

2.1.1 Requirement to Meet Water Quality Standards

~~a.~~

~~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. Discharges shall not cause or contribute to an exceedance 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.~~

~~b. For each waterbody that receives a discharge from the small MS4, the permittee shall consult the water quality standards applicable to that waterbody. Applicable water quality standards are compiled at <http://www.epa.gov/waterscience/standards/wqslibrary/>. The NHDES also makes a copy of its regulations available at:~~

http://des.nh.gov/organization/commissioner/legal/rules/documents/env_wq1700.pdf

~~c. If at any time the permittee determines or EPA or the state agency determines that a discharge causes or contributes to an exceedance of applicable water quality standards, the permittee shall within 60 days of becoming aware of the situation eliminate the conditions causing or contributing to an exceedance of water quality standards. If elimination of the conditions within 60 days is infeasible, the permittee shall develop a Water Quality Response Plan addressing the pollutant(s) causing the conditions (the “pollutants of concern”) pursuant to Part 2.2.2 below. The permittee shall include in its annual report (1) a listing of any such discharges identified during the reporting period; (2) a description of measures taken to eliminate conditions within 60 days or the basis of a finding that such elimination is infeasible; and (3) a description of any Water Quality Response Plan as specified in part 2.2.2. The permittee must comply with any additional requirements or schedules established by EPA or the state agency, including any requirement to submit additional information concerning the potential cause of the exceedance. Any discharge causing or contributing to an exceedance of applicable water quality standards violates Part 2.1.1.a of this permit and remains a violation until eliminated. The 60 days to eliminate the conditions causing or contributing to an exceedance of an applicable water quality standard is not a grace period; compliance with the requirements of Part 2.1.1.c does not excuse or otherwise constitute a defense to a violation of Part 2.1.1.a.~~

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.
- ~~Discharge to a water identified as impaired by the State agency pursuant to Section 303(d) of the Clean Water Act and for which TMDL development has been identified as necessary, but for which a TMDL has not yet been approved; or~~
- ~~Discharge to a tributary of any nitrogen impaired water in the Great Bay watershed.~~

~~The discharge location from an interconnection shall be determined based on the receiving water of the outfall from the interconnected system. The discharge location from an interconnection shall be determined based on the receiving water of the outfall from the interconnected system. EPA or the State agency may determine that additional waters shall be treated as “impaired” waters pursuant to this Part based on water quality or modeling information and shall notify the affected MS4 operators of any such determination.~~

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 ~~implement~~ comply with to be consistent with the terms of the approved TMDL. ~~In addition to those specific requirements, EPA may notify the small MS4 of the need to comply with additional requirements that are consistent with the assumptions and requirements of the Waste Load Allocation (WLA).~~ 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.de.
- d. The following is a list of municipalities that contain waters ~~small MS4s~~ subject to an approved TMDL for chlorides:

1.

DERRY
LONDONDERRY
SALEM
WINDHAM

~~2. Non Traditional and Transportation MS4s discharging to Beaver Brook, Dinsmore Brook, North Tributary to Canobie Lake, or Policy-Porcupine Brook~~

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. The following is a list of small MS4s in NH subject to an approved TMDL for bacteria. The municipalities subject to a bacteria TMDL can also be found on Table F1 and Table F2 in Appendix F:

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	

~~Non Traditional and Transportation MS4s discharging to any waterbody listed on Table F1 or Table F2 in Appendix F.~~

~~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. The operators of MS4s listed in 2.2.1.e.1. and 2 above shall meet the requirements of Appendix F with respect to reduction of bacteria discharges from the MS4.~~

f. The following is a list of municipalities that contain a lake or pond subject to an approved lake or pond phosphorus TMDL ~~small MS4s in NH subject to an approved TMDL for phosphorus, the municipalities subject to a phosphorus TMDL can also be found on Table F4 in Appendix F:~~

1. AMHERST
BEDFORD
DERRY
HOLLIS
HUDSON
KINGSTON
MANCHESTER
MERRIMACK
RAYMOND
SANDOWN

~~2. Non Traditional and Transportation MS4s discharging any waterbody listed on Table F4 in Appendix F~~

