

EPA is reopening the comment period for the 2013 draft New Hampshire small MS4 permit to take comments on new language in section 2.1.1, 2.2 (including all subsections), and 2.3.6 (including all subsections), Appendix F (excluding attachments) and Appendix H (excluding attachments) only, comments received pertaining to other sections of the 2013 draft MS4 permit will not be addressed prior to final issuance of the MS4 permit for New Hampshire. The following pages contain the proposed language for section 2.1.1, 2.2 (including all subsections), and 2.3.6 (including all subsections), and will completely replace the sections in the 2013 draft permit released February 12, 2013.

2.1.1 Requirement to Meet Water Quality Standards

- a. The permittee shall reduce the discharge of pollutants such that the discharges from the MS4 do not cause or contribute to an exceedance of water quality standards.
- b. If there is a discharge from the MS4 to a waterbody (or its tributaries in some cases) that is subject to an approved TMDL identified in Part 2.2.1, the permittee is subject to the requirements of Part 2.2.1 and Appendix F of this permit and the permittee shall comply with all applicable schedules and requirements in Appendix F. A permittee's compliance with all applicable requirements and BMP implementation schedules in Appendix F applicable to it will constitute compliance with Part 2.1.1.a. of the Permit.
- c. If there is a discharge from the MS4 to a waterbody (or its tributaries in some cases) that is water quality limited (see definition in Appendix A) due to nutrients (nitrogen or phosphorus), metals, solids, bacteria/pathogens, chloride or oil and grease (hydrocarbons) and is not subject to an approved TMDL, or the MS4 is located within a municipality listed in Part 2.2.2.a.-b., the permittee is subject to the requirements of Part 2.2.2 and Appendix H of this permit and the permittee shall comply with all applicable schedules and requirements in Appendix H. A permittee's compliance with all applicable requirements and BMP implementation schedules in Appendix H applicable to it will constitute compliance with Part 2.1.1.a. of the Permit.
- d. Except where a discharge is subject to the requirements of Part 2.2.1 and/or Part 2.2.2 of this permit and the permittee is complying with all applicable requirements of Part 2.2.1 and Appendix F and/or 2.2.2, and Appendix H, if there is a discharge from the MS4 that is causing or contributing to a violation of applicable water quality standards (including numeric and narrative water quality criteria) for the receiving water (applicable water quality standards are the state standards that have been federally approved as of the effective date of this permit and are compiled at <http://www.epa.gov/waterscience/standards/wqslibrary/>), the permittee shall, as expeditiously as possible, but no later than 60 days of becoming aware of the situation, eliminate the condition causing or contributing to an exceedance of water quality standards. Where elimination of the condition causing or contributing to an exceedance of water quality standards within 60 days of its identification is not possible, the permittee shall establish an expeditious schedule for elimination and report the dates of identification and schedules for removal in the permittee's annual reports. The permittee shall immediately commence actions necessary for elimination. The permittee shall diligently pursue elimination of all conditions causing or contributing to an exceedance of water quality standards.

2.2 Discharges to Certain Impaired Waters

The permittee shall identify in the SWMP and Annual Reports all discharges, including both outfalls and interconnections to other MS4 or other separate storm sewer systems, that:

- Are subject to an approved Total Maximum Daily Load (TMDL) as identified in Part 2.2.1;
- Are subject to additional requirements to protect water quality as identified in Part 2.2.2.

The discharge location from an interconnection shall be determined based on the receiving water of the outfall from the interconnected system.

