



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

**Issuance Date: \*\*\*\*\***

**Effective Date: \*\*\*\*\***

**Expiration Date: \*\*\*\*\***

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## 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](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 (BMP)”* 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.

*“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-94 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 of the Connecticut General Statutes.

*“Commissioner”* means Commissioner as defined in section 22a-423 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.

*“Department” or “DEEP”* 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 the disconnection provisions of the Stormwater Quality Manual) 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.

“*DOT*” means the Connecticut Department of Transportation.

“*DOT 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.

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

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

“*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(a)(2) 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)*” means those surface waters of the state designated by the Commissioner as impaired pursuant to Section 303(d) of the federal Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report within Categories 4 or 5, including any subdivisions of these categories.

“*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.

*“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) as described in Section 5(b).

*“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 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 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.

*“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-423 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.

*“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 pursuant to Section 4 of this general permit.

“*Registration*” means a registration form filed with the Commissioner pursuant to Section 4 of this general permit.

“*Retain*” means to hold runoff on-site to promote vegetative uptake and groundwater recharge through the use of runoff reduction or LID practices or other measures. In addition, it means there shall be no subsequent point source release to surface waters from a storm event defined in this general permit or as approved by the Commissioner.

“*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(a)(5)(B)(i) or (ii), 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.

“*Sanitary Sewer Overflow*” or “*SSO*” means a discharge of untreated sanitary wastewater from a municipal sanitary sewer.

“*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 municipally-owned or -operated MS4 (as defined above) including: all those located partially or entirely within an Urban Area that have at least 1,000 residents in the Urban Area (as determined by 2020 census), all those defined in a previous version of this general permit, and all state- and federally-operated MS4s (except DOT) and any other MS4s located outside an Urban Area as may be designated by the Commissioner. (Note: A list of Small MS4 municipalities is included in Appendix A of this general permit. They are authorized under a separate permit.)

“*Standard of care*”, as used in Section 3(b)(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 and has an average daily population of 1,000 people or more.

“*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 (TMDL)”* means a water quality implementation plan established pursuant to Section 303 of the federal Clean Water Act.

*“Urban Area”* 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 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.

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



### Section 3. Authorization Under This General Permit

#### *(a) Eligible Activities*

This general permit authorizes the discharge of stormwater from or associated with the Connecticut Department of Transportation (DOT) MS4, provided the requirements of subsection (b) of this section 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 (as defined in Section 5(b)).

This permit authorizes the following non-stormwater discharges provided: the permittee controls such non-stormwater discharges to the Maximum Extent Practicable (MEP) as required by this general permit; such non-stormwater discharges do not contribute to a violation of water quality standards; and such non-stormwater discharges are documented in the Stormwater Management Plan and do not contribute a significant amount of pollutants to any identified MS4:

- uncontaminated ground water discharges including, but not limited to, 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 DOT Structure Cleaning Program;
- discharges or flows from firefighting activities (except training); and
- naturally occurring discharges such as rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), springs, diverted stream flows and flows from riparian habitats and wetlands.

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

#### *(b) Requirements for Authorization*

This general permit authorizes the activity listed in the “Eligible Activities” section (Section 3(a)) of this general permit provided:

##### *(1) Coastal Management and Permitting*

Such activity is consistent with all applicable goals and policies in Section 22a-92 of the Connecticut General Statutes, and shall not cause adverse impacts to coastal resources as defined in Section 22a-93(15) of the Connecticut General Statutes or if such activity is located, wholly or in part, waterward of the coastal jurisdiction line in tidal, coastal or navigable waters of the State or in tidal wetlands, the activity is authorized pursuant to sections 22a-359 through 22a-363f, inclusive, or 22a-28 through 22a-35, inclusive.

##### *(2) 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 shall not result in the destruction or adverse modification of habitat designated as essential to such species.

(3) *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.

(4) *Discharge to Publicly Owned Treatment Works (POTW)*

The stormwater is *not* discharged to a POTW.

(5) *Discharge to Groundwater*

The stormwater is *not* discharged entirely to groundwater.

(6) *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 (“Plan”), the control measures it will implement to ensure compliance with antidegradation provisions and the terms of this Permit. At a minimum, the permittee shall evaluate and implement to the Maximum Extent Practicable practices to 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.

(7) *New or Increased Discharges to Impaired Waters*

There shall be no increase in the volume of stormwater discharged from the DOT MS4 to impaired waters listed in categories 5 or 4b of the most recent Connecticut Integrated Water Quality Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b) unless the permittee demonstrates that there is no net increase in loading by the DOT MS4 of the pollutant(s) for which the waterbody is impaired. The permittee may demonstrate no net increase by either:

- (A) Documenting that the pollutant(s) for which the waterbody is impaired is not present in the MS4’s discharge and retain documentation of this finding with the Plan; or
- (B) Documenting that the total load of the pollutant(s) of concern from the MS4 to any impaired portion of the receiving water will not increase as a result of the activity and retain documentation of this finding in the Plan. Compliance with the requirements for Runoff Reduction and Low Impact Development measures for new development and redevelopment in Sections 6(a)(5)(A) and (B) shall be considered as demonstrating no net increase. Requirements for discharges to impaired waters are included in Section 6(k) of this general permit

(8) *Conservation and Preservation Restrictions*

Such activity, if located within a conservation or preservation restriction area, complies

with section 47-42d of the Connecticut General Statutes, 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.

*(9) Certification Requirements for Registrants and other Individuals*

As part of the registration for this general permit, the registrant and any other individual(s) principally responsible for preparing the registration submits to the Commissioner a written certification which, at a minimum, complies with the following requirements:

- (A) 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:
  - (i) all registration information provided in accordance with Section 4(c)(2) of such general permit,
  - (ii) the Stormwater Management Plan, and
  - (iii) any plans, specifications, and Department approvals regarding such Stormwater Management Plan.
- (B) 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(b)(9)(A) of this general permit, made an affirmative determination to:
  - (i) comply with the terms and conditions of this general permit;
  - (ii) maintain compliance with all plans and documents prepared pursuant to this general permit, including, but not limited to, the Stormwater Management Plan;
  - (iii) properly implement and maintain the elements of the Stormwater Management Plan; and
  - (iv) 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.
- (C) 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 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(b)(9)(A) 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(b)(9)(B) 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."

*(10) Stormwater Management Plan Certification*

As part of the registration for this general permit, the registrant submits to the Commissioner a written certification by a qualified professional engineer who has reviewed the Stormwater Management Plan (Plan) in accordance with the following requirements:

- (A) The qualified professional engineer has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under such general permit:
  - (i) all registration information provided in accordance with Section 4(c)(2) of such general permit,
  - (ii) the Stormwater Management Plan, and
  - (iii) all non-engineered and engineered stormwater management measures and systems, including any plans, specifications and Department approvals regarding such stormwater management measures and systems.

(B) Affirmative Determination

A qualified professional engineer signing the certification must have made an affirmative determination, based on the review described in section 3(b)(10)(A) of this general permit and on best engineering practices, that the Plan 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 all non-engineered and engineered stormwater management measures and systems:

- (i) have been designed in accordance with best engineering practices;
- (ii) will function properly as designed;
- (iii) are adequate to ensure compliance with the terms and conditions of this general permit; and

(iv) will protect the waters of the state from pollution.

- (C) The qualified professional engineer, as specified in section 3(b)(10)(A), 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 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(b)(10)(A) 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(b)(10)(A) 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(b)(10)(B) 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."

- (D) Nothing in this subsection shall be construed to authorize or require a qualified professional engineer to engage in any profession or occupation requiring a license under any other provision of the Connecticut General Statutes without such license.

**(c) Registration**

Pursuant to the "Registration Requirements" section (Section 4) of this permit, the permittee shall submit a Registration Form (accessible from the DEEP website) to the Commissioner at least ninety (90) days prior to the effective date of this general permit. The form will guide the registrant to submit the appropriate information.

Include any additional forms and information regarding new or increased stormwater discharges to address compliance and/or consistency with the Coastal Management Act, High Quality Waters, Impaired Waters (including TMDL requirements), Endangered and Threatened Species, and Aquifer Protection Areas that may be required pursuant to the "Requirements of Authorization" section (Section 3(b)).

**(d) Geographic Area**

This general permit applies throughout the State of Connecticut.

***(e) 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 5 (five) from such date of issuance.

***(f) Effective Date of Authorization***

An activity is authorized by this general permit: on the date the general permit becomes effective; on the date the authorized activity is initiated; or on another date approved by the Commissioner, whichever is latest.