- ~~3. Any other municipality that operates a regulated MS4 located within the watershed boundary of any waterbody listed on Table F-4 in Appendix F~~

~~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. Permittees that operate regulated MS4s that discharge to waterbodies with an approved phosphorus TMDL or within the waterbody's tributary watershed shall meet the requirements of Appendix F with respect to reduction of phosphorus discharges from the MS4.~~

~~g. Permittees identified in Appendix F, or above, shall document in their annual report all control measures implemented during the reporting period or planned to be implemented in the next reporting period to control the pollutants identified in the approved TMDLs and provide an assessment of the effectiveness of the implemented BMPs. The Year Five annual report shall include a quantitative assessment of load reductions achieved through the implemented controls demonstrating that such reductions are consistent with the load reductions identified in the WLA; or if such controls are inadequate, the permittee shall describe in the annual report additional measures needed to achieve load reductions consistent with the assumptions of the requirements of the WLA and implement those measures as soon as possible.~~

~~h. Timeframes of requirements in Appendix F do not constitute a compliance schedule under 40 CFR §122.47. The requirements of Part 2.2.1 and Appendix F are independent of the requirements of Part 2.1 and its subsections, and compliance with the requirements of Part 2.2.1 does not excuse or otherwise constitute a defense to a violation of Part 2.1 or any other provision of the permit or of any applicable law or regulation. The permittee shall not be in compliance with Part 2.1 and its subsections until the permittee has satisfied all requirements of the applicable WLA.~~

2.2.2 Discharge to ~~an Certain Water Quality Limited Waters~~ Impaired Water 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.

AMHERST
ATKINSON
BEDFORD
DERRY
DOVER
GOFFSTOWN
HAMPSTEAD
KINGSTON
LITCHFIELD
MANCHESTER
MERRIMACK
PELHAM
ROLLINSFORD
SALEM
SANDOWN
SOMERSWORTH
WINDHAM

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. ~~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 Any MS4 discharging directly to a water quality limited waterbody where bacteria or pathogens is the cause of the water quality limitation.

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 ~~Any MS4 discharging directly to a water quality limited waterbody where~~ chloride is the cause of the impairment.

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. ~~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 Any MS4 discharging directly to a water quality limited waterbody where~~ solids, oil and grease (hydrocarbons) or metals ~~is the cause of the impairment.~~

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.

~~If there is a discharge from the MS4 to any impaired water without an approved TMDL, the permittee shall comply with Part 2.1 of this permit. Furthermore, if there is a discharge from the MS4 to an impaired water without an approved TMDL, other than a chloride impaired waters addressed under Part 2.2.4, the permittee shall address in the SWMP and annual reports how the discharge of pollutant(s) identified as causing the impairment (pollutant(s) of concern) will be controlled such that they do not cause or contribute to the impairment. (For specific requirements applicable to the Great Bay Estuary watershed, see both this Part 2.2.2 and also Part 2.2.3.)~~

~~In light of the absence of a defined pollutant reduction target where no TMDL has been established, this permit part defines an iterative approach to addressing such discharges that incorporates three phases over the course of the permit term:~~

~~**Phase 1.** Preliminary evaluation and source identification for MS4 discharges and identification of additional and/or modified BMPs to address the pollutant of concern (“Planned BMPs”)—Part 2.2.2.a. Phase 1 shall be completed 1 year from the effective date of the permit.~~

~~**Phase 2.** Implementation of BMPs and finalization of the source identification and assessment—Part 2.2.2.b. Phase 2 shall be completed three years from the effective date of the permit.~~

~~**Phase 3.** Assessment of implemented BMPs with modifications as necessary based on additional information and implementation experience and identification of Prospective BMPs for possible implementation—Part 2.2.2.c. Phase 3 shall be completed five years from the effective date of the permit.~~