2.2.1 Discharges Subject to Requirements Related to an Approved TMDL

- a. “Approved TMDLs” for discharges from the permittee’s MS4 are those that have been approved by EPA as of the effective date of this permit
- b. For those TMDLs that specify a wasteload allocation or other requirements either individually or categorically for the MS4 discharge, the permittee shall comply with the terms of Part 2.1 and 2.2 and satisfy the appropriate requirements of Appendix F. Appendix F identifies, by section, the provisions and schedules the permittee shall comply with to be consistent with the terms of the approved TMDL. Alternatively, EPA may notify the permittee that an individual permit application is necessary in accordance with Part 1.8.
- c. The “TMDL for 158 Acid Impaired Ponds and 21 Aluminum Impaired Lakes” does not specify a wasteload allocation or other requirements either individually or categorically for the MS4 discharges and specifies that load reductions are to be achieved through reduction in atmospheric deposition sources. No requirements related to this TMDL are imposed on MS4 discharges under this Part. However, if the permittee becomes aware, or EPA or NHDES determines, that an MS4 discharge is causing or contributing to such impairment to an extent that cannot be explained by atmospheric deposition (e.g. chemical spill, acid landfill leachate or other sources), the permittee shall comply with the requirements of Part 2.1.1.d.
- d. The following is a list of municipalities that contain waters subject to an approved TMDL for chlorides:
 1. DERRY
LONDONDERRY
SALEM
WINDHAM

The operators of MS4s located in municipalities listed above that discharge to Beaver Brook, Dinsmore Brook, North Tributary to Canobie Lake, or Policy-Porcupine Brook and any other MS4 that discharges directly to Beaver Brook, Dinsmore Brook, North Tributary to Canobie Lake, or Policy-Porcupine Brook shall meet the requirements of Appendix F Part I with respect to reduction of chloride discharges from their MS4.

- e. The following is a list of municipalities that contain waters subject to an approved TMDL for bacteria or pathogens.
 1. AMHERST MANCHESTER
BEDFORD MERRIMACK
CHESTER MILFORD

DERRY	MILTON
DOVER	NASHUA
DURHAM	NEW CASTLE
EXETER	NEWINGTON
FARMINGTON	NORTH HAMPTON
GOFFSTOWN	PELHAM
GREENLAND	PLAISTOW
HAMPSTEAD	PORTSMOUTH
HAMPTON	ROCHESTER
HAMPTON FALLS	ROLLINSFORD
HOLLIS	RYE
HOOKSETT	SALEM
HUDSON	SANDOWN
KINGSTON	SEABROOK
LEE	SOMERSWORTH
MADBURY	

The operators of MS4s located in municipalities listed above that discharge to a waterbody segment listed on Table F-1 in Appendix F and any other MS4 that discharges directly to a waterbody segment listed on Table F-1 in Appendix F shall meet the requirements of Appendix F, Part II with respect to reduction of bacteria/pathogens discharges from their MS4.

f. The following is a list of municipalities that contain a lake or pond subject to an approved lake or pond phosphorus TMDL,

1.

AMHERST
BEDFORD
DERRY
HOLLIS
HUDSON
KINGSTON
MANCHESTER
MERRIMACK
RAYMOND
SANDOWN

Permittees that operate regulated MS4s in the above municipalities that discharge to waterbodies listed on Table F-2 in Appendix F or their tributaries, and any other MS4 that discharges to waterbodies listed on Table F-2 in Appendix F or their tributaries, shall meet the requirements of Appendix F, Part A.II with respect to reduction of phosphorus discharges from their MS4.

2.2.2 Discharge to Certain Water Quality Limited Waters without an Approved TMDL

For purposes of this permit, a ‘water quality limited water body’ is any water body that does not meet

applicable water quality standards, including but not limited to waters listed in categories 5 or 4b on the most recent EPA approved New Hampshire Clean Water Act section 303(d) list or New Hampshire Integrated Report under Clean Water Act section 305(b).

If there is a discharge from the MS4 to a water quality limited waterbody where pollutants typically found in stormwater (specifically nutrients (nitrogen or phosphorus), solids, bacteria/pathogens, chloride, metals and oil and grease (hydrocarbons)) are the cause of the impairment and there is not an approved TMDL, or the MS4 is located in a town listed in Part 2.2.2.a.-b. the permittee shall comply with the provisions in Appendix H applicable to it.

In the absence of a defined pollutant reduction target and where no approved TMDL has been established, this permit Part and Appendix H define an iterative approach addressing pollutant reductions to waterbodies where the permittee's discharge is causing or contributing to an excursion above water quality standards due to nutrients (nitrogen or phosphorus), solids, bacteria/pathogens, chloride, metals or oil and grease (hydrocarbons).

a. Discharges to water quality limited waterbodies where nitrogen is the cause of the impairment, or their tributaries

i. The requirements of this Part are applicable to:

1. Permittees (including traditional and non-traditional MS4s) that own or operate an MS4 in the following municipalities. Discharges from MS4s within these municipalities are to waterbodies that are impaired due to nitrogen, or their tributaries.