***(g) 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:

***(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.

***(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**

***(a) Who Must File a Registration***

The Connecticut Department of Transportation shall file with the Commissioner a registration form that meets the requirements of this section of this general permit. Such form shall be submitted within the timeframe specified in Section 3(c).

***(b) Scope of Registration***

A registrant shall register on one registration form by the date indicated in Section 3(c) for all discharges that are owned or operated by the Department of Transportation (DOT). DOT may not submit more than one (1) registration under this general permit.

**(c) Contents of Registration**

*(1) Fees*

No registration fee is required for this general permit.

*(2) Registration Form*

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

- (A) The name, title, address, e-mail address, and telephone number of the Commissioner of Transportation.
- (B) Name, address, email address, and telephone number of the primary and district contact persons for the DOT.
- (C) Name, primary contact, address, email address, and telephone number of any consultant(s) or engineer(s) retained by the DOT to prepare the registration,
- (D) Assurance that the Stormwater Management Plan for the MS4 is consistent with the following provisions of state statutes and regulations, as appropriate:
  - (i) 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.
  - (ii) 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.
  - (iii) 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.
  - (iv) 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.
  - (v) The Stormwater Management Plan appropriately addresses new or increased discharges to high quality waters, as specified in Section 3(b)(6).

- (vi) The Stormwater Management Plan appropriately addresses new or increased discharges to impaired waters, as specified in Section 3(b)(7).
- (E) For each of the Minimum Control Measures in Section 6(a), the following information shall be included:
  - (i) each Best Management Practice (BMP) to be implemented;
  - (ii) the person(s) responsible for implementing and maintaining each BMP;
  - (iii) the date by which each BMP will be implemented;
  - (iv) the measurable goal(s) by which each BMP will be evaluated.
- (F) Provide an internet address (URL) where the Stormwater Management Plan required by Section 5(b) and the annual reports required by Section 6(j) are accessible for public review. Also provide a physical address where a paper copy of the Plan and annual reports are available for inspection. If the registrant claims that certain elements of their Plan constitute secure information (pursuant to Section 4(d)(2)) 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, also called FOIA) 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 FOIA requirements. The process of complying with the FOIA requirements does not exempt the registrant from the registration and Plan preparation deadlines of this general permit.
- (G) The certification of the registrant and of the individual(s) responsible for actually preparing the registration, in accordance with Section 3(b)(9).
- (H) Certification (pursuant to the requirements and conditions of Section 3(b)(10)) that the Stormwater Management Plan has been reviewed by a qualified professional engineer (as defined in Section 2) licensed in the State of Connecticut.

***(d) Availability of Registrations, Stormwater Management Plans, and Annual Reports***

***(1) Registration Availability***

Within thirty (30) days of receipt of the registration, the Commissioner shall post the registration on the DEEP website and identify the location where the Stormwater Management Plan is available.

On or before sixty (60) days from the date the Commissioner posts the registration, members of the public may review the registration and submit written comments to the Commissioner.

***(2) Stormwater Management Plan Availability***

The permittee shall make its Stormwater Management Plan (Plan) available, electronically and at a publicly available location, for public review and comment at least ninety (90)



days prior to the effective date of this general permit. The permittee shall also provide the internet address (URL) where the Plan may be located or an electronic copy to the Commissioner. Within thirty (30) days of receipt of a Stormwater Management Plan (or its URL), the Commissioner shall either post the Plan on the DEEP website or identify any other location where the Plan will be available for review. In addition to the internet address (URL) required as part of the registration (pursuant to Section 4(c)(2)(F)), reasonable efforts to inform the public of this document shall be undertaken by the permittee. The Plan shall be made available at the permittee's main office, designated district office(s), or other publicly available location for public inspection and copying consistent with the federal and state Freedom of Information Acts. On or before sixty (60) days from the date of the availability of the Plan, members of the public may review the Plan and submit written comments on it to the Commissioner.

If the registrant claims that certain elements of their Plan 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 (section 1-210 et seq of the Connecticut General Statutes, also called FOIA), they shall follow the procedures for information subject to FOIA requirements provided in the registration form instructions for this general permit. The process of complying with the FOIA requirements does not exempt the registrant from the registration and Plan preparation deadlines in this general permit.

Following the comment period specified above, the final Plan shall remain available for public inspection on-line and a paper copy made available at the location(s) specified above during regular business hours.

*(3) Annual Report Availability*

At least forty-five (45) days prior to submission of each annual report to the Department, pursuant to Section 6(j), the permittee shall make a draft copy of the report available for public review and comment. Written comments on the annual report may be submitted to the permittee and are *not* submitted to the Commissioner. Reasonable efforts to inform the public of this document shall be undertaken by the permittee. Such draft copies shall be made available electronically on the permittee's website for public inspection and copying consistent with the federal and state Freedom of Information Acts and at least one of the following locations: the permittee's main office, designated district office, or other central publicly available location. Following submission of the annual report (pursuant to Section 6(j)), a copy of the final report shall be made available for public inspection during regular business hours.

***(e) Where to File a Registration***

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  
Hartford, CT 06106-5127

***(f) 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.

***(g) Additional Notification***

For discharges authorized by this general permit to a regulated Small MS4 or to the City of Stamford, a copy of the registration and all attachments thereto shall also be submitted to the owner and operator of that system.

For discharges within a public drinking water supply watershed or aquifer protection area, the permittee shall notify the water company of the availability (pursuant to Sections 4(d)(1) and (2)) of the registration and the Plan described in subsection 5(b) of this general permit or the registration and Plan shall be submitted to the water company upon request.

For discharges to river components and tributaries that have been designated as Wild and Scenic under the Wild and Scenic Rivers Act, the applicable Wild and Scenic Coordinating Committee shall be notified that a copy of the registration and the Plan described in 5(b) of this general permit are available upon request.

***(h) Action by Commissioner***

***(1) Registration Requirements***

The Commissioner may reject a registration without prejudice if it is determined that it does not satisfy the requirements of Section 4(c) of this general permit.

***(2) Obtain an 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 of the Connecticut General Statutes.

***(3) Authorization Requirements***

The Commissioner may disapprove a registration if it is found that the subject activity is inconsistent with the requirements for authorization under Section 3 of this general permit, or for any other reason provided by law.

***(4) Notice to Registrant***

Disapproval of a registration under this subsection shall constitute notice to the registrant that the subject activity must be authorized by an individual permit.

***(5) Disclaimer***

Rejection or disapproval of a registration shall be in writing.

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

### *(a) Conditions Applicable for Certain Discharges*

#### *(1) Proximity to Wetlands*

If the permittee initiates, creates, or originates a discharge of stormwater which is located less than 500 feet from a tidal wetland that is not a fresh-tidal wetland, such discharge shall flow through a system designed to retain the Water Quality Volume, as defined in Section 2.

#### *(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.

#### *(3) Quality of Discharge*

There shall be no floating scum, oil, or other matter distinctively visible in the stormwater discharge. Naturally occurring substances such as leaves and twigs are excluded provided that no person has placed such substances in or near the discharge.

#### *(4) Toxicity to Aquatic and Marine Life/Risk to Human Health*

The stormwater 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 an unacceptable risk to human health.

#### *(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.

#### *(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 a minimum, the permittee shall evaluate and implement to the Maximum Extent Practicable practices to 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.

*(7) Management of Pollutants of Concern*

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

**(b) Stormwater Management Plan**

The permittee shall develop, implement, and enforce a stormwater management plan designed to reduce the discharge of pollutants from the DOT MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the federal Clean Water Act. Maximum Extent Practicable (MEP) 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, there must be a serious attempt to comply, 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 in determining whether the permittee has complied with this general permit to the Maximum Extent Practicable.

Under this program, the permittee shall prepare a Stormwater Management Plan pursuant to Section 6 of this general permit and complete the plan in the time specified in Section 4(d)(2) 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 Plan 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.

Failure to implement all elements of the Stormwater Management Plan to the MEP is a violation of this permit.

**Section 6. Development of Stormwater Management Plan (Plan)**

The Stormwater Management Plan (Plan) shall address the Minimum Control Measures as indicated in this section. Section 6(a) contains the requirements for the DOT MS4. These measures shall be implemented to the MEP throughout the boundaries of the DOT 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 except as otherwise indicated in this section. The Plan shall identify and provide supporting justification for any of the Minimum Control Measures which, in whole or in part, are not applicable to the DOT MS4 or which cannot otherwise be met. If, as of the effective date of this permit, DOT does not have or is otherwise unable to obtain the Legal Authority required for a particular Minimum Control Measure, DOT shall develop

policies and procedures in the Plan to address the requirements of the measure including, but not limited to, coordination with adjacent and/or interconnected MS4s and with the Commissioner.