~~a. Phase 1~~

~~i. Preliminary evaluation of discharges to impaired waters.~~

~~(a) Within one year of the permit effective date, the permittee shall evaluate its discharges to impaired waters in order to (1) assess whether MS4 discharges are potential contributors to the identified impairment; and (2) identify sources of pollutant(s) of concern in the MS4 area draining to the impaired waters. The permittee may consider multiple MS4 discharges to the same receiving water together, but shall conduct a separate evaluation for each impaired receiving water. This initial evaluation may be qualitative in nature, and must be reassessed over the course of the permit term. The permittee shall consider the nature of the~~

~~pollutant, all available monitoring data, likely causes as identified by the state agency during water quality assessments, land use and impervious cover in the MS4 area draining to the water body, the proportion of the watershed to the receiving water that is within the MS4 jurisdiction, the presence or absence of other pollutant sources, and any other information deemed relevant by the permittee. The initial assessment may include, but is not limited to, the assessment of the following source categories:~~

- ~~1. Fertilizer Use—nutrient and bacteria impairments~~
- ~~2. Illicit discharges—nutrient and bacteria impairments~~
- ~~3. Leaf litter—nutrient impairments~~
- ~~4. Pet waste—nutrient and bacteria impairments~~
- ~~5. Industrial areas—metals impairments~~
- ~~6. Construction—total suspended solids (TSS)/solids and turbidity impairments~~
- ~~7. Highly impervious area—nutrient, metals, bacteria and TSS impairments~~

~~EPA presumes that MS4 discharges are potential contributors to impairments due to nutrients (phosphorus or nitrogen), bacteria, suspended solids, metals, or oil and grease.~~

- ~~(b) The permittee shall, as part of Phase 1, develop a Water Quality Response Plan (WQRP) pursuant to Part 2.2.2.a.ii, and include the WQRP with the SWMP.~~
- ~~(c) Notwithstanding Part 2.2.2.a.i.b, if the permittee's analysis under paragraph 2.2.2.a.i.a suggests that its MS4 discharges are *not* potential contributors to impairments, then the permittee shall report the basis for that determination in its Year 1 annual report rather than developing a WQRP. Notwithstanding the permittee's analysis, EPA or the State Agency may at any time, based on water quality data or modeling, determine that a permittee's discharges are in fact a potential contributor, and require the permittee to develop a WQRP.~~

~~ii. Water Quality Response Plan~~

- ~~(a) Except as provided in Part 2.2.2.a.i.c, within one year of the permit effective date the permittee shall develop a WQRP that identifies additional or modified BMPs the permittee will implement to ensure that its discharges do not cause or contribute to the impairment. The WQRP shall be a separate section of the SWMP. The WQRP is designed to provide an iterative process for addressing discharges that have the potential to cause or contribute to impairments. The content of the WQRP should reflect the magnitude and complexity of the impairment and the permittee's potential to contribute to the impairment. The permittee may develop a single WQRP covering all impairment pollutants, waterbodies, and catchments; or it may develop multiple separate WQRPs (subdivided by pollutant, waterbody, and/or catchment), so long as its separate~~

~~WQRPs, taken together, collectively address all impairment pollutants, waterbodies, and catchments.~~

~~(b) The WQRP shall contain the following elements:~~

- ~~1. Preliminary source assessment—The plan shall include the source identification and assessment required by Part 2.2.2.a.i. describing the permittee's source identification and assessment procedures and the target pollutants and receiving waters. The plan shall list the specific receiving water segments, impairments and pollutants of concern addressed by the plan.~~
- ~~2. A comprehensive listing of additional or modified BMPs to address pollutants causing impairments. The permittee shall consider each of the following types of BMPs for inclusion:
 - ~~a) Additional and/or modified public education programs (beyond what is required in Part 2.3.2);~~
 - ~~b) Increasing the priority of catchments discharging to the impaired water for IDDE under Part 2.3.4;~~
 - ~~c) More stringent development/redevelopment requirements than those required under Part 2.3.5 and 2.3.6, which may include:
 - ~~1. Requiring the use of BMPs effective at reducing the pollutants of concern in development/redevelopment within the MS4 area,~~
 - ~~2. More stringent redevelopment standards;~~
 - ~~3. Application of development/redevelopment and construction standards to developments disturbing less than one acre~~~~
 - ~~d) Revision of Good Housekeeping and Pollution Prevention under Part 2.3.7 to target catchments draining to impaired waters which may include:
 - ~~1. Increased catch basin cleaning~~
 - ~~2. Increased street sweeping~~
 - ~~3. Reduced fertilizer use~~
 - ~~4. Leaf litter collection programs~~
 - ~~5. Policies and procedures to incorporate stormwater management improvements in street reconstruction and other permittee owned projects).~~~~
 - ~~e) Implementation of programs leading to disconnection of directly connected impervious area (DCIA) on municipal and/or private property. These programs may include:
 - ~~1. Downspout disconnection programs~~
 - ~~2. Green roofs installation programs~~
 - ~~3. Residential rain garden programs~~
 - ~~4. Programs targeting the removal of unnecessary impervious area~~~~~~

