

**VERMONT AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**FACT SHEET**

**NPDES GENERAL PERMIT 3-9014 (2010) FOR STORMWATER DISCHARGES FROM  
SMALL SEPARATE STORM SEWER SYSTEMS (MS4S)**

**I. INTRODUCTION AND BACKGROUND**

**A. Program Background**

The Vermont Agency of Natural Resources (Agency) is proposing to reissue the National Pollutant Discharge Elimination System (NPDES) general permit for the discharge of stormwater from certain small Municipal Separate Storm Sewer Systems (MS4s) to waters within the State of Vermont. Upon its effective date, this permit will replace the existing MS4 permit issued in 2003, amended in February, 2004 and subsequently modified by the Vermont Water Resources Board in July 2005. This draft general permit is issued pursuant to the Secretary's federally-delegated NPDES program.

The draft permit will apply to the following regulated MS4s: Burlington, Colchester, Essex, Essex Junction, Milton, Shelburne, South Burlington, Williston, Winooski, the University of Vermont, the Burlington International Airport and the Vermont Agency of Transportation. This permit will also provide coverage for any additional small MS4s designated by the Secretary pursuant to 40 CFR 123.35(b) or 122.32(a)(2).

**B. Public Notice and Comment Period**

The Secretary is providing a 45-day public comment period on the draft general permit from January 22, 2010 through March 8, 2010. Interested parties may submit written comments on the general permit to the Department at the address given below by no later than 4:30 p.m. on March 8, 2010. All relevant comments will be considered by the Secretary in finalizing this general permit.

The Secretary has scheduled a public meeting to discuss the draft general permit at 6:00 p.m. on February 16, 2010 from 6-8 p.m. in the Chittenden County Regional Planning Commission conference room at 110 West Canal Street, Suite 202, Winooski, Vermont. At the meeting, Department staff will be available to answer questions concerning the general permit.

The draft general permit is available for download from the Department's Water Quality Division website at [www.vtwaterquality.org](http://www.vtwaterquality.org) or by calling (802) 241-3780. Office hours are 8:00 AM to 4:30 PM, Monday through Friday. For additional information concerning the permit contact:

VT Water Quality Division  
c/o Padraic Monks  
103 S Main Street – Building 10 North  
Waterbury, VT 05676

Or electronically to Padraic.Monks@state.vt.us  
Or call: 802-241-1453.

### **C. General Permit Authority**

Section 13.12 of the Vermont Water Pollution Control Permit Regulations authorizes the issuance of "general permits" to cover a category of discharges, including stormwater runoff, within an existing geographic area. The Secretary has determined that MS4 stormwater discharges may be appropriately controlled through a general permit. Pursuant to Subpart VI.R of the draft general permit, the Secretary reserves the right to require an individual permit in accordance with that Subpart.

### **D. Notice of Intent (NOI) Requirements**

A regulated small MS4 may be authorized to discharge stormwater under this general permit by filing a written Notice of Intent (NOI). Regulated MS4s who previously obtained coverage under the 2003 MS4 permit are required to submit an NOI to the Secretary of the Agency of Natural Resources (Secretary) within 180 days of the effective date of this permit. If a MS4 is designated as a regulated MS4 prior to the effective date of the general permit but was not previously required to obtain coverage under the 2003 MS4 permit, then it shall submit a NOI within 270 days of the effective date of the permit. If an entity is designated as a regulated MS4 by the Secretary after the effective date of this permit, it must submit a NOI no later than 270 days after such designation. The Secretary has developed criteria for the designation of additional regulated MS4s pursuant to 40 CFR 123.35(b).

## **II. REQUIREMENTS OF THE DRAFT GENERAL PERMIT**

### **A. Authority**

This draft permit is issued in accordance with the following state and federal laws and rules: the Vermont Water Pollution Control statute, 10 V.S.A. Chapter 47, including §§ 1259, 1263, 1264 and 1264a; the Vermont Water Pollution Control Rules, Chapter 13, including the rule governing general permits in Section 13.12; the federal Clean Water Act, as amended, 33 U.S.C.A. 1251 et seq., including 33 U.S.C.A. 1342(p); and regulations of the federal Environmental Protection Agency including but not limited to 40 CFR 122.26, 40 CFR 122.28 and 40 C.F.R. 122.30 to 122.37.