For the purposes of Section 6 of this General Permit, “Priority Area” is defined as areas within the Urban Area, within those watershed basins of the MS4 with Directly Connected Impervious Area (DCIA) of greater than 11% (as identified on maps available via links at [www.ct.gov/deep/municipalstormwater](http://www.ct.gov/deep/municipalstormwater)), or which discharge to impaired waters.

**(a) Minimum Control Measures**

For each Minimum Control Measure, the permittee shall:

- define appropriate BMPs;
- designate a person(s) and job title responsible for each BMP;
- define a timeline for implementation of each BMP;
- where appropriate, identify the location, including the address and/or latitude and longitude, for each BMP; and
- define measurable goals for each BMP.

The Minimum Control Measures in the Plan include, but are not limited to:

**(1) Public education and outreach**

The goals of this minimum control measure are:

- To raise awareness that polluted stormwater runoff is the most significant source of water quality problems;
- To inform permittee’s community (i.e., general public, municipalities, business and commerce, staff, contractors, etc.) to use Best Management Practices (BMPs) to reduce polluted stormwater runoff; and
- To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.

(A) 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, information on management of pet waste, application of fertilizers, herbicides, and pesticides, impervious cover and 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. DOT 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 small 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](http://www.ct.gov/deep/stormwater). Information shall be communicated to an audience by methods including, but not limited to, citizens utilizing DOT roadways and/or facilities (e.g., parking facilities, rest areas and service areas) with flyers, brochures, signage, billboards, storm drain labeling, television public

service announcements, and/or web-based tools. Each annual report shall summarize the types, sources, number of, and methods by which materials are disseminated.

- (B) 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.
- (C) Additional measures for discharges to waters associated with a Stormwater Pollutant of Concern:

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 Plan.

- (i) 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:
  - a. Subsurface Disposal Systems
  - b. Fertilizer use
  - c. Pet waste
  - d. Grass clippings and leaf management
  - e. Detergent use
  - f. Discharge of sediment (to which Phosphorus binds)
  - g. Other erosive surfaces
- (ii) 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:
  - a. Subsurface Disposal Systems
  - b. Fertilizer use
  - c. Pet waste
  - c. Grass clippings and leaf management
  - d. Discharge of sediment (to which Nitrogen binds)
  - e. Other erosive surfaces
- (iii) 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:
  - a. Subsurface Disposal Systems
  - b. Sanitary cross connections
  - c. Waterfowl
  - d. Pet waste

- e. Manure piles associated with livestock and horses
  - f. Discharge of sediment (to which Bacteria binds)
- (iv) 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:
- a. Thermometers
  - b. Thermostats
  - c. Fluorescent lights
  - d. Button cell batteries

(D) Suggested Strategies

- (i) Target specific populations: The permittee is encouraged to direct such outreach program and/or materials at specific populations. Such target populations may include, for example, school age populations, farming populations, urban populations, and Environmental Justice Communities ([portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities](http://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities)).
- (ii) For each Stormwater Pollutant of Concern noted in Section 6(a)(1)(C), DEEP will make sample educational materials available.
- (iii) Partner with local organizations: The permittee may wish to include in its outreach efforts various local organizations or municipal/institutional small MS4 permittees which may be able to assist in helping to spread the stormwater message.

(2) *Public Involvement/Participation*

The permittee shall provide opportunities to engage their community to participate in the review and implementation of the permittee's Plan. The goal of this minimum control measure 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 a broader public support, additional expertise, and a conduit to other programs. Community members are also more likely to apply these lessons/BMPs at home if they are a part of the process.

- (A) Publish a public notice on the DOT 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 Plan and the annual report required by Section 6(j) of this permit and to solicit comments on the Plan and annual report. The notice shall provide a contact name (with phone number, address, and email) to whom the public can send comments and publicly accessible locations (such as the DOT Headquarters and district offices, rest areas, service areas, or local libraries or other publicly available locations) and/or a URL where the Plan and annual report are available for public review. The public notice shall, at a minimum, allow for a thirty (30) day comment period. DOT shall annually publish this public notice no later than thirty (30) days following the anniversary of the effective date of this general permit.

- (B) The permittee is encouraged to enlist local organizations to help implement the elements of their Plan. However, the permittee retains sole responsibility for permit compliance.
- (C) No requirements in addition to those specified in subsections (A)-(B), are specified for discharges to waters impaired for Phosphorus, Nitrogen, Bacteria, or Mercury.

(3) *Illicit Discharge Detection and Elimination*

The permittee shall continue to maintain a 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(a)(2) 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. Failure to implement all elements of the IDDE program to the MEP is a violation of this permit.

(A) IDDE Program Elements

- (i) The permittee shall, at a 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 Sections (A)(2), (A)(3), and (B)(2) of Appendix B.
- (ii) Illicit discharges to the DOT 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 subsection (B) of this Section. 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 180 days (six (6) months). 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.
- (iii) The permittee shall develop a program for citizens 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 (3) and of



Appendix B. All citizen reports and the response to those reports shall be included in the annual report.

- (iv) 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.
  - (v) 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(j) of this permit.
  - (vi) Timelines – permittees shall implement IDDE program elements in accordance with the schedules included in this section and in Appendix B.
- (B) The permittee shall continue to establish and implement the necessary Legal Authorities to eliminate illicit discharges, which shall:
- (i) prohibit illicit discharges to its storm sewer system and require removal of such discharges consistent with subsection (3)(A), above; and
  - (ii) 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;
  - (iii) authorize pursuit of penalties and/or recoup costs incurred by the permittee from anyone creating an illicit discharge, spilling, or dumping as specified in subsection (3)(A), above; and
  - (iv) provide any additional legal authorities specified in Section (A)(7)(a) of Appendix B.
- (C) 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 DOT MS4 and owned or operated by the DOT and all interconnections with other MS4s. The map(s) should, if possible, be developed in a GIS format.
- (i) The list and map(s) shall include the following for each discharge:
    - a. Type, material, size, and location (identified with a latitude and longitude) of conveyance, outfall, or channelized flow (e.g., 24" concrete pipe);
    - b. the name, water body ID and Surface Water Quality Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges;

- c. 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;
- d. the name of the watershed, including the subregional drainage basin number (available from CT ECO at [www.cteco.uconn.edu](http://www.cteco.uconn.edu)) in which the discharge is located; and
- e. the spreadsheet or database should, if possible, be prepared in a format compatible with Microsoft Excel.

(D) For waters for which phosphorus, nitrogen, or bacteria is a Stormwater Pollutant of Concern:

To address subsurface disposal system failures (SSDS), 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.

(E) No requirements in addition to those specified in subsections (A) - (C) above exist for discharges to waters for which mercury or other pollutants are Stormwater Pollutant(s) of Concern.

*(4) Construction Site Stormwater Runoff Control*

The permittee shall continue to implement and enforce a program to control stormwater discharges (to its MS4) associated with land disturbance or development (including re-development) activities from sites (as defined in the Department's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities) with one (1) acre or more of soil disturbance, whether considered individually or collectively as part of a larger common plan. Such program shall include the following elements:

(A) Legal Authority

(i) The permittee shall continue to maintain Legal Authorities that require:

- a. All discharges to or from the DOT 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 DOT MS4 pursuant to CGS 22a-430 and 22a-430b. This shall include:
  - i. developers and construction site operators for projects that discharge to the DOT MS4; and

- ii. engineers, consultants, and contractors employed by, or under contract to the DOT for discharges from the DOT MS4.
- b. the implementation of additional measures to protect/improve water quality (in addition to those requirements set forth in Section (6)(a)(4)(A)(i)(a)) as deemed necessary by DOT;
- c. DOT or its consultant or contractor to carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with DOT 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 DOT 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; and
- 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.

(B) Consistency with DEEP Requirements

The permittee shall ensure that all DOT 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 General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. These manuals shall include, but are not limited to, the following DOT manuals (as amended) and all supplements thereto: DOT Construction Manual, DOT Highway Design Manual, DOT Consultant Engineers Manual, DOT Bridge Design Manual, DOT Drainage Manual and DOT Form 818.

(C) Interdepartmental Coordination

- (i) 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 DOT MS4 will coordinate their functions with one another.
- (ii) This measure shall be implemented upon the effective date of this permit.

