriate cost-sharing arrangements.

B.2.4.8 Verification of Illicit Discharge Removal

After completing the removal of all illicit discharges from a particular alignment or portion of an MS4 outfall drainage area, the Permittee shall verify that no illicit discharges remain. Depending on the extent and timing of corrections made, verification monitoring may be accomplished at the original junction structure or the closest downstream MS4 structure to each correction. Verification shall be accomplished by using the same visual inspection, field monitoring, and/or damming techniques as described in Sections B.2.4.4.a-c, above. Investigation of those portions of any other

alignments confounded by the identified illicit discharge(s) shall not proceed until removal or elimination has been verified.

B.2.4.9 Verification of IDDP Completion in MS4 Drainage Areas

A completed verification at the outfall (or the first accessible upstream structure from an inaccessible MS4 outfall) of an MS4 outfall drainage area shall serve to demonstrate that the IDDP has been fully implemented for that entire drainage area. This drainage area verification shall include both the techniques described in Sections B.2.4.4.a-c, above.

B.2.5 Work Progression and Schedule

Since the IDDP requires verification of illicit discharge removals prior to progressing to affected portions of downstream MS4 drainage areas, the Permittee shall maintain capacity to mobilize investigations to other drainage areas or unaffected lateral alignments within the same drainage area, to facilitate suitable progress while awaiting correction of illicit discharges confounding downstream investigations. Since work progress may be further constrained by the persistence of precipitation and snow melt events, the Permittee shall provide for adequate staffing and equipment resources to perform concurrent investigations in multiple areas as necessary to complete all investigations within five (5) years from the effective date of this permit.

B.2.6 Reporting and Evaluation

The Permittee shall document in its Annual Reports its progress implementing the provisions of Section 6.1.3 and this appendix, including the results and status of its outfall screening and monitoring, mapping, and IDDP implementation. The Permittee shall evaluate its progress by tracking, at a minimum, the percentage of MS4 outfall drainage areas or outfalls screened and/or monitored, percentage of structures inspected, and the footage or percentage of MS4 cleaned and inspected by CCTV.

B.2.7 Modifications

Though the IDDP is applicable to most storm sewers, modifications to methods and materials may be required to address situations where groundwater or backwater conditions or other issues preclude adequate implementation as described herein. In such instances, the Permittee shall make necessary modifications to the IDDP in accordance with Section 6.1.3 of this permit.

APPENDIX C: Guidance for Aquifer Protection Areas and Other Groundwater Drinking Supply Areas

The Stormwater Management Plan (SMP) should consider measures to reduce or mitigate potential impacts to both ground water (aquifers) and surface waters, taking into consideration both quantity and quality of the runoff. The emphasis should be to minimize, to the extent possible, changes between pre-development and post-development runoff rates and volumes. Coordination and discussion with the local water company is strongly encouraged.

The basic stormwater principals for Aquifer Protection Areas (and other groundwater drinking supply areas) are to prevent inadvertent pollution discharges/releases to the ground, while encouraging recharge of stormwater where it does not endanger groundwater quality. The Permittee should review Sections 19-13-B32(h) and (i) of the Regulations of Connecticut State Agencies for additional information. Measures include:

- prevent illicit discharges to storm water, including fuel/chemical pollution releases to the ground;
- minimize DCIA and disconnect large areas of DCIA with natural or landscape areas;
- direct paved surface runoff to aboveground type land treatment structures – sheet flow, surface swales, depressed grass islands, detention/retention and infiltration basins, and wet basins. These provide an opportunity for volatilization of volatile organic compounds to the extent possible before the stormwater can infiltrate into the ground;
- provide necessary impervious pavement in high potential pollutant release areas. These “storm water hot spots” include certain land use types or storage and loading areas, fueling areas, intensive parking areas and roadways (see table below);
- only use subsurface recharge structures such as dry wells, galleries, or leaching trenches, to directly infiltrate clean runoff such as rooftops, or other clean surfaces. These structures do not adequately allow for attenuation of salts, solvents, fuels, or other soluble compounds in groundwater that may be contained in runoff; and
- Minimize pavement deicing chemicals or use an environmentally suitable substitute.