BARRINGTON
BRENTWOOD
CANDIA
CHESTER
DANVILLE
DERRY
DOVER
DURHAM
EAST KINGSTON
EPPING
EXETER
FREMONT
GREENLAND
HAMPSTEAD
HAMPSTON FALLS
KENSINGTON
KINGSTON
LEE
MADBURY
MILTON
NEWFIELDS
NEWINGTON

NEWMARKET
NORTH HAMPTON
PORTSMOUTH
RAYMOND
ROCHESTER
ROLLINSFORD
SANDOWN
SOMERSWORTH
STRATHAM

2. Any other permittee that, during the permit term, becomes aware that its discharge is to a waterbody that is impaired due to nitrogen, or a tributary of such water.

ii. Permittees subject to Part 2.2.2.a.i above shall meet the requirements of Appendix H Part I with respect to the control of nitrogen discharges from their MS4;

b. Discharges to water quality limited waterbodies where phosphorus is the cause of the impairment, or their tributaries

i. The requirements of this Part are applicable to:

1. Permittees (including traditional and non-traditional MS4s) that own or operate an MS4 in the following municipalities. Discharges from MS4s within these municipalities are to waterbodies that are impaired due to phosphorus, or their tributaries.

ATKINSON
DERRY
DOVER
GOFFSTOWN
HAMPSTEAD
KINGSTON
LITCHFIELD
MANCHESTER
PELHAM
RAYMOND
ROLLINSFORD
SALEM
SANDOWN
SOMERSWORTH
WINDHAM

2. Any other permittee that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to phosphorus, or to a tributary of such water.

ii. The permittees subject to Part 2.2.2.b.i. above shall meet all requirements of Appendix H Part II with respect to the control of phosphorus discharges from the MS4.

c. Discharges to water quality limited waterbodies where bacteria or pathogens is the cause of the impairment

i. The requirements of this Part are applicable to:

1. Permittees (including traditional and non-traditional MS4s) that own or operate an MS4 in the following municipalities. Discharges from MS4s within these municipalities are to waterbodies that are impaired due to bacteria or pathogens.

DERRY
EXETER
HOLLIS
HUDSON
KINGSTON
MANCHESTER
MILTON
NEW CASTLE
NORTH
HAMPTON
ROCHESTER
RYE
SALEM
WINDHAM

2. Any other permittee that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to bacteria or pathogens

ii. The permittees subject to Part 2.2.2.c.i. shall meet all requirements of Appendix H Part III with respect to reduction of bacteria or pathogens discharges from the MS4.

d. Discharges to water quality limited waterbodies where chloride is the cause of the impairment

i. The requirements of this Part are applicable to:

1. Permittees (including traditional and non-traditional MS4s) that own or operate an MS4 in the following municipalities. Discharges from MS4s within these municipalities are to waterbodies that are impaired due to chloride.

BEDFORD
DERRY
DOVER
DURHAM
EXETER
GOFFSTOWN
GREENLAND
HOOKSETT

LONDONDERRY
MANCHESTER
NASHUA
PORTSMOUTH
RYE
SALEM
SEABROOK
STRATHAM

2. Any other permittee that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to chloride.
- ii. The permittees subject to Part 2.2.2.d.i. shall meet all requirements of Appendix H Part IV with respect to reduction of chloride discharges from the MS4.
- e. Discharges to water quality limited waterbodies where oil and grease (hydrocarbons), solids or metals is the cause of the impairment
- i. The requirements of this Part are applicable to:
 1. Permittees (including traditional and non-traditional MS4s) that own or operate an MS4 in the following municipalities. Discharges from MS4s within these municipalities are to waterbodies that are impaired due to solids, oil and grease (hydrocarbons) or metals.

EXETER
GOFFSTOWN
HAMPTON
LONDONDERRY
MANCHESTER
PORTSMOUTH
STRATHAM

2. Any other permittee that, during the permit term, becomes aware that its discharge is to a waterbody that is water quality limited due to
- ii. The permittees subject to Part 2.2.2.d.i. shall meet all requirements of Appendix H Part V with respect to reduction of solids, oil and grease (hydrocarbons) or metals discharges from the MS4.