- ~~f) Structural BMP retrofits, including identifying specific projects to be undertaken during the permit term;~~

~~The permittee shall identify additional and modified BMPs from each of a) through e) above, unless they are inapplicable to its system or the pollutant(s) of concern and the permittee provides the basis for that determination in its WQRP.~~

- ~~3. A schedule for implementing the BMPs, including, as appropriate: funding, training, purchasing, construction, monitoring, and other assessment and evaluation components of implementation. Implementation of planned BMPs developed under Part 2.2.2.a.ii.b.2 must begin as soon as possible but not later than 18 months after the permit effective date. All planned BMPs shall be fully implemented within three (3) years of the permit effective date unless the permittee can document that such implementation is infeasible. Non-structural, operational, source control and pollution prevention measures shall be presumed feasible to fully implement within two years. Where planned structural BMP retrofits or major drainage infrastructure projects are expected to take additional time to construct, the permittee shall within 2 years of the effective date of the permit have a schedule for completion of construction within five years of permit effective date, including identification of funding source.~~
- ~~4. A description of the monitoring or other assessment and evaluation efforts that will be implemented to monitor, assess or evaluate the effectiveness of the WQRP.~~

~~The Permittee shall include the WQRP in its first annual report and the permittee shall report on the status of each BMP in each subsequent annual report.~~

~~b. Phase 2~~

~~i. Implementation of Planned BMPs~~

~~The permittee shall implement planned BMPs identified in the WQRP in accordance with the schedule requirements of paragraph 2.2.2.a.ii.~~

~~ii. Final Source Identification and Assessment~~

~~Within three years of the permit effective date the permittee shall complete a final Source Identification and Assessment report, updating the source identification assessment produced under Part 2.2.2.a.i. The final report shall include the following elements:~~

- ~~1. Specific receiving water segments, impairments and pollutants of concern~~

- ~~2. Calculation of total MS4 area draining to the impaired receiving water segments, incorporating updated mapping of the MS4 and catchment delineations produced pursuant to Part 2.3.4.d,~~
- ~~3. All screening and monitoring results pursuant to Parts 2.3.4 and 3.0, targeting the receiving water segments~~
- ~~4. Impervious area and DCIA for the target catchment, where available~~
- ~~5. Updated pollutant source categories (see Part 2.2.2.a.i.) and their physical location and/or area extent within the MS4 area.~~

~~The final source identification and assessment report shall be submitted to EPA as part of the Year 3 annual report.~~

~~c. Phase 3~~

~~i. Reassessment of Implemented BMPs~~

~~Within four years of the permit effective date, the permittee shall reassess the implemented BMPs and the MS4's initial evaluation as to potential to cause or contribute to the impairment. Using the information developed in the updated source identification and assessment report, experience with implementation and operation of planned BMPs, and any available information on the effectiveness of the planned BMPs, the permittee shall assess whether planned BMPs should be modified or additional BMPs should be added to target identified sources. If so, the permittee shall revise the planned BMPs as appropriate, provide a schedule for implementation of any additional BMPs, and implement them according to that schedule, beginning as soon as possible. Where the permittee has initially determined that it is not a potential contributor to an impairment, the permittee shall review that determination in light of the final source identification and assessment, and shall develop a WQRP for discharges that are determined to be a potential contributor to an impairment. The permittee shall document its reassessment in the Year 4 annual report.~~