(D) Site Review and Inspection

For all construction projects that discharge to the DOT MS4:

- (i) The permittee shall confirm that a site plan review was conducted by the appropriate authority (i.e., DOT, DEEP or adjacent MS4) that incorporates consideration of stormwater controls or management practices to prevent or minimize impacts to water quality; and
- (ii) The permittee shall confirm that the site inspection(s) and enforcement by the appropriate authority (i.e., DOT, 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
- (iii) The permittee shall implement this measure to the MEP upon the effective date of this permit.

(E) State Permit Notification

- (i) The permittee will implement a procedure for notifying developers conducting projects that will connect to the DOT MS4s, and any consultants or contractors working under contract to DOT, of their obligation to comply with the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities ("construction general permit") 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 Storm Water Pollution Control Plan (required by the construction general permit) to the permittee upon request.
- (ii) The permittee shall implement this procedure upon the effective date of this permit.

- (F) 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(b)(7) or 6(k).

(5) *Post-construction stormwater management in new development or redevelopment*

(A) Legal Authority

- (i) 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 DOT MS4 consider the use of LID and runoff reduction site planning and development practices prior to the consideration of other practices, and; (2) DOT, for construction projects over one (1) acre, 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:

- a. for redevelopment of sites that are currently developed with Directly Connected Impervious Area (DCIA) of forty percent (40%) or more, retain on-site half (1/2) the water quality volume for the site, or
- b. for new development and redevelopment of sites with less than forty percent (40%) DCIA, retain the water quality volume for the site, or
- c. an alternate retention/treatment standard as outlined in subsections 5(C)(i)-(ii) 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 DCIA. If such barriers cannot be eliminated within the timeframe dictated, the permittee shall provide in the annual report(s) required by Section 6(j) a justification and a revised schedule for implementation.

- (ii) 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:
  - a. 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.
  - b. 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.
  - c. 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.
  - d. Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges.
  - e. Implement standards to protect trees and other vegetation with evapotranspirative qualities.
  - f. Implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils.

(B) Consistency with DEEP Requirements

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

(C) Runoff Reduction/Low Impact Development (“LID”) Measures

Pursuant to the requirements of subsection 5(A)(i) above, the permittee shall require the party responsible (i.e., the Permittee, municipality, interconnecting MS4 or any developer/contractor seeking connection to the DOT MS4) for development and redevelopment projects of 1 acre or more within its MS4 to do the following:

(i) Requirements for Non-DOT Projects.

For projects not conducted by, or through contract to, DOT, the Permittee shall document that the municipality approving the project has confirmed that such project has met the requirements of the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (Construction General Permit) and, if applicable, the requirements of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit).

(ii) Requirements for DOT Projects

For projects conducted by, or through contract to, DOT, 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.

- a. For development or redevelopment of sites that are currently developed with Directly Connected Impervious Area (DCIA) of forty percent (40%) or more, the Permittee shall retain fifty percent (50%) of the water quality volume at the site.
- b. For all new development and for redevelopment of sites with DCIA less than forty percent (40%), the Permittee shall retain one hundred percent (100%) of the water quality volume at the site.
- c. For any project that may be unable to meet the retention requirement specified in subparagraph (ii)a. or (ii)b., above, the Permittee shall implement the applicable retention requirement at the site to the maximum extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice, and shall also provide additional stormwater treatment to the maximum extent achievable using control measures that are technologically available and 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. Additionally, in such

cases, the permittee shall implement to the MEP stormwater mitigation for such project on another site within existing DOT right-of-way within the same local that will achieve an amount of runoff reduction similar to the amount by which the original project failed to achieve retention of the appropriate portion of the water quality volume.

- d. For linear redevelopment projects that connect to the DOT 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 subparagraph (ii)a., (ii)b., or (ii)c.; 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 water quality volume.
- e. If there are site constraints that would prevent meeting the retention requirements in subparagraphs (ii)a. or (ii)b. and the Permittee is implementing the requirements of (ii)c., 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 water quality volume, including estimated pollutant removal efficiencies.
- f. 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,
- g. 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.
- h. In areas served by on-site sewage disposal (septic) 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.

#### (D) 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](http://www.ct.gov/deep/municipalstormwater)) or other equivalent source, the permittee shall maintain an estimate of the Directly Connected

Impervious Area (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](http://www.ct.gov/deep/municipalstormwater)) and the precise methodology and assumptions shall be described in the permittee's 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.

(E) 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 subsection (ii), below. Inspections performed since July 1, 2019, that meet the preceding requirements may be used to satisfy this subsection.

As the permittee completes the required mapping for additional areas of its MS4 in accordance with Section 6(a)(3)(C), it shall inspect, within one 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.

- (ii) Within one hundred eighty (180) days following the effective date of this permit, the permittee shall submit to the Commissioner for review a storm water 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.

Except as provided below, at a 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 sediment, oils, leaves, litter, etc.) to restore full solids capture design capacity where found to be in excess of 50% design capacity. If a stormwater treatment structure or measure requires maintenance as a result of the inspections in subsection (i), above, the permittee may delay future inspections and routine



maintenance under the Maintenance Plan, until the required maintenance is complete.

- (iii) The permittee shall complete any short-term and medium-term maintenance (including removing sediment if at more than 50% of design capacity) required to ensure proper functioning at stormwater treatment structures covered in subsection (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(a)(3)(C), maintenance of these structures shall be completed within three (3) years of the inspection date. For wet basins greater than two feet deep, assessment of accumulated sediment depth and removal of sediment shall be considered long-term maintenance.

(F) Additional measures for discharges to impaired waters (with or without a TMDL)

- (i) For waters for which nitrogen, phosphorus, or bacteria is a Stormwater Pollutant of Concern:

To address erosion and sediment problems noted during the course of conducting the inspections required by subsection E above, or identified by other means, the permittee shall develop, fund, implement, and prioritize these problems under the Retrofit program specified in Section 6(a)(6)(B). These problems must be corrected within a specific timeframe and the permittee must establish short term and long term maintenance. Each annual report shall include which problem areas were retrofitted, the cost of the retrofit, and the anticipated pollutant reduction.

- (ii) No requirements in addition to those specified in subsections (A)-(D), above, exist for discharges to waters for which mercury is a Stormwater Pollutant of Concern.

(6) *Pollution Prevention/Good Housekeeping*

The permittee shall implement an operations and maintenance program for permittee-owned or -operated MS4s that has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee-owned or -operated MS4s.

(A) 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 Plan; identification and reporting of illicit discharges and improper disposal; spill response protocols; and respective responsibilities of involved personnel.

(B) Infrastructure Repair, Rehabilitation and Retrofit

- (i) 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, inspection observations or observations made during outfall mapping pursuant to Section 6(a)(3)(C) of this permit.

(ii) Retrofit Program

The goal of the retrofit program is to “disconnect” existing Directly Connected Impervious Areas (DCIA). An area of DCIA is considered disconnected when the appropriate portion of the Water Quality Volume has been retained in accordance with the requirements of Section 6(a)(5)(C)(i) or (ii) of this general permit. This may be accomplished through retrofits or redevelopment projects (public or private) that utilize Low Impact Development (LID) and runoff reduction measures or any other means by which stormwater is infiltrated into the ground or reused for other purposes without a surface or storm sewer discharge. A redevelopment project, as that term is used here and in Section 6(a)(5)(C)(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. The DCIA calculation performed pursuant to Section 6(a)(5)(D) shall serve as the baseline for the retrofit program required in this section. Credit for the amount of DCIA that is considered “disconnected” shall be in accordance with the provisions of the Stormwater Quality Manual.

a. DCIA Disconnection 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 CT DOT in accordance with Section 6(j)(2) of the Permit, each Annual Report shall include a list of retrofit projects and construction/reconstruction projects completed in the previous permit year and the DCIA disconnection credit for each such project, the total of DCIA disconnection credits for all such projects completed in the previous permit year and the cumulative total disconnection credits for all prior years since July 1, 2014, and current progress towards the 2027 and 2030 DCIA goals in paragraph b., below. The first Annual Report following the effective date of this permit shall include totals for all DCIA disconnection credits for projects the permittee completed since July 1, 2014. The DCIA Retrofit Plan shall be considered to be part of the Annual Report. The permittee shall submit a copy of each Annual Report to EPA upon submission to CT DEEP.