The requirements in the draft permit are established pursuant to CWA §402(p)(3)(iii) to ensure that pollutant discharges from regulated small MS4s are reduced to the maximum extent practicable (MEP), protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act. The draft permit sets forth the requirements to “reduce pollutants in

discharges from the MS4 to the maximum extent practicable, including management practices, control techniques, and system, design and engineering methods...” (Section 402(p) (3) (B) (iii)). The Secretary believes implementation of best management practices (BMPs) designed to control storm water runoff from the MS4 is generally the most appropriate approach for reducing pollutants to satisfy the MEP standard. The draft permit contains BMPs, including development and implementation of a comprehensive stormwater management program (SWMP) as the mechanism to achieve the required pollutant reductions.

Section 402(p) (3) (B) (iii) and authorizing regulations provide that the Secretary may include in an MS4 permit such other provisions as the Department determines appropriate for control of pollutants. The Secretary believes that this provision forms a basis for imposing water quality-based requirements consistent with the authority in Section 301(b) (1) (C) of the CWA. Accordingly, Part IV of the draft permit contains water quality requirements, expressed in terms of BMPs that the Secretary has determined are necessary and appropriate under the CWA.

### **B. Coverage Under the Draft Permit**

Subparts I.A., B and C of the draft permit define the small MS4s that are regulated by this permit, the types of discharges subject to the permit and limitations on coverage. This draft general permit is applicable to stormwater discharges from small municipal separate storm sewer systems meeting the definition of “small municipal separate storm sewer system” at 40 CFR § 122.26(b) (16) and designated under 40 CFR § 122.32(a) (1) (applicable to small MS4s located in an urbanized area) or designated by the Secretary as needing a permit pursuant to 40 CFR §122.32(a) (2) or 123.35(b).

The Secretary has authority under the CWA and implementing regulations to designate additional MS4s for regulation at any time when necessary to protect or remedy localized water quality impacts. Federal regulations provide that in making designations of small MS4s for regulation, a state program may develop criteria to evaluate whether a stormwater discharge results in or has the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. (40 CFR 123.35(b)(1)(i)) In determining other significant water quality impacts, EPA recommends a balanced consideration of the following designation criteria on a watershed or other local basis:

- Discharge to sensitive waters;
- High population density;
- High growth or growth potential;
- Contiguity to an Urbanized Area;
- Significant contributor of pollutants to waters of the United States; and
- Ineffective protection of water quality concerns by other programs. (40 CFR 123.35(b)(1)(ii))

The Department has adopted criteria, using a combination of population and environmental factors, to designate additional small MS4s for regulation. These criteria provide, in part:

Criterion 1: A small MS4 discharging to a state water that the Secretary determines is significantly impaired by discharges of stormwater runoff and is listed as being impaired due to stormwater runoff on the EPA-approved State of Vermont 303(d) List of Waters prepared pursuant to 33 U.S.C. Section 1313(d).

Prior to any official designation of a MS4 for regulation, public notice and an opportunity to comment on such designation will be provided.

This general permit authorizes discharges of stormwater from a regulated small MS4 provided that authorization to discharge is obtained and compliance with the terms and conditions of the general permit is maintained. Subpart I.C. of the general permit contains certain limitations on coverage. Subpart I.E. provides certain potential waivers from coverage.

Subpart II. of the draft permit contains Notice of Intent (NOI) requirements and deadlines for submission of the NOI. In order for a small MS4 to obtain authorization to discharge, it must submit a complete and accurate NOI. The NOI must be signed in accordance with the requirements of Subpart VI.H of the permit.

### **C. Stormwater Management Program**

The Stormwater Management Program (SWMP) is a written document required by the permit and is a mechanism for documenting the practices the permittee is implementing to meet permit requirements. Regulated MS4s must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the 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.

### **D. Discharge Requirements**

This draft permit includes provisions to ensure that discharges do not cause or contribute to exceedances of water quality standards. Part IV of this permit contains both water quality based requirements and discharge requirements expressed in the form of the six minimum control measures in Subparts IV.F and G.

If an MS4 discharges into waters that are not impaired, the draft permit employs a presumptive approach to ensure that the permittee's MS4 discharges do not cause or contribute to exceedances of water quality standards. For MS4 discharges into waters that are not impaired, the Secretary presumes that the conditions in the draft permit will meet applicable water quality standards when fully satisfied. The Secretary considers this approach valid since, despite ongoing discharges from the permittee's MS4 and other potential sources, these waters have not been categorized as impaired and failing to meet water quality standards. During the previous five years, permittees have implemented SWMPs to comply with the conditions of the 2003 MS4 general permit. Under this draft permit, the permittees would continue implementation of an augmented SWMP to comply with several additional and strengthened permit conditions. Therefore, the Secretary presumes that implementation of an augmented SWMP will at least maintain at present levels the contributions of pollutants from MS4s discharging to unimpaired

waters, thereby not causing or contributing to an exceedance of water quality standards.

