

# GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM DEPARTMENT OF TRANSPORTATION SEPARATE STORM SEWER SYSTEMS REISSUANCE WITH MODIFICATIONS

## **FACT SHEET**

# **General Permit Background:**

The DEEP stormwater general permit program was developed as a comprehensive permit pursuant to EPA's Stormwater Rule, and Connecticut's stormwater permits are issued under the authority of the National Pollutant Discharge Elimination System (NPDES) and Sections 22a-430 and 22a-430b of the Connecticut General Statutes. Phase I of the EPA Stormwater Rule was published in 1990 and addressed runoff from medium and large municipal (and transportation agency) separate storm sewer systems (MS4s) with populations greater than 100,000 as well as runoff from industrial and construction activities. Phase II of the Stormwater Rule was published in 1999 and addressed runoff from small MS4s with populations less than 100,000. The Connecticut Department of Transportation (DOT) operates an MS4 and falls under the EPA Stormwater Rule. The DEEP first issued the General Permit for the Discharge of Stormwater from the Connecticut Department of Transportation Separate Storm Sewer Systems (DOT MS4 general permit) on May 24, 2018 (effective July 1, 2019) under the EPA Stormwater Rule. The general permit will expire on June 30, 2024.

The purpose of the DOT MS4 general permit is to protect waters of the state from pollution associated with urban stormwater runoff discharging through the DOT separate storm sewer systems. A municipal separate storm sewer is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned or operated by a state or municipal entity or other public body created by or pursuant to state law. EPA currently defines a regulated MS4 as a municipality or state or federal institution that owns and operates a separate storm sewer system in an Urban Area (previously termed Urbanized Area or UA). Urban Areas are defined by the Census Bureau and consist of densely populated areas surrounding urban centers. The criteria for designating UAs are developed by the Census Bureau and maps of UAs are published after each decennial census. Changes were made to the definition of UA in the 2020 census with new UA maps issued. EPA does not require coverage of MS4s outside of Urban Areas but allows the permitting authority (DEEP) to designate additional MS4s outside of Urban Areas. The DOT MS4 general permit covers separate storm sewer systems within Urban Areas and other areas outside UAs which discharge to impaired waters or which have significant levels of directly connected impervious surfaces.

The requirements of the proposed DOT MS4 general permit reissuance will include registration to obtain permit coverage, development and implementation of a Stormwater Management Plan (Plan), a monitoring program to identify discharges contributing to stream impairments and the submission of Annual Reports to track the progress of implementation of the Plan. The Stormwater Management Plan is the cornerstone of this proposed general permit. It is a document prepared by the MS4 that contains information on its stormwater system and department infrastructure along with Best Management Practices (BMPs) to reduce and/or eliminate the discharge of pollutants through the storm sewer system to the Maximum Extent Practicable (MEP). MEP is the standard promulgated in EPA's Phase II rule that MS4s are required to meet. The definition of MEP is "to reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice." EPA states that the MEP standard for MS4 discharges is an "iterative process consisting of a municipality developing a program consistent with specific permit requirements, implementing the program, evaluating the effectiveness of BMPs included as part of the program, then revising those parts of the program that are not effective at controlling pollutants, then implementing the revisions, and evaluating again." This process continues until the goal of meeting water quality requirements is achieved.

In accordance with EPA rules, the BMPs described in the DOT MS4 general permit and the Stormwater Management Plan are organized into six categories of Minimum Control Measures: public education and outreach; public participation; illicit discharge detection and elimination (IDDE); construction stormwater management; post-construction stormwater management; and pollution prevention and good housekeeping. Each of these categories includes several BMPs to implement the control measure. Certain BMPs are required and the permit provides for additional BMPs to be implemented, as necessary to address pollution, at the discretion of the DOT.

The proposed DOT MS4 general permit reissuance provides significant detail on the requirements and implementation of the six Minimum Control Measures. A summary of these elements follows.

#### **Proposed General Permit Overview:**

Under this proposed general permit reissuance many elements of the six Minimum Control Measures are required only within the UA and those areas outside the UA that discharge to impaired waters or from areas with Directly Connected Impervious Area (DCIA) exceeding eleven percent (11%). The general permit refers to these areas as "priority areas". Implementation of certain elements outside of these priority areas is at the discretion of the permittee.