Tracking the disconnection of DCIA does not apply for sites that were previously undeveloped as there were no existing impervious surfaces on those sites.

b. Retrofit 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(j)(2) of this permit, the permittee shall submit an

updated DCIA Retrofit Plan. The DCIA Retrofit Plan shall be due on the same date as each year's Annual Report under Section 6(j)(2) of this permit. The DCIA Retrofit Plan submitted in each Annual Report shall cover the current permit year and next four permit years, and shall include the following information:

1. A list and description of stormwater control retrofit projects planned by permittee and any planned construction/reconstruction projects that are expected to receive DCIA disconnection credit, the proposed schedule for completing such projects, and the expected amount of DCIA disconnection credit each project will receive. As project designs and schedules are revised during planning and construction, each year's DCIA Retrofit Plan shall include updated estimates of DCIA disconnection credit and updated construction schedules for each project based on current designs.
2. A list of proposed retrofit projects sufficient to ensure that by the permit year ending June 2027, the permittee will complete retrofits or construction/reconstruction with DCIA disconnection credits equal to 40 acres of the permittee's DCIA (the "2027 DCIA Goal") and by June 2030, the permittee will complete retrofits or construction/reconstruction with DCIA credits equal to 80 acres of the permittee's DCIA (the "2030 DCIA Goal"). These goals are each cumulative covering all DCIA disconnection credits for projects the permittee completed from July 1, 2014 to the end of the 2027 or 2030 permit year, respectively. Each DCIA Retrofit Plan shall include the total DCIA disconnection credit from projects expected to be completed in each permit year covered by the Plan.
3. The amount of DCIA disconnection credit given to each stormwater control retrofit project and construction/reconstruction project shall be determined by either the actual amount of DCIA disconnected, or the crediting criteria referenced in the Stormwater Quality Manual that allows for partial credit for DCIA reductions where full infiltration of the Water Quality Volume is not practicable.

(C) MS4 Property and Operations Maintenance

Permittee-owned or -operated properties, parks, parking facilities, rest areas, service areas and other facilities that are owned, operated, or otherwise the legal responsibility of the permittee, shall be maintained to minimize the discharge of pollutants to its MS4. Such maintenance shall include, but not be limited to:

(i) Parks and open space

The permittee shall optimize the application of fertilizers by DOT 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), application schedule (i.e. appropriate season or month) and timing (i.e. coordinated with climatic conditions to minimize runoff potential); development of standard operating practices for the handling, storage, application, and disposal of pesticides and herbicides in compliance with applicable state and federal laws; evaluate lawn maintenance and landscaping activities to promote water quality (protective practices include reduced mowing frequencies, proper disposal of lawn clippings, and use of alternative landscaping materials like drought resistant and native plantings); and establish procedures for management of trash containers at parks (scheduled cleanings; sufficient number).

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.

(ii) Pet waste management

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).

(iii) Waterfowl management

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.

(iv) Buildings, parking facilities, rest areas, service areas and other facilities under the jurisdiction of the permittee

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; and ensure that all interior building floor drains are

not connected to the MS4. This permit does not authorize such discharges; wastewaters from interior floor drains must be appropriately permitted.

(v) Vehicles and Equipment

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 DOT MS4 or to surface waters. This permit does not authorize such discharges; wastewaters from interior floor drains must be appropriately permitted.

(vi) Leaf Management

For roadways other than limited access highways, the permittee shall establish and implement an inspection program 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.

(D) Street, Parking & DOT MS4 Infrastructure Maintenance

The permittee shall implement a program to provide for regular inspection and maintenance of permittee-owned or -operated streets, parking facilities, rest areas, service areas and other DOT MS4 infrastructure.

(i) Sweeping

- a. Upon the effective date of this permit, implement and maintain 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.

- b. Ensure the proper disposal of street sweepings in accordance with Department policies, guidance, and regulations. Sweepings shall not be discharged back into the storm drain system and/or surface waters.
- c. 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.

(ii) Catch Basin Cleaning

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:

- a. By August 1, 2031, the permittee shall complete at least one 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 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 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 year cycle.
- b. 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.
- c. 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.
- d. 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.

- e. 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 maximum extent practicable, abate contributing sources. The permittee shall describe any actions taken in its annual report.
- f. The permittee shall document in the 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.
- g. The permittee shall report in each annual report the total number of catch basins, number inspected, and number cleaned.

(iii) 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.

(E) Snow Management Practices

(i) Deicing Material Management

Develop and implement 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 110% of the largest container or 10% of the total volume of all containers, whichever is larger, without overflow from the containment area.

(ii) 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 2/4/11 and as amended (see link at: [www.ct.gov/deep/stormwater](http://www.ct.gov/deep/stormwater)). In its 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;
- lane-miles treated;
- total amount of each deicing material used; type(s) of deicing equipment used;
- any changes in deicing practices (and the reasons for the change); and
- snow disposal methods.

(iii) 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, gross 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 (BMPs) 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), as well as an absorbent oil pad/boom or similar devices that will help eliminate oily/discholored 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 48°F. All snow melting operations shall be conducted by the permittee in accordance with their Stormwater Management Plan to the MEP.

(F) Interconnected MS4s

As part of interagency agreements established pursuant to Section 6(b)(3) of this 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.



(G) 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 permit issued pursuant to Sections 22a-430 or 22a-430b of the Connecticut General Statutes.

(H) Additional measures for discharges to impaired waters (with or without a TMDL)

(i) 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 policy 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. Each annual report shall discuss the actions taken to implement this policy with an estimate of fertilizer and turf reduction.

(ii) 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. Each 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(i), 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. Each annual report shall discuss the actions taken to implement this program.

(iii) No additional requirements in addition to those specified in subsections (A)-(C), above, exist for discharges to waters for which mercury is a Stormwater Pollutant of Concern.

**(b) Sharing Responsibility**

*(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(j) 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 Participation and/or the Pollution Prevention and Good Housekeeping Minimum Control Measure.)

*(2) Qualifying Municipal, State or Federal Program*

If a BMP or Minimum Control Measure is the responsibility of a third (3<sup>rd</sup>) 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 (3<sup>rd</sup>) 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 DOT 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 agreement to perform maintenance activities on DOT property abutting the town's property or a DOT 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.)

*(3) Coordination of Permit Responsibilities*

Where a portion of the separate storm sewer system within the DOT MS4 is owned or otherwise the responsibility of a municipality, an institution, or a state or federal agency, the entities shall coordinate the development and implementation 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 DOT. 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.)

***(c) 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. 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.

***(d) Signature Requirements***

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

**(e) Plan Review Fee**

No plan review fee is required for this general permit.

**(f) Keeping Plans Current**

The permittee shall amend the 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 Plan 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 Plan. The amended Plan and all actions required by such Plan shall be completed within a time period determined by the Commissioner.

The Commissioner may notify the permittee in writing at any time that the 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 Plan 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 Plan, perform all actions required by the revised Plan, 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 Plan and its implementation. If at any time the Commissioner finds that the Plan 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.

**(g) Failure to Prepare or Amend Plan**

In no event shall failure to complete or update a Plan in accordance with Sections 5(b) 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.

**(h) Plan Review Certification**

A copy of the Plan review certification made in accordance with Section 3(b)(10) shall be maintained with the Plan.

**(i) Monitoring Requirements**

**(1) Automatic Outfall Sampling Protocol**

The permittee shall comply with the screening and/or monitoring requirements in this section for outfalls that discharge directly to impaired waters, as identified in Section 6(k). The permittee shall utilize an outfall sampling modelling 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 subsection (2) of this Section. 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.

(A) Utilization of Data

Once the collection of data for each of the representative outfall locations is completed and released by USGS, the permittee shall assess each location using SELDM to determine if the modeling activities support a potential link between the impairment and the outfall discharge.

The permittee shall assess each representative outfall location automatically sampled in the previous permit term using SELDM to determine if the modeling activities support a potential link between the impairment and the outfall discharge.

If the modeling activities do not support a potential link between the impairment and the outfall discharge, the permittee must document the basis for this conclusion and include this documentation in its annual report.

If the modeling activities do support a potential link between the impairment and the outfall discharge, the permittee shall conduct follow-up investigations pursuant to subsection (B) of this Section that place priority on the assessment on those outfall locations and pollutants where the existing data suggest that the concentration of the constituent of concern in the outfall discharge may exceed the applicable water quality standards for the impairment of concern.

(B) Follow-up Investigations

The permittee shall conduct follow-up investigations for the drainage areas associated with the outfalls identified as potentially contributing to an impairment as a result of the representative outfall selected pursuant to the factors enumerated in subsection (A), above.