The draft permit requires permittees to identify any additional or modified BMPs to be implemented to address any discharge from its MS4 in the event the permittee becomes aware that the discharge causes or contributes to and exceedances of applicable water quality standards. In this case, the permittee should use any available information, and add or modify BMPs in its SWMP to abate pollutants sufficiently to meet applicable water quality standards.

Pursuant to federal regulation, Vermont must develop a list of water bodies that are not meeting the water quality standards applicable to the water body. This list, the “303(d) List”, refers to the section of the CWA that requires the listing of the water bodies. Vermont must update its 303(d) list every two years. Federal regulations require that TMDLs be developed for water bodies not meeting applicable standards (see 40 CFR § 130.7 for the regulations associated with TMDLs). A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards. The TMDL allocates pollutant loadings to the impaired waterbody from all point and non-point pollutant sources. Regulations at 40 CFR §130.2 define the TMDL as “the sum of the individual wasteload allocations (WLA) for point sources and load allocations (LAs) for non-point sources.”

A TMDL may establish a specific waste load allocation (WLA) for a specific source, or may establish an aggregate WLA that applies to numerous sources. Typically stormwater sources are expressed as an aggregate in a WLA. The permittee must identify in its SWMP how it will achieve any applicable WLA established in the TMDL. This will include specific BMPs and specific measures to meet the WLA, if applicable. The permittee’s demonstration of meeting the requirements of the WLA should focus on evidence that shows that the BMPs are implemented properly and adequately maintained. This demonstration may be an iterative process.

For MS4 discharges into an impaired water for which there is an EPA-approved TMDL as of the effective date of this permit, the draft permit includes requirements consistent with the assumptions and requirements of the available WLA in the TMDL.

As of the date of issuance of this draft permit, EPA-approved stormwater TMDLS have been issued for the following waters into which certain regulated MS4s discharge: Allen Brook, Bartlett Brook, Centennial Brook, Englesby Brook, Indian Brook, Moon Brook, Morehouse Brook, Munroe Brook, Potash Brook, Rugg Brook, Stevens Brook and Sunderland Brook. Each of these TMDLs includes an aggregate point source WLA and does not specify MS4-specific WLAs. Each TMDL contains an individual waterbody description, problem assessment and a generalized discussion of potential implementation actions, including permits that may be necessary to regulate stormwater consistent with established WLAs. The Secretary has considered the stormwater TMDLs, including the aggregate WLA, in the development of permit requirements necessary to protect water quality. The Secretary considers these permit requirements, including but not limited to the stormwater TMDL implementation requirements in Part IV of the draft permit, to be consistent with the assumptions and requirements of the TMDLs and necessary to support the achievement of the WLAs.

The draft permit requires that each MS4 permittee, in consultation with the Agency, shall work cooperatively with any other MS4 permittees that discharge into the same stormwater impaired watershed to develop and submit a single, comprehensive Flow Restoration Plan (FRP) for the stormwater impaired watershed. The FRP shall be submitted within the first three years of the permit term. The FRP will include:

- Identification of the suite of necessary stormwater BMPs to achieve the flow restoration targets;
- A design and construction schedule for the identified suite of stormwater BMPs which provides for implementation of the BMPs no later than 10 years from the effective date of the permit;
- A financing plan that estimates the costs for implementing the Flow Reduction Plan and describes a strategy for financing the Plan;
- A regulatory analysis that identifies and describes what, if any additional regulatory authorities, including the authority to require low impact development BMPs, the permittee will need to effectively implement the Flow Reduction Plan; and
- An identification of regulatory assistance that the permittee will need in order to effectively implement the Flow Reduction Plan (e.g. use of residual designation authority by the Secretary).

The draft permit requires that the permittee develop a program to identify opportunities for and provide assistance to landowners within the MS4 jurisdiction in the implementation of low impact BMPs, such as maximizing disconnection, maximizing infiltration, preventing and eliminating soil erosion, and preventing and eliminating the delivery of pollutants to stormwater conveyances. The draft permit also requires that the permittee fund the operation and maintenance of the existing flow gaging and rainfall gaging stations in its respective stormwater-impaired watershed(s). To date, this activity has been funded by the state.

The draft permit requires that a permittee must be consistent with recommendations applicable to its MS4 in the implementation section of the Lake Champlain TMDL and any future TMDLs for impaired waters affected by the MS4 established or approved by EPA.