Infiltration of stormwater should be **restricted** under the following site conditions:

- Land Uses or Activities with Potential for Higher Pollutant Loads:
Infiltration of stormwater from these land uses or activities (see table below), also referred to as stormwater “hotspots,” can contaminate public and private groundwater supplies. Infiltration of stormwater from these land uses or activities may be allowed by the review authority with appropriate pretreatment. Pretreatment could consist of one or a combination of the primary or secondary treatment practices described in the Stormwater Quality Manual provided that the treatment practice is designed to remove the stormwater contaminants of concern.
- Subsurface Contamination:
Infiltration of stormwater in areas with soil or groundwater contamination such as brownfield sites and urban redevelopment areas can mobilize contaminants.
- Groundwater Supply and Wellhead Areas:
Infiltration of stormwater can potentially contaminate groundwater drinking water supplies in immediate public drinking water wellhead areas.

Refer to the Stormwater Quality Manual for land uses or activities with a known potential for high pollutant loads.

For further information regarding the design of stormwater collection systems in Aquifer Protection Areas, contact the Aquifer Protection Area Program at (860) 424-3020 or visit www.ct.gov/deep/aquiferprotection.

APPENDIX D: Impaired Waters Guidance

Surface Waters and Associated Pollutants of Concern

Pollutant of Concern	Waterbodies included within a TMDL or Waters Included in Pollution Control Action Plan Developed by CTDEEP	Impaired Waters Without a TMDL	
		Impaired Designated Use	Cause
Phosphorus	Any water body subject to a TMDL pollutant load allocation or reduction for Phosphorus or any waterbody included in the Interim Phosphorus Reduction Strategy for Connecticut Freshwater Non-tidal Receiving Rivers and Streams Technical Support Document (2014 or as amended), including but not limited to the Bantam River Watershed, Blackberry River Watershed, Factory Brook Watershed, Farmington River Watershed, Fivemile River Watershed, Hockanum River Watershed, Housatonic River Main Stem Watershed, Limekiln Brook Watershed, Naugatuck River Watershed, Norwalk River Watershed, Pequabuck River Watershed, Pomperaug River Watershed, Pootatuck River Watershed, Quinebaug River Watershed, Quinnipiac River Watershed, Shetucket River Watershed or Willimantic River Watershed	<ul style="list-style-type: none"> Habitat for Fish, Other Aquatic Life and Wildlife Recreation 	<ul style="list-style-type: none"> Phosphorus Nutrient/ Eutrophication Biological Indicators Dissolved Oxygen Chlorophyll-a, or Excess Algal Growth
Nitrogen	Any water body subject to a TMDL pollutant load allocation or reduction for nitrogen, including but not limited to the Long Island Sound TMDL for Dissolved Oxygen. Entire state of Connecticut	<ul style="list-style-type: none"> Habitat for Fish, Other Aquatic Life and Wildlife Habitat for Marine Fish, Other Aquatic Life and Wildlife 	<ul style="list-style-type: none"> Dissolved Oxygen Nitrogen (Total) Nutrient / Eutrophication Biological Indicators Oxygen, Dissolved
Bacteria	Any water body subject to a TMDL pollutant load allocation or reduction for bacteria, total coliform, <i>Escherichia coli</i> , fecal coliform or <i>Enterococci</i> . Entire state of Connecticut	<ul style="list-style-type: none"> Recreation Existing or Proposed Drinking Water Commercial Shellfish Harvesting Where Authorized or Shellfish Harvesting for Direct Consumption Where Authorized 	<ul style="list-style-type: none"> Total Coliform, <i>Escherichia coli</i>, Fecal coliform, or <i>Enterococci</i>
Mercury	Any water body subject to a TMDL pollutant load reduction for Mercury. Entire state of Connecticut	<ul style="list-style-type: none"> Habitat for Fish, Other Aquatic Life and Wildlife or Fish Consumption 	<ul style="list-style-type: none"> Mercury

Water Quality Targets for Waters for Which Bacteria is a Stormwater Pollutant of Concern