2.3.6 Stormwater Management in New Development and Redevelopment (Post Construction Stormwater Management)

Objective: The objective of this control measure is for the permittee to ensure that within their MS4 area, hydrology resulting from new development will approximate the pre-development hydrology of the site or improve the hydrology of a redeveloped site and reduce the discharge of stormwater pollutants.

- a. Permittees shall develop, implement, and enforce a program to address post-construction stormwater runoff from all new development and redevelopment projects that disturb one or more acres and discharge into the permittees MS4 (at a minimum). Permittees authorized under the MS4-2003 permit shall continue to implement and enforce their program and modify as necessary to meet the requirements of this Part.
 - i. The permittee's new development/ redevelopment program shall include projects less than one acre if the project is part of a larger common plan of development or redevelopment which disturbs one or more acre.
 - ii. The permittee shall develop or modify, as appropriate, an ordinance or other regulatory mechanism within two (2) years of the effective date of the permit to contain provisions that are as least as stringent as the following:
 - (a).Low Impact Development (LID) site planning and design strategies must be used to the maximum extent feasible in order to reduce the discharge of stormwater from new development.
 - (b).Salt storage areas on commercial and industrial developments shall be covered and loading/offloading areas shall be designed and maintained in accordance with NHDES published guidance. Snow storage areas shall be located in accordance with NHDES published guidance such that no direct untreated discharges to receiving waters are possible from the storage site. Runoff from snow and salt storage areas shall enter treatment areas as specified above before being discharged to receiving waters or allowed to infiltrate into the groundwater. See NHDES published guidance fact sheets on road salt and water quality, and snow disposal at <http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/index.htm>.
 - (c).The selection and design of treatment and infiltration practices should follow the guidance in Volume 2 (Post-Construction Best Management Practices Selection & Design) of the New Hampshire Stormwater Manual as amended, where applicable.
 - (d).Stormwater management systems on new and redeveloped sites shall be designed to:
 - (1) Remove pollutants in accordance with Env-Wq 1507.03;
 - (2) Recharge groundwater in accordance with Env-Wq 1507.04¹;
 - (3) Protect channels in accordance with Env-Wq 1507.05¹;
 - (4) Control peak runoff rates in accordance with Env-Wq 1507.06¹; and
 - (5) Implement long term maintenance practices in accordance with Env-Wq 1507.08.
 - (e).Stormwater management systems on redevelopment sites shall be designed to retain or treat runoff from the disturbed portion of the redevelopment site. In accordance with Part 2.3.6(a)ii.(d), offsite mitigation within the same USGS HUC10 as the redevelopment site may be used to meet the pollutant removal equivalent of the requirements in Part 2.3.6(a)ii.(d)(1) and the equivalent groundwater recharge requirements of Part 2.3.6(a)ii.(d)(2).

¹ Requirement necessary for Section 401 water quality certification by New Hampshire