As of the date of the issuance of this draft permit, certain waterbodies into which regulated small MS4s discharge have been listed as impaired on Vermont's 303(d) list, but a TMDL has not yet been established. The Secretary has considered these impairments in the development of this draft permit, including but not limited to requirements for the six minimum measures. Subpart IV.C.2 of the draft permit provides that if a MS4 discharges to an impaired water that is without an approved TMDL, the permittee shall address in its SWMP and annual reports how any discharges that have the potential to cause or contribute to the impairment will be controlled. An MS4 may achieve an increased level of control through additional BMPs or enhancement of existing BMPs.

The requirements in the draft general permit reflect the goal of the CWA and Vermont law to achieve and maintain water quality standards. Federal regulations pertaining to the state anti-degradation policies are found in 40 CFR §131.12. States must develop anti-degradation policies

designed to protect existing uses of the water and protect water quality level such that existing uses be maintained. Vermont's anti-degradation policy is set forth in Section 1-03 of the Vermont Water Quality Standards. This draft general permit does not authorize any new or increased discharge to receiving waters unless the new or increased discharge is consistent with Vermont's anti-degradation policy.

Subparts IV.F and G of the draft permit contain permit requirements relating to the "six minimum measures," including public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site stormwater runoff control, post construction stormwater management for new development and redevelopment and pollution prevention and good housekeeping for municipal operations.

#### *Public Education and Outreach (Subpart IV.G.1)*

The MS4 must implement a public education program to distribute educational materials to the community or conduct other outreach activities about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff. The education program must be specific to the MS4 and include a focus on the pollutants of concern associated with impaired waters affected by discharges from the small MS4. The overall long-term goal of an effective education program is to change behavior and increase the knowledge of the community. An education program must have a defined and targeted message for each of the different audiences and must include a measure to evaluate effectiveness of the educational messages. This draft permit builds upon minimum measure #1 in the 2003 MS4 permit. For example, the I/E program must now include the element of flow reduction in the educational message to support the implementation of the stormwater TMDLs.

#### *Public involvement and Participation (Subpart IV.G.2)*

This control measure is closely related to the public education and outreach control measure. The objective of this measure is to provide and engage the public with opportunities to participate in the review and implementation of the SWMP. This draft permit builds upon minimum measure #2 in the 2003 MS4 permit. For example, the MS4s are encouraged to evaluate whether they can develop a more effective and more engaging outreach effort by regionalizing the requirement. The goal is to adopt a program that continues to build on successful ongoing activities but be more focused both in terms of activity and geographic location (i.e. roof top disconnections in an impaired waterway).

#### *Illicit discharge detection and elimination (Part IV.G.3)*

The 2003 MS4 permit required that the permittee must develop, implement, and enforce a program to detect and eliminate illicit discharges. This measure requires the MS4 to detect and eliminate illicit discharges from its municipal separate storm sewer system. This draft permit builds upon the requirements for minimum measure #3 in the 2003 MS4 permit. For example, the MS4s must continue to improve their existing drainage data and maps and focus illicit discharge and detection monitoring on random acute spills/dumping vs. chronic connections such as wastewater-stormwater cross connections in the stormwater impaired watersheds.

#### *Construction site stormwater runoff control (Subpart IV.G.4)*

The 2003 MS4 permit required that the permittee must develop, implement, and enforce a program to address construction-related stormwater runoff from new development and redevelopment projects that are below the jurisdictional thresholds of the Department's stormwater program for discharges associated with construction activities. The overall objective of an effective construction runoff management program is to have a program that minimizes or eliminates erosion and maintains sediment on site. This draft permit builds upon the requirements for minimum measure #4 in the 2003 MS4 permit. For example, any changes adopted in the state's stormwater management manual will be referenced by rule in most of the local ordinances or policies. The permittee must also review its stormwater ordinances or policies for consistency with low impact development guidelines.

#### *Stormwater Management in New Development and Redevelopment (Part IV.G.5)*

The 2003 MS4 permit required that the permittee must develop, implement, and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that are below the jurisdictional thresholds of the Department's stormwater program for operational stormwater discharges. This draft permit builds upon the requirements for minimum measure #5 in the 2003 MS4 permit. For example, any changes adopted in the state's stormwater management manual will be referenced by rule in most of the local ordinances or policies. The permittee must adopt an ordinance or regulation that prevents or minimizes water quality impacts from post-construction stormwater runoff through a combination of structural, non-structural and low impact BMPs that meet at a minimum the requirements in the Agency's 2002 Vermont State Stormwater Management Manual and any amendments thereto and ensures adequate long-term operation and maintenance.