(i) Drainage Area Investigation

The permittee shall investigate activities within the drainage area contributing to each representative outfall identified as potentially contributing to an impairment. 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 identified by the permittee as potentially contributing to the related impairment.

Once the permittee has identified the factors potentially associated with the cause of the stream impairment, it shall identify these outfalls potentially contributing to impairments and factors for control measures implementation in subparagraph (ii), below.

(ii) Control Measure Implementation

In each outfall drainage area identified for follow-up investigation, the permittee shall implement a BMP program focusing on the impaired waters provisions of each of the Control Measures in Section 6(a) of this general permit and on the findings of the drainage area investigation in subparagraph (i), above.

(iii) Inventory of Outfalls Potentially Contributing to Impairments

The permittee shall assess the DOT MS4 outfall drainage areas (mapped as of the effective date of this general permit) that discharge directly to impaired waterbodies for factors similar to those of the monitored representative outfalls that were identified as potentially contributing to an impairment. This inventory will be used to identify other drainage areas within the DOT MS4 where implementation of additional control measures may be appropriate to reduce impairments.

(2) *Monitoring Schedule and Reporting*

(A) Schedule

(i) Impaired Waters Discharge Mapping

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

(ii) Follow-up Investigations

The permittee shall commence follow-up investigations identified pursuant to subsection (1)(B)(iii), above, no later than the expiration date of this general permit.

(B) 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 six (6) months 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 their monitoring program during the period of July 1, 2019 through June 30, 2024.

**(j) *Reporting & Record Keeping Requirements***

(1) *Record Retention*

The permittee shall keep records required by this permit for at least 5 years following its expiration or longer if requested by the Commissioner in writing. Such records, including

the Stormwater Management Plan, shall be available to the public at reasonable times during regular business hours.

(2) *Annual Report*

Within one year plus ninety (90) days following the effective date of this general permit and annually thereafter by ninety (90) days following the anniversary of the effective date of this general permit, 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](http://www.ct.gov/deep/municipalstormwater)) may provide guidance on annual report submittal. The annual report must be in Microsoft Word<sup>®</sup>, Adobe Acrobat<sup>®</sup> or another format acceptable to the Commissioner.

The report shall include:

- (A) A written discussion of the status of compliance with this general permit including, but not limited to:
- (i) a listing and brief description (including, where appropriate, the address or latitude and longitude) of all BMPs within each Minimum Control Measure;
  - (ii) any reporting requirements enumerated in the controls measures sections 6(a) and its subsections;
  - (iii) 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;
  - (iv) 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;
  - (v) 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;
  - (vi) 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;
  - (vii) a discussion of any changes to personnel responsible for the Plan or BMP implementation;
  - (viii) a description of any new BMPs added to the Plan 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;

- (ix) a discussion of the progress and status of the MS4's IDDE program (see Section 6(a)(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;
- (x) a discussion of measures included in the Plan for the control of discharges to impaired waters (see Section 6(k)) 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 Plan's impaired waters program, and any new or modified BMPs to be added to the Plan to improve its effectiveness;
- (xi) 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 Plan as a result of the monitoring results; and
- (xii) a discussion of any planned BMP implementation in the coming year, including a discussion of any new or modified BMPs planned for future implementation.

(B) All monitoring data collected and/or analyzed pursuant to Section 6(i).

(C) All other information collected and analyzed, including data collected under the Illicit Discharge Detection Protocol (Appendix B), during the reporting period.

**(k) *Discharges Impaired Waters or Waterbodies Subject to a Pollutant Load Reduction Within a TMDL***

Outfalls from the DOT MS4 that discharge directly to impaired waters (with or without a TMDL), waters for which nitrogen, phosphorus, bacteria, or mercury are stormwater pollutants of concern, or waters which have pollution load reductions specified within a TMDL are required to meet certain criteria identified in this section and other sections of this general permit.

**(1) *Existing Discharge to an Impaired Water without an Established TMDL***

If the permittee discharges to an impaired Water without an established TMDL, the permittee must follow:

- (A) For waters for which Phosphorus, Nitrogen, Bacteria, or Mercury are stormwater pollutants of concern, the control measures in Section 6(a) and the screening and monitoring requirements of Section 6(i),
- (B) For all other impairments, implement control measures to reduce the discharge of the pollutant(s) associated with the impairment and follow the requirements of Section 6(i), or as directed by the Commissioner.

**(2) *Existing Discharge to a Water with an Established TMDL or with a Pollutant Load Reduction Specified within the TMDL***

If the permittee discharges to a water included in a TMDL, the permittee must follow:

- (A) For waters for which Phosphorus, Nitrogen, Bacteria, or Mercury is a stormwater pollutant of concern, the control measures in Section 6(a) and the screening and monitoring requirements of Section 6(i),
- (B) For all other discharges subject to a pollutant load reduction contained within a TMDLs, implement control measures to be consistent with the Waste Load Allocation in the specific TMDL. The permittee must also conduct the appropriate screening and monitoring in accordance with Section 6(i).
- (C) The permittee shall implement BMPs as necessary to achieve the Waste Load Allocation, Load Allocation or Water Quality Targets specified within the TMDL (see Appendix D).

(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(b)(7), 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(i) and maintain documentation of these measures and conditions in their Plan.

(4) *New Discharge to a Water with an Established TMDL or with a Pollutant Load Reduction Specified within the TMDL*

If a new discharge to a water with a TMDL or with a pollutant load reduction established within the TMDL is authorized pursuant to the conditions of Section 3(b)(7), the permittee must follow the discharge requirements consistent with the applicable Wasteload Allocations, Load Allocations or Water Quality Targets for that TMDL. The permittee must also conduct the appropriate screening and monitoring in accordance with Section 6(i) and maintain documentation of these measures and conditions in their Plan.



## **Section 7. Additional Requirements of this General Permit**

### ***(a) 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:

#### ***(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

#### ***(2) Section 22a-430-4***

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

### ***(b) Reliance on Registration***

In evaluating the permittee's registration, the Commissioner has relied on information provided by the permittee. If such information proves to be false or incomplete, the permittee's authorization may be suspended or revoked in accordance with law, and the Commissioner may take any other legal action provided by law.

### ***(c) Duty to Correct and Report Violations***

Upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct and mitigate the results of such violation and prevent further such violation. The permittee shall report in writing such violation and such corrective action to the Commissioner within five (5) days of the permittee's learning of such violation. Such information shall be filed in accordance with the certification requirements prescribed in Section 7(e) of this general permit.

### ***(d) Duty to Provide Information***

If the Commissioner requests any information pertinent to the authorized activity or to compliance with this general permit or with the permittee's authorization under this general permit, the permittee shall provide such information within thirty (30) days of such request. Such information shall be filed in accordance with the certification requirements prescribed in Section 7(e) of this general permit.

***(e) Certification of Documents***

Any document, including but not limited to any notice, information or report, which is submitted to the Commissioner under this general permit shall be signed by, as applicable, the Commissioner of Transportation in accordance with section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

“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 this document or its attachments 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.”

***(f) Date of Filing***

For 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. The word “day” as used in this general permit 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.

***(g) 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, under Section 53a-157b of the Connecticut General Statutes.

***(h) Correction of Inaccuracies***

Within fifteen (15) days after the date the permittee becomes aware of a change in any information in any material submitted pursuant to this general permit or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, the permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the Commissioner. Such information shall be filed in accordance with the certification requirements prescribed in Section 7(e) of this general permit.