#### **Public Education and Outreach:**

This minimum measure provides detail on the types of outreach and the means of conducting the outreach that serve to educate the public about issues related to stormwater pollution. It specifies outreach targeting pet waste, application of fertilizers, herbicides, and pesticides, and impacts of illicit discharges and improper disposal of waste into the MS4. Outreach materials can be developed or acquired from various sources such as governmental agencies, academia, and/or environmental advocacy organizations and can be disseminated in numerous ways such as flyers,

brochures, billboards, television public service announcements, and web-based tools. This minimum measure also dictates a timeline for implementation of this program. In addition to these standard requirements, this measure includes additional targeted efforts to address water quality impairments.

#### **Public Participation:**

This measure provides detail on soliciting, providing for and responding to public input in the development of the Stormwater Management Plan. It requires the DOT to publish a public notice of the availability of its Stormwater Management Plan and Annual Report for public review. It recommends locations for the plan to be available such as DOT offices, local libraries or other central publicly available locations and also a URL where the information may be accessed electronically. This measure requires a minimum of a thirty day comment period to solicit and receive public comment on the Annual Report. DOT is also encouraged to enlist local organizations to help implement the elements of its Stormwater Management Plan.

# Illicit Discharge Detection and Elimination (IDDE):

This section addresses how DOT identifies, traces and eliminates non-stormwater discharges to its storm sewer system from sources such as sanitary sewer cross-connections, illegal dumping, industrial and commercial wastes, floor drains, animal wastes, lawn management chemicals and wastes. This section also provides considerable detail regarding the legal authorities that are required to implement the IDDE program, the protocol for actually performing the field work to detect and eliminate illicit discharges, mapping requirements, citizen reporting provisions and the timeframe for IDDE program completion. The requirements of this measure are mandated only in the priority areas. There are also requirements for record keeping to document the progress of the IDDE program. In addition to these standard requirements, this measure includes additional targeted efforts to address water quality impairments.

#### **Construction Site Stormwater Runoff Control:**

This section provides a detailed outline of the legal authorities DOT must develop to manage construction site runoff within, or discharging to, its jurisdiction. Most of this legal authority resides within the internal policies and various construction manuals maintained by DOT. This section also requires that DOT ensures the consistency of these policies and manuals with the Connecticut Stormwater Quality Manual, the Guidelines for Soil Erosion, Sedimentation Control and the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective December 31, 2020 (construction general permit). Detail is provided for construction review and inspection, notification of requirements of the DEEP construction general permit, public involvement and long-term maintenance of stormwater treatment ponds. There is also language requiring DOT to develop a plan outlining how all DOT departments with jurisdiction over land disturbance and development projects will coordinate their functions with one another.

#### **Post-construction Stormwater Management:**

Under this section, DOT is required to update their construction and post-construction design policies and manuals to include Low Impact Development (LID) measures, post-construction stormwater retention and other elements of the construction general permit in addressing new

development and redevelopment projects within their system or that discharge to their system. In addition, they must develop a program to ensure the inspection and long-term maintenance of existing stormwater facilities under the jurisdiction of DOT as well as provide, through its storm sewer connection permitting process, requirements for long-term maintenance of stormwater management measures for development projects that discharge to the DOT MS4. In addition to these standard requirements, this measure includes a requirement for the MS4 to map its DCIA. There are also targeted efforts, including prioritizing the use of retrofits, to address water quality impairments.

# **Pollution Prevention and Good Housekeeping:**

This section provides details on the maintenance of DOT's property and operations including parks and open space, employee training, the management of pet waste and waterfowl, buildings and facilities, vehicles and equipment, parking lots, snow management practices, street sweeping, leaf management and catch basin cleaning. In addition to these standard requirements, this measure includes a Retrofit Program requiring the reduction of DCIA within the MS4 by retrofits or stormwater retention practices for redevelopment projects. This section also allows and encourages DOT to coordinate with other interconnected MS4s and includes targeted efforts to address water quality impairments.