~~ii. Prospective BMPs~~

~~Within five years of the permit effective date, the permittee shall identify Prospective BMPs to be implemented if further reductions are necessary. The permittee shall evaluate all properties identified as presenting retrofit opportunities under Part 2.3.6.8.b. that are within the drainage area of the impaired water. The evaluation shall include:~~

- ~~1. Identification of potential redevelopment or retrofit BMPs that would reduce the pollutant of concern;~~
- ~~2. The next planned infrastructure, resurfacing or redevelopment activity planned for the property;~~
- ~~3. The estimated cost of redevelopment or retrofit BMPs; and~~
- ~~4. The engineering and regulatory feasibility of redevelopment or retrofit BMPs.~~

~~The permittee shall provide a listing of Prospective BMPs and a plan and schedule for implementation in the Year five annual report. Thereafter, the permittee shall implement the~~

~~Prospective BMPs in accordance with the plan and schedule in the Year five annual report.~~

~~For discharges identified pursuant to paragraph 2.1.1.c. or 2.2.2.c.i. after the first year, the WQRP shall be completed within 180 days of identification of the discharge or determination that a discharge causes or contributes to an impairment, and timelines based on permit effective date shall be based on the date of identification of the discharge.~~

~~The development of a WQRP shall by itself not be considered evidence that a discharge is in fact causing or contributing to an impairment. The above timeframes do not constitute a compliance schedule under 40 CFR §122.47, and the implementation of a WQRP does not relieve the permittee of its obligations under Part 2.1 and its subsections. However, EPA will consider the appropriateness and promptness of a response plan in determining enforcement responses to permit violations. The permittee shall comply with any additional BMPs or other requirements established by EPA or the state agency.~~

~~2.2.3—Great Bay Watershed Nitrogen Requirements~~

~~The municipalities within the Great Bay Estuary watershed that have regulated MS4s that discharge directly to the nitrogen impaired waterbodies in the Great Bay Estuary watershed or their tributaries are listed below and in Appendix H, Table H-1. The operators of MS4s listed below or in Table H-1 shall meet all requirements of Part 2.2.2 with respect to reduction of nitrogen discharges from the MS4; however, the additional and modified BMPs included in the WQRP (see Part 2.2.2.a.ii.) shall include, at a minimum, the BMPs identified in Appendix H. Compliance with this section does not relieve the permittee from compliance with Section 2.1.~~

~~1.—~~

BARRINGTON	KENSINGTON
BRENTWOOD	KINGSTON
CANDIA	LEE
CHESTER	MADBURY
DANVILLE	MILTON
DERRY	NEWFIELDS
DOVER	NEWINGTON
DURHAM	NORTH HAMPTON
EAST KINGSTON	PORTSMOUTH
EPPING	RAYMOND
EXETER	ROCHESTER
FREMONT	ROLLINSFORD
GREENLAND	SANDOWN
HAMPSTEAD	SOMERSWORTH
HAMPSTON FALLS	STRATHAM

~~2.— Non Traditional and Transportation MS4s located in urbanized areas within the above municipal boundaries~~

~~2.2.4—Discharges to Chloride Impaired Waters~~

~~The municipalities that have small MS4s located in areas with chloride-impaired waters for which a TMDL has not yet been approved are named below as well as in Appendix H, Table H2. Permittees that operate regulated MS4s located within these municipalities that discharge directly to the identified impaired waters must identify and implement BMPs designed to substantially reduce chloride discharges. For this purpose, the permittee shall meet the requirements set forth in Appendix H. Compliance with this section does not relieve the permittee from compliance with Section 2.1.~~

~~1.—~~

BEDFORD	NEWINGTON
DOVER	PORTSMOUTH
DURHAM	RYE
GOFFSTOWN	SALEM
LONDONDERRY	SEABROOK
MANCHESTER	STRATHAM
NASHUA	

~~2.— Non Traditional and Transportation MS4s discharging any waterbody listed on Table H2 Appendix H~~

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

Objective: The objective of this control measure is for the hydrology resulting from new development to mirror the pre-development hydrology of the site or to improve the hydrology of a redeveloped site and reduce the discharge of stormwater.