- (f). Redevelopment that disturbs equal to or greater than 1 acre and exclusively involves maintenance and improvement of existing roadways, including road widening that increases the total road width by less than 10%, shall improve existing conditions where feasible and are exempt from Part 2.3.6(a)ii.(d). Roadway widening or improvements that increase the amount of impervious area on the redevelopment site by greater than or equal to 10% shall meet the requirements of Part 2.3.6(a)ii.(d) and Part 2.3.6(a)ii.(e) fully.
- b. For projects subject to the ordinances required by this Part the permittee shall require the submission of as-built drawings within a specified time frame, not to exceed one year from completion of construction projects. The as-built drawings must depict all on site controls designed to manage the stormwater associated with the completed site (post construction stormwater management). The new development/redevelopment program shall have procedures to ensure adequate long-term operation and maintenance of stormwater management practices that remain in place after the completion of a construction project. These procedures may include the use of dedicated funds or escrow accounts for development projects or the acceptance of ownership by the permittee of all privately owned BMPs. These procedures may also include the development of maintenance contracts between the owner of the BMP and the permittee. Alternatively, these procedures may include the submission of an annual certification documenting the work that has been done over the last 12 months to properly operate and maintain the stormwater control measures. The procedures to require submission of as-built drawings and ensure long term operation and maintenance shall be a part of the SWMP. The permittee shall report in the annual report on the measures that the permittee has utilized to meet this requirement.
- c. Within three (3) years of the effective date of this permit, the permittee shall develop a report assessing current street design and parking lot guidelines and other local requirements that affect the creation of impervious cover. This assessment shall be used to provide information to determine if the design standards for streets and parking lots need to be updated and can be modified to support low impact design options. If the assessment indicates that changes can be made, the assessment shall include recommendations and proposed schedules to incorporate policies and standards into relevant documents and procedures to minimize impervious cover attributable to parking areas and street designs. The permittee shall involve any local planning boards and local transportation boards in this assessment to the extent feasible. The permittee shall report in each annual report on the status of this assessment including progress towards meeting the milestones in the schedule for implementation of recommendations of the assessment planned or completed changes to local regulations and guidelines.
- d. Within three (3) years from the effective date of the permit, the permittee shall develop a report assessing existing local regulations including, but not limited to, zoning and construction codes to determine the feasibility of making, at a minimum, the following green infrastructure practices allowable when appropriate site conditions exist:
1. Green roofs;
 2. Infiltration practices such as rain gardens, curb extensions, planter gardens, porous and pervious pavements, and other designs to manage stormwater using landscaping and structured or augmented soils; and
 3. Water harvesting devices such as rain barrels and cisterns, and the use of stormwater for non-potable uses.

The assessment should indicate whether and under what circumstances the practices are allowed in the MS4 jurisdiction. If the practices are not allowed, the permittee shall identify impediments to the use of these practices, and what changes in local regulations may be made to make them allowable including a schedule for implementation of changes to local regulations. The permittee shall report in each

annual report on its findings and progress towards meeting the milestones in the schedule for implementation of recommendations of the assessment. (Information available at: <http://www.epa.gov/region1/npdes/stormwater/assets/pdfs/AddressingBarrier2LID.pdf>)

- e. Within four (4) years from the effective date of this permit, the permittee shall complete an inventory and priority ranking of permittee-owned property and existing infrastructure that could be retrofitted with BMPs designed to reduce the frequency, volume and pollutant loads of stormwater discharges to its MS4 through the mitigation of impervious area. Properties and infrastructure for consideration shall include those with the potential for mitigation of on-site IA and DCIA, as well as those that could provide mitigation of off-site IA and DCIA. At a minimum, permittees shall consider municipal property with significant impervious cover (including parking lots, buildings, and maintenance yards) that could be mitigated, and open space and undeveloped land available to mitigate impervious cover and associated stormwater from proximate offsite properties. MS4 infrastructure to be considered includes existing street right-of-ways, outfalls and conventional stormwater conveyances and controls (including swales and detention practices) that could be readily modified to provide reduction in frequency, volume or pollutant loads of such discharges through the mitigation of impervious cover. The permittee may also include in its inventory properties and infrastructure that are privately-held or that do not contribute stormwater to its MS4.

The inventory and priority ranking shall, at minimum, be a screening level ranking that may be based on existing or readily obtainable data. In determining the potential for retrofitting particular properties, the permittee shall consider, on a screening level and subject to availability of data, factors such as access for maintenance purposes; subsurface geology; depth to water table; site slope and elevation; and proximity to aquifers and subsurface infrastructure including sanitary sewers and septic systems. The permittee may consider public safety when evaluating potential retrofits. In determining its priority ranking, the permittee shall consider, on a screening level and subject to availability of data, factors such as schedules for planned capital improvements to storm and sanitary sewer infrastructure and paving projects; current storm sewer level of service; and control of discharges to impaired waters, first or second order streams, and critical receiving waters; the complexity and cost of implementation; and opportunities for public use and education. For the purposes of this part, critical receiving waters include public swimming beaches, public drinking water supply sources, outstanding resource waters, cold water fisheries, and shellfish growing areas.

Beginning with the third year annual report and in each subsequent annual report, the permittee shall report on those permittee-owned properties and infrastructure inventoried pursuant to Part 2.3.6.e.. that have been retrofitted with BMPs to mitigate IA and DCIA. The permittee may also include in its annual report non-MS4 owned property that has been retrofitted with BMPs to mitigate IA and DCIA.