***(i) 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.

**(j) 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.

**Section 8. Commissioner's Powers**

**(a) 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.

**(b) 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.

**(c) 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.

Date:

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Emma Cimino  
Deputy Commissioner

## APPENDIX A: Small MS4 Municipalities

Connecticut Municipalities with >1,000 People in Urban Areas*		
Ansonia	Avon	Beacon Falls
Berlin	Bethany	Bethel
Bloomfield	Bolton	Branford
Bridgeport	Bristol	Brookfield
Brooklyn	Burlington	Canton
Cheshire	Chester	Clinton
Cromwell	Danbury	Darien
Deep River	Derby	Durham
East Granby	East Hartford	East Haven
East Lyme	East Windsor	Easton
Ellington	Enfield	Essex
Fairfield	Farmington	Glastonbury
Granby	Greenwich	Griswold
Groton (City)	Groton (Town)	Guilford
Haddam	Hamden	Hartford
Hebron	Killingly	Ledyard
Lisbon	Madison	Manchester
Marlborough	Meriden	Middlebury
Mansfield	Middlefield	Middletown
Milford	Monroe	Montville
Naugatuck	New Britain	New Canaan
New Fairfield	New Hartford	New Haven
New London	New Milford	Newington
Newtown	North Branford	North Haven
Norwalk	Norwich	Old Lyme
Old Saybrook	Orange	Oxford
Plainfield	Plainville	Plymouth
Portland	Prospect	Putnam
Redding	Ridgefield	Rocky Hill
Seymour	Shelton	Simsbury
Somers	South Windsor	Southbury
Southington	Sprague	Stonington (Town & Borough)
Stratford	Suffield	Thomaston
Thompson	Tolland	Trumbull
Vernon	Wallingford	Waterbury
Waterford	Watertown	West Hartford
West Haven	Westbrook	Weston
Westport	Wethersfield	Wilton
Willington	Windsor	Windsor Locks
Wolcott	Woodbridge	Woodbury

\*The list is subject to change based on the state and federal requirements

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

The permittee shall implement an IDDE program within Priority Areas to systematically find and eliminate sources of non-stormwater discharges to its MS4 and implement procedures to prevent such discharges.

### **(A) 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.

#### **(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 subsection (c) 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 subsection (c) below. Within one hundred eighty (180) days of the effective date of this permit, the permittee shall submit to the commissioner an inventory of all MS4 outfalls for which the permittee deems screening is not required pursuant to this subsection. For each such drainage area, the permittee shall provide:

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

#### **(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.

#### **(3) Priority Ranking for IDDE Investigation**

Screening of outfalls (in the priority ranking developed in subsection (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), below. Analysis of screening results, including comparisons with benchmark values for parameters in Table 1 and Figure 1 in subsection (B)(4)(e) 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 subsection (B)(4)(b) below.

#### **(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:

- (a) 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) 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.
- (c) Record any indicators of illicit discharges such as odors, oil sheen, discoloration, foaming, soap suds, slimes, or presence of sanitary floatables or solids.
- (d) If the outfall is inaccessible or submerged, proceed to the first accessible upstream manhole or structure.
- (e) Outfall observation

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

- (i) 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.
  - (ii) 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 subparagraph (vi) below, and collect a grab sample for enumeration of *E.coli* indicator bacteria in the laboratory.
  - (iii) If the outfall is not flowing, but shows evidence of an illicit discharge, return in 4 to 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.
- (f) Field analyses of dry weather flow samples shall include measurement of the following parameters:
- Conductivity
  - Turbidity
  - Dissolved Oxygen
  - pH
  - Chlorine
  - Temperature
  - Surfactants as (MBAS)
  - Potassium
  - Ammonia

(B) Illicit Discharge Detection Protocol (“IDDP”)

(1) Implementation

The permittee shall implement an IDDP according to the priorities developed pursuant to subparagraph (2), below, and consistent with the methodology described in subparagraph (4), below. The permittee shall complete implementation of its IDDP as outlined in the schedule in Section (B)(4)(j). The drainage areas investigated shall include the highest 20 percent of the prioritized areas as determined by subparagraph (2), below. The permittee shall eliminate all identified illicit discharges pursuant to the “IDDE Program Elements” section (Section 6(a)(3)(A)).

(a) Impaired Waters

If more than twenty (20) percent of the outfall drainage areas in the MS4 discharge to impaired waters, the permittee shall include in the Plan a discussion of the criteria by which those areas in the highest 20 percent of prioritized drainage areas were chosen. The remaining drainage areas to impaired waters that are not included in the highest 20 percent of prioritized areas shall receive highest priority for future investigation. If the permittee completes the initial 20 percent of highest prioritized areas ahead of the schedule in Section (B)(4)(j), below, the IDDP investigations shall proceed immediately to these remaining high prioritized areas discharging to impaired waters.

(2) Prioritization

The permittee shall use the results from its dry weather outfall screening required by Section 6(a)(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.

(3) Mapping

Through a geographic information system or other methods, the permittee shall, within three years of the effective date of this permit, 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. The following information and features, where currently available, shall be included in the mapping:

(a) Infrastructure

- (i) Municipal separate storm sewer system (including inter-municipal and private connections where available)
  - (ii) Thematic representation of sewer material, size, and age
  - (iii) Storm sewer flow direction
  - (iv) Select rim and invert elevations
  - (v) Aerial delineations of MS4 outfall drainage areas
  - (vi) Areas served by on-site subsurface disposal systems
  - (vii) Storm sewer alignments to which known or suspected underdrain systems may discharge
- (b) Water Resources and Topographic Features
- (i) Water bodies and watercourses identified by name and water quality classification
  - (ii) Impaired waters (including type of impairment)
  - (iii) Inland wetlands
  - (iv) Tidal wetlands
  - (v) Topography
  - (vi) Orthophotography
- (c) O&M, Investigations, Remediation, and Capital Projects
- (i) 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))
  - (ii) Locations of suspected, confirmed, and corrected illicit discharges (with dates and flow estimates)
  - (iii) Water quality monitoring locations with representation of water quality indicator concentrations
  - (iv) Recent and planned storm sewer infrastructure cleaning and repair projects
  - (v) Planned capital projects relative to utility and roadway rehabilitation or replacement
  - (vi) Proposed phasing of future illicit discharge investigations
- (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.

(a) 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) 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.

(c) 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 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.

(d) 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 1 indicates which analytes will be used for the determination of illicit discharges.

- (i) No Dry Weather Flow: If no dry weather flow is observed at an outfall and there is no evidence of one (color, algae, etc.), no further inspection of the outfall is required during the term of this permit.

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

- a. Partially dam the outfall when no rain is forecast for at least 48 hours;
- b. Re-inspect the outfall within 24 to 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 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.

- (ii) Groundwater Dry Weather Flow: If a dry weather flow is observed, test the flow for the analytes in Table 1 (pursuant to subsection (iv) below) and inspect the flow for evidence of an illicit discharge (color, odor, sheen, etc.). If discharge is determined to be groundwater:
  - a. 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 groundwater;
  - b. 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.
  - c. 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.
  - d. Re-inspect within six months.
- (iii) Contaminated Dry Weather Flow: If a dry weather flow is observed and testing or visual inspection indicates that the discharge is other than groundwater:
  - a. Inspect next upstream manhole(s) to determine which ones show signs of dry weather flow. There may be several manholes depending on the tributaries;
  - b. 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;
  - c. Repeat for all tributaries that show signs of dry weather flow.
  - d. 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.
  - e. For alignments that indicate an illicit discharge, the next step is to smoke test the area to determine the source of the discharge following the notification procedures.
  - f. If the location is identified, appropriate corrections will be made to stop the illicit discharge.
  - g. If no location is determined, dye testing of potential upstream sources shall be conducted and then the violation corrected.
  - h. If no location is still identified, the area will be monitored twice per month to establish the cause of this illicit discharge.

(e) 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 1. The permittee shall compare the measured values with benchmark values using the flow chart in Figure 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 1 during the course of investigations after a comparison and calibration of data with actual incidences of observed flow sources.

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 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 presence of human-generated contamination.