#### **Impaired Waters:**

The DEEP is required by Section 303(d) the federal Clean Water Act to assess its water bodies to determine if they are impaired for a variety of uses and to develop a plan, called a Total Maximum Daily Load plan (TMDL), to eliminate the causes of these impairments and return these waters to designated uses. These water bodies are categorized as impaired waters. This general permit specifies requirements regarding how DOT must address impaired waters within its jurisdiction. While there are numerous causes for impairments throughout the state, the majority of impairments (with or without TMDLs) for which stormwater is a potential source, are likely caused by phosphorus, nitrogen, and bacteria. In addition to these, sediment is another significant stormwater pollutant as it can impact water resources through sedimentation and carrying pollutants such as metals and nutrients bound to sediment. Each of the six Minimum Control Measures includes a section detailing which of the BMPs within the measure should receive particular focus and emphasis to address a given impairment. To further address how DOT deals with impaired waters, there are specific monitoring requirements targeting these waters as well as measures to be implemented to address new or increased discharges to impaired waters.

#### **Monitoring**

The purpose of the monitoring program is to sample MS4 discharges to impaired waters during a rain event and analyze the samples for parameters that may contribute to the cause of the particular impairment. The general permit reissuance is proposed to continue the stormwater monitoring program conducted under the current DOT MS4 general permit. DOT utilizes a sampling modelling program called the Stochastic Empirical Dilution Model (SELDM) developed by the United States Geological Survey (USGS). Sampling is conducted for certain outfalls throughout the DOT MS4 and entered into the SELDM model to determine potential

impacts. This model can then be applied to other outfalls within the DOT system to help identify outfalls that may contribute to an impairment.

## **Proposed General Permit Modifications**

While the proposed DOT MS4 general permit is a continuation of the current general permit, DEEP is proposing several modifications with this reissuance. In 2023, EPA initiated an enforcement action against the DOT in the form of an Administrative Order on Consent for violations of the current DOT MS4 general permit. Most of the proposed modifications in this reissuance are to address or incorporate elements of that Order. EPA has indicated that the Order will be closed once the proposed general permit becomes effective. The following are a list of the modifications being proposed.

- Section 6(b)(3)(C) IDDE mapping A completion date of July 1, 2029 is proposed for the completion of the outfall mapping for the Priority Areas of the DOT MS4.
- Section 6(b)(5)(E)(i) Stormwater structure maintenance A timeline has been added to this section requiring the completion of inspections of stormwater structures mapped under the previous permit within six (6) months following the effective date of the reissuance. Also included is a requirement to complete inspection of any structures mapped after the effective date of the reissuance to be completed within one year of their mapping.
- Section 6(b)(5)(E)(ii) Stormwater structure maintenance A provision is added in this section requiring DOT to submit a stormwater structure maintenance plan for the Priority Areas within six (6) months of the effective date of the reissuance. This section also includes a requirement to inspect all stormwater structures annually.
- Section 6(b)(5)(E)(iii) Stormwater structure maintenance This section requires DOT to complete short- and medium-term maintenance of structures by November 1, 2027 for structures mapped under original permit and within three (3) years of inspection for structures mapped following the effective date of the reissuance.
- Section 6(b)(6)(B)(ii)(a.) DCIA disconnection tracking Under this section DOT is required to report each year on the disconnection projects completed to meet their Directly Connected Impervious Area (DCIA) disconnection goal and the area credited for each disconnection.
- Section 6(b)(6)(B)(ii)(b.) Retrofit planning This section requires DOT to update their retrofit plan each year in their Annual Report and enumerates a goal of disconnecting forty (40) acres of DCIA by June 2027 and eighty (80) acres by June 2030.
- Section 6(b)(6)(D)(i) Street sweeping Under this section DOT must conduct annual inspections and sweeping, as necessary, of all roadways and parking lots within the Priority Areas.
- Section 6(b)(6)(D)(ii) Catch basin cleaning This section requires DOT to complete inspections and cleaning for all catch basins within the Priority Areas by August 1, 2031.
  After this date, DOT must inspect and clean all catch basin at a rate of ten percent (10%) per year.

- Section 6(i) Monitoring Under the current permit, DOT has conducted their monitoring program utilizing automatic samplers to provide input to the SELDM model developed by the USGS for modeling potential stormwater pollutants in outfalls state-wide. The current permit has a secondary option for sampling all outfalls if the SELDM program was not manageable. The reissuance proposes the continuation of the SELDM program and removes the secondary option of sampling all outfalls.
- Appendix B IDDE Protocol This appendix updates the IDDE protocol to change prioritization methods and focus on dry weather screening of outfalls. It provides a more streamlined and targeted method of detecting and eliminating illicit discharges.

