



GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM DEPARTMENT OF TRANSPORTATION SEPARATE STORM SEWER SYSTEMS

FACT SHEET

General Permit Background:

The DEEP stormwater general permit program was developed 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 Connecticut General Statutes Section 22a-430 and 22a-430b. Phase I of the EPA Stormwater Rule was published in 1990 and addressed runoff from medium and large municipal 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. Included in this Phase II definition of an MS4 are municipalities and government institutions, including transportation agencies.

The DEEP first issued a General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (Small MS4 general permit) on January 9, 2004 covering 113 municipalities under this Phase II rule. The Small MS4 general permit, reissued on January 20, 2016 and effective July 1, 2017, includes modifications and now covers 121 municipalities as well as state and federal institutions (except DOT). The DOT MS4 general permit will provide coverage for the DOT separate storm sewer system to complete statewide coverage of all EPA mandated MS4s. 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. EPA defines a municipal separate storm sewer (including DOT) 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. The DOT MS4 general permit covers separate storm sewer systems within Urbanized Areas (UAs) and other areas outside UAs which discharge to impaired waters or which have significant levels of directly connected impervious surfaces. Urbanized Areas are defined by the federal 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.

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

Overview:

Under this general permit implementation of the elements of the six Minimum Control Measures is required throughout the boundaries of the DOT MS4 that are within the jurisdiction of any Small MS4 authorized by the Small MS4 general permit and, for certain elements, within other areas of 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 will reside 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 2002 Guidelines for Soil Erosion, Sedimentation Control and the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective October 1, 2013 (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. This section also includes language requiring DOT to develop a plan outlining how contractors and consultants under contract to DOT and all DOT departments with jurisdiction over land disturbance and development projects will coordinate their functions and permit compliance 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. There are also provisions to

address non-DOT projects that discharge to the DOT MS4. In addition, DOT 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 (including snow melting operations), street sweeping, structure rinsing, 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 proposed general permit includes two options for outfall screening for discharges to impaired waters. The first option is to conduct an automatic sampling program using a model similar or equal to the Stochastic Empirical Dilution Model (SELDM) by the United States Geological Service (USGS) to model potential sources of pollution to the DOT MS4 by land use type and address these potential sources statewide based on the model. The second option is an outfall screening program similar to that of the Small MS4 general permit. This outfall screening is conducted during a rain storm and only includes screening for nitrogen, phosphorus, bacteria or turbidity, dependent on the identified cause of the impairment. Outfalls that exceed certain thresholds will be targeted for follow-up investigation and increased or alternate BMPs within the outfall's drainage area.