**Table 1 - Field Measurements, Benchmarks, and Instrumentation**

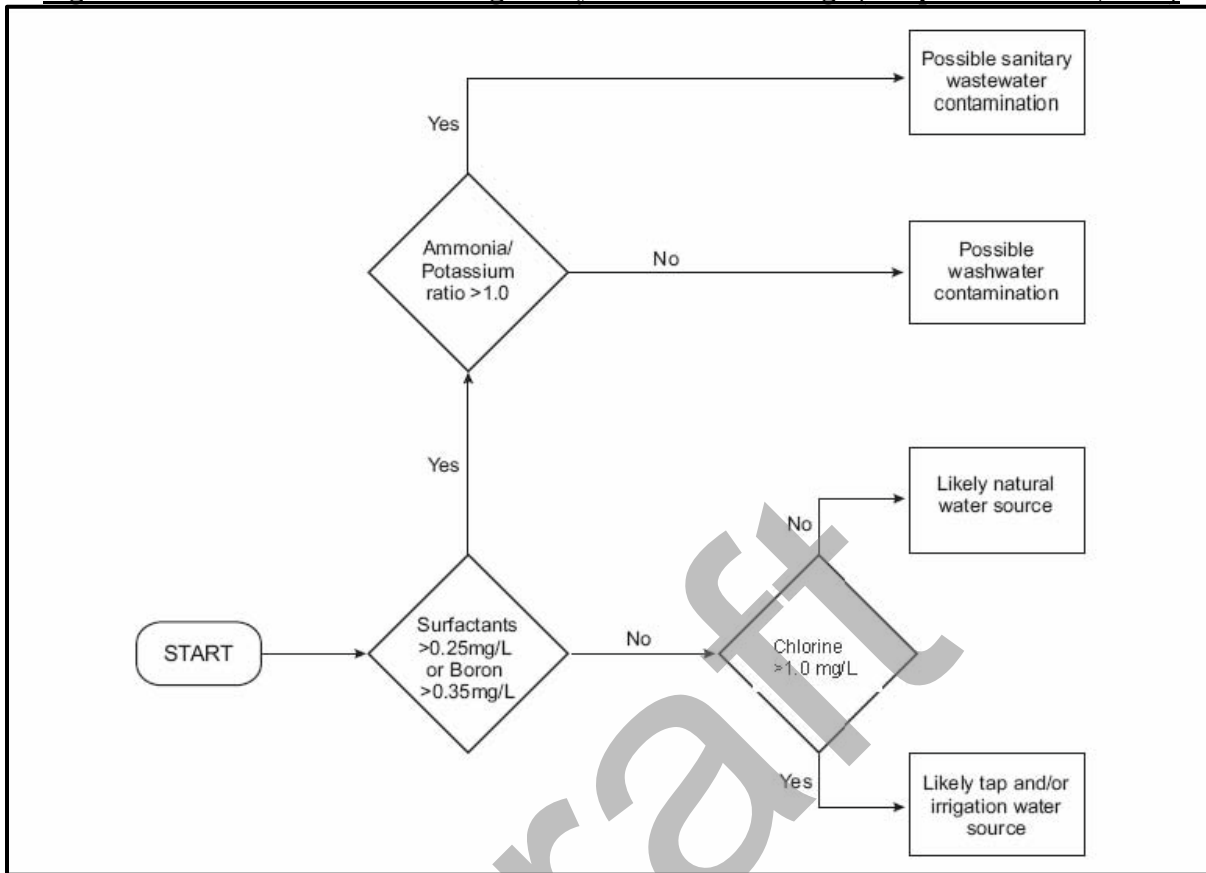
Analyte	Benchmark	Instrumentation <sup>1</sup>
Surfactants (as MBAS)	>0.25 mg/L	MBAS Test Kit (e.g., CHEMetrics K-9400)
Potassium (K)	(ratio below)	Portable Ion Meter (e.g., Horiba Cardy C131)
Ammonia (NH <sub>3</sub> )	NH <sub>3</sub> /K > 1.0	Portable Colorimeter or Photometer (e.g., Hach DR/890, CHEMetrics 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

<sup>1</sup> Instrumentation manufacturers and models provided for informational purposes only. Mention of specific products does not constitute or imply DEEP endorsement of same.

**Table 2 – Compounds for Pharmaceutical and Personal Care Products Analysis**

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

**Figure 1 – Flow Chart - Determining Likely Source of Discharge (Adapted from Pitt, 2004)**



(f) 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).

(g) 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(a)(3)(B) of this permit, including prompt notification and any appropriate cost-sharing arrangements.

(h) Verification of Illicit Discharge Removals

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 subsections (c) through (e) 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.

(i) 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 subparagraphs (c) through (e) above.

(j) Work Progression & 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 XX years from the effective date of this permit.

(k) Reporting and Evaluation

The permittee shall document in its Annual Reports its progress implementing the provisions of Section 6(a)(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.

(l) 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(a)(3) of this permit.

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

The Stormwater Management Plan (“the Plan”) 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 7-5);
- 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 (refer to Table 7-5), 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.

**Land Uses or Activities with Potential for Higher Pollutant Loads  
See Table 2-1 of the Stormwater Quality Manual**

<b>Land Use/Activities</b>	
<ul style="list-style-type: none"> <li>• Industrial facilities subject to the DEEP Industrial Stormwater General Permit or the U.S. EPA National Pollution Discharge Elimination System (NPDES) Stormwater Permit Program</li> <li>• Vehicle salvage yards and recycling facilities</li> <li>• Vehicle fueling facilities (gas stations and other facilities with on-site vehicle fueling)</li> <li>• Vehicle service, maintenance, and equipment cleaning facilities</li> <li>• Fleet storage areas (cars, buses, trucks, public works)</li> <li>• Commercial parking lots with high intensity use (shopping malls, fast food restaurants, convenience stores, supermarkets, etc.)</li> <li>• Public works storage areas</li> </ul>	<ul style="list-style-type: none"> <li>• Road salt storage facilities (if exposed to rainfall)</li> <li>• Commercial nurseries</li> <li>• Flat metal rooftops of industrial facilities</li> <li>• Facilities with outdoor storage and loading/unloading of hazardous substances or materials, regardless of the primary land use of the facility or development</li> <li>• Facilities subject to chemical inventory reporting under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA), if materials or containers are exposed to rainfall</li> <li>• Marinas (service and maintenance)</li> <li>• Other land uses and activities as designated by the review authority</li> </ul>

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](http://www.ct.gov/deep/aquiferprotection).

**APPENDIX D: Impaired Waters Guidance**

<b>SURFACE WATERS AND ASSOCIATED STORMWATER POLLUTANTS OF CONCERN</b>			
<b>Stormwater Pollutant of Concern</b>	<b>Waterbodies associated with a TMDL or Waters Included in Pollution Control Strategy Developed by CT DEEP</b>	<b>Impaired waters without a TMDL</b>	
		<b>Impaired Designated Use</b>	<b>Cause</b>
<b>Phosphorus</b>	Any water body subject to a TMDL pollutant load reduction for Phosphorus, including the watershed contributing to that waterbody as identified in the TMDL 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).	Habitat for Fish, Other Aquatic Life and Wildlife or Recreation  Habitat for Marine Fish, Other Aquatic Life and Wildlife	Phosphorus, Nutrient/ Eutrophication Biological Indicators, Dissolved Oxygen, Chlorophyll-a, or Excess Algal Growth
<b>Nitrogen</b>	Entire State of CT. All surface waters within CT are subject to a TMDL pollutant load reduction for Nitrogen, through the Long Island Sound TMDL for Dissolved Oxygen. Additionally included are waterbodies in state and their contributing watershed that may be subject to other TMDLs for Nitrogen.	Habitat for Fish, Other Aquatic Life and Wildlife  Habitat for Marine Fish, Other Aquatic Life and Wildlife	Dissolved oxygen saturation, Nitrogen (Total), Nutrient / Eutrophication Biological Indicators, Oxygen, Dissolved
<b>Bacteria</b>	Any water body and their contributing watershed that are subject to a TMDL pollutant load reduction for Total Coliform, Escherichia coli, Fecal coliform, or Enterococci.	Recreation, Existing or Proposed Drinking Water, Commercial Shellfish Harvesting Where Authorized or Shellfish Harvesting for Direct Consumption Where Authorized	Total Coliform, Escherichia coli, Fecal coliform, or Enterococci
<b>Mercury</b>	Entire state of Connecticut. Any water body subject to a TMDL pollutant load reduction for Mercury or for which a fish consumption advisory for mercury has been established.	Habitat for Fish, Other Aquatic Life and Wildlife or Fish Consumption	Mercury
<b>Cause Unknown or Other Pollutants</b>	Any water body and the contributing watershed that is subject to a TMDL pollutant load reduction for any other pollutant.	Any Use	Cause Unknown or Any Other Pollutant Parameter



**WATER QUALITY TARGETS FOR WATERS FOR WHICH BACTERIA  
IS A STORMWATER POLLUTANT OF CONCERN**

<b>Water Quality Classification</b>	<b>E. Coli (Freshwater Rec) (cols/100mls)</b>	<b>Enterococci (Marine Rec) (cols/100mls)</b>	<b>Fecal Coliform (Marine Shellfishing) (cols/100mls)</b>	<b>Total Coliform (Freshwater Drinking) (cols/100mls)</b>
<b>AA</b>	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
<b>A</b>	Same as AA	N/A	N/A	N/A
<b>B</b>	Same as AA	N/A	N/A	N/A
<b>SA</b>	N/A	Instantaneous Designated Swimming < 104  Instantaneous All other Uses < 500  Geomean < 35	Geomean < 14  90% of samples < 31	N/A
<b>SB</b>	N/A	Same as SA waters	Geomean < 88  90% of samples < 260	N/A