#### *Pollution Prevention/Good Housekeeping (Part IV.G.6)*

The 2003 MS4 permit required that the permittee must develop and implement a program with a goal of preventing and/or reducing pollutant runoff from municipal operations and set forth required elements of the pollution prevention and good housekeeping program. This measure requires small MS4s to develop and implement an operation and maintenance program that includes a training component. The ultimate goal of this measure is preventing or reducing pollutant runoff from all municipal operations. This draft permit builds upon the 2003 MS4 permit. For example, MS4s are required to evaluate all municipal operations for stormwater impacts and implement procedures to minimize polluted runoff. For any municipal operation requiring the use of lawn or garden fertilizers the MS4 must prohibit by policy the use of phosphorus in the fertilizer unless warranted by a current soil test. The MS4s must provide DEC with a list of all commercial and industrial facilities in their stormwater impaired watersheds in order to assist DEC in determining compliance of these facilities with the Multi-Sector Industrial General Permit.

In accordance with 40 CFR§122.35, the draft general permit allows a MS4 to rely on another entity for implementation of all or part of a permit condition or control measure. The permittee may rely on the other entity if the other entity is actually implementing the control measure or

permit condition. If the other party fails to implement the measure or permit condition, the permittee is ultimately responsible for its implementation.

### **E. Monitoring, Recordkeeping and Reporting**

Subpart IV.C.1.d.8 of the draft permit contains monitoring requirements specifically related to stormwater TMDL implementation requirements necessary to protect water quality. This subpart provides as follows:

“(8) As a result of a rigorous analysis of the requirements and the need for stormwater monitoring data summarized in the National Academy of Sciences report: Urban Stormwater Management in the United States (2009) and the Vermont Water Resources Board docket and proceedings described in “A Scientifically Based Assessment and Adaptive Management Approach to Stormwater Management”(2004) the Agency has instituted a network of stream flow gauging and rainfall gauging stations in the stormwater impaired watersheds. The Agency has funded the operation and maintenance of these stations for the years 2005-2009. As part of this long term monitoring effort:

- (a) The permittee shall continue to fund the operation and maintenance of the flow gaging and rainfall gaging stations in its respective stormwater impaired watersheds. The Agency will work with the permittee on the appropriate data collection methods, maintenance and oversight of the gages and, if a lower cost gage is substituted for a current USGS gage, insure that the accuracy and usefulness of the data set is not disrupted. A nontraditional MS4, at a minimum, will co-share in the O&M cost of the gage for each watershed into which it discharges.

The Secretary has determined that this monitoring is necessary to measure the effectiveness of the suite of BMPs that will be implemented pursuant to this permit to achieve the WLAs in the stormwater TMDLs and to protect water quality. This monitoring data will be used to better refine any future BMP implementation that is required in successive iterations of this permit to achieve the WLAs in the stormwater TMDLs and to protect water quality.

Subpart V of the draft permit provides additional monitoring requirements as well as requirements for record keeping and reporting. The permittee must periodically evaluate its SWMP for the following: compliance with the terms of the permit, the appropriateness of the identified BMPs and progress towards achieving the objective of the control measure and the permittee’s measurable goals. The permittee may need to change its selected BMPs identified in the SWMP based on this evaluation process in order to ensure compliance with the terms of the permit including water quality-based requirements.

The permittee must submit an annual report each April 1<sup>st</sup> during the term of the permit. The report must include a self-assessment regarding compliance with the terms of the permit, the appropriateness of selected BMPs, and the progress towards achieving the permittee's identified measurable goals. The report must also contain a summary of any information that has been collected and analyzed. This includes all types of data. The permittee must also indicate what activities are planned for the next reporting cycle and discuss any changes to either BMPs or measurable goals. The report must indicate if any control measure or measurable goal is the responsibility of another entity.

#### **F. Standard Permit Conditions**

40 CFR §§ 122.41 and 122.42 establish requirements that must be in all NPDES Permits. Subpart VI of the draft permit contains standard permit conditions relating to:

- Duty to Comply
- Continuation of the Expired General Permit
- Need to Halt or Reduce Activity Not a Defense
- Duty to Provide Information
- Other Information
- Signatory Requirements
- Property Rights
- Proper Operation and Maintenance
- Inspection and Entry
- Permit Actions
- Permit Transfers
- Anticipated Noncompliance
- State Environmental Laws
- Severability
- Procedures for Modification and Revocation
- Requiring an Individual Permit or Alternative General Permit
- Limitation