Water Quality Classification	E. Coli (Freshwater Rec) (cols/100mls)	Enterococci (Marine Rec) (cols/100mls)	Fecal Coliform (Marine Shellfishing) (cols/100mls)	Total Coliform (Freshwater Drinking) (cols/100mls)
AA	Instantaneous designated swimming 235 Non designated Swimming 410 All other Recreation 576 Geomean 126	N/A	N/A	Monthly Moving average <100 Single Sample Maximum 500
A	Same as AA	N/A	N/A	N/A
B	Same as AA	N/A	N/A	N/A
SA (Direct Consumption)	N/A	Instantaneous Designated Swimming 104 Instantaneous All other Uses 500 Geomean 35	Geomean 14 90% of samples < 31	N/A
SB (Indirect Consumption)	N/A	Same as SA waters	Geomean 88 90% of samples < 260	N/A

APPENDIX E: DCIA Reduction Program Crediting and Guidance

The goal of the Directly Connected Impervious Area Reduction Program (DCIA Reduction Program) is to reduce pollution generated by stormwater runoff from impervious surfaces. This may be accomplished by “restoring” impervious areas through retention of stormwater runoff, treatment of runoff prior to discharge, or by a combination of both practices.

E.1 Projects Eligible for DCIA Reduction Credit

Reduction credit is only available for projects which alter stormwater runoff from an existing, developed site. These projects may be for the redevelopment of a site or a retrofit. A redevelopment project is one whose purpose is for enhancing, expanding, or otherwise modifying its function or purpose. A retrofit project is one that modifies an existing developed site for the primary purpose of DCIA reduction. Reduction credit cannot be claimed for projects on currently undeveloped sites (i.e., new construction projects). Reduction credit can be claimed by the Permittee for any redevelopment or retrofit project completed within the CTDOT rights-of-way or properties or draining to the CTDOT MS4, regardless of the size or ownership of the project.

The reduction credit which can be claimed for each project is determined by the estimated acreage of DCIA reduced by the project. For projects which retain the appropriate portion of the Water Quality Volume (WQV) pursuant to Section 6.1.5.3.b for the entire developed area, credit equal to one hundred percent (100%) of the DCIA of the developed area may be claimed. For projects which cannot retain the appropriate WQV for the entire developed area, but which retain part of the appropriate WQV and provide treatment for the remainder of the WQV, partial credit may be claimed in accordance with section E.2 of this appendix.

E.2 DCIA Reduction Crediting for BMPs

As stated in Section E.1 of this appendix, DCIA reduction credits are awarded based on the acreage of DCIA reduced through the implementation of Best Management Practices (BMPs). Redevelopment or retrofit projects may implement a number of BMPs to either retain or treat the WQV.

The following table shall be used to determine the percent reduction credit which may be claimed for each BMP relative to the acreage that BMP serves for various common stormwater BMPs. The percent credit listed represents an approximation of the pollutant removal efficiency for each given BMP.

Table E-1: DCIA Reduction Crediting based on BMP implementation.

BMP	Efficiency Rating ¹	Reduction Credit ¹
Retention of WQV²	Excellent	75 – 100%
Infiltration Basin		100%
Infiltration Chamber		100%
Infiltration Trench		100%
Dry Well		100%
Other Infiltration Mechanisms		100%
Permeable Pavement w/ Underdrain		75%
Filtering	Good	50 – 60%
Biofiltration		50%
Sand Filter		50%
Gravel Wetland		60%
Enhanced Biofiltration w/ Internal Storage Reservoir		50%
Detention/Storage	Moderate	25 – 40%
Wet Pond		40%
Extended Dry Detention		25%
Grass Swale		25%
Proprietary Treatment Structures	Fair	25%
Hydrodynamic Separator		25%

¹ Sources: New England Stormwater Retrofit Manual (2022), International BMP Database (2020).

² Projects retaining greater than the WQV may be eligible for greater than 100% DCIA reduction credit.

- E.2.1 For stormwater treatment measures or structures not listed in Table E-1, above, the Permittee may submit testing data from an independent testing organization that verifies the pollutant removal efficiency of the measure or structure for approval by the Commissioner.
- E.2.2 For projects retaining a volume greater than the appropriate portion of the WQV, up to an additional fifty percent (50%) DCIA reduction credit may be claimed for retention up to one-hundred fifty percent (150%) of the WQV.
- E.2.3 For projects treating a volume greater than the WQV, no additional DCIA reduction credit may be claimed.