- a. Permittees shall develop, implement, and enforce a program to address post-construction stormwater runoff from all new development and re-development projects that disturb a minimum of 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/ re-development 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 NH DES published guidance such that no untreated discharge to receiving waters results. Snow storage areas shall be located in accordance with NH DES 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 re-developed 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 1507.05²;
- (4) Control peak runoff rates in accordance with Env-Wq 1507.06²; 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).

(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. 2.3.6.1—Permittees shall implement and enforce a program to address post construction stormwater runoff from new development and redevelopment projects that disturb one or more acres of land and discharge or will discharge into the MS4. Permittees authorized under the MS4-2003 shall continue to implement their existing programs and shall modify them as necessary to meet the requirements of this Part.

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

~~2.3.6.2 The 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 acres.~~

~~2.3.6.3 The new development/redevelopment program shall include an ordinance or regulatory mechanism that regulates runoff from new development and redevelopment projects. Development of the ordinance or other regulatory mechanism was a requirement of the MS4-2003 (See MS4-2003 Part III.B.5) and was required to be effective by May 1, 2008.~~

~~The ordinance or other regulatory mechanism shall be amended or modified, as appropriate, within two (2) years of the effective date of the permit to require compliance with the design criteria set forth in the most recent version of the New Hampshire Stormwater Manual (<http://des.nh.gov/organization/divisions/water/stormwater/manual.htm>)~~

~~2.3.6.4. The permittee's new development/redevelopment program shall have procedures to ensure that any stormwater controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality. These procedures may also include requirements to avoid disturbance of areas susceptible to erosion and sediment loss; requirements to preserve areas in the municipality that provide important water quality benefits; requirements to implement measures for flood control; and requirements to protect the integrity of natural resources. See related requirements for new and increased discharges in Part 2.1.2.~~

~~2.3.6.5 For projects subject to the ordinances required by this Part, the permittee shall require~~
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.

~~2.3.6.6.c.~~ Within ~~two~~three (32) 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 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 any planned or completed changes to local regulations and guidelines.

~~2.3.6.7.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. The permittee shall report in each annual report on its findings and progress towards making the practices allowable. (Information available at:

<http://www.epa.gov/region1/npdes/stormwater/assets/pdfs/AddressingBarrier2LID.pdf>)

~~2.3.6.8 — Directly Connected Impervious Area~~

~~a. The permittee shall estimate the annual increase or decrease in the number of acres of impervious area (IA) and directly connected impervious area (DCIA) draining to its MS4 and report those estimates in each annual report. The permittee shall tabulate its estimates by sub-basins. EPA recommends that the sub-basins be those included in the Level 6 Hydrologic Unit Boundaries for New Hampshire (<http://www.granit.unh.edu>). Alternatively, the permittee may tabulate its estimates by the catchments it has delineated pursuant to Part 2.3.4.8 .c.iii. of this permit or an alternative delineation of sub-basins.~~

~~For the purposes of this part, IA includes conventional pavements, sidewalks, driveways, roadways, parking lots, and rooftops. DCIA is the portion of IA with a direct hydraulic connection to the permittee's MS4 or a waterbody via continuous paved surfaces, gutters, pipes and other impervious features. DCIA typically does not include isolated impervious areas with an indirect hydraulic connection to the MS4 or that otherwise drain to a pervious area.~~

~~eb. Two (2)~~ 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.

~~e. Beginning with the second year annual report and in each subsequent annual report, the permittee shall estimate for each sub-basin identified pursuant to Part 2.3.6.8.a. the number of acres of IA and DCIA draining to its MS4 that have been added or removed during the prior year. The permittee shall include in its estimates the additions or reductions resulting from development, redevelopment, or retrofit projects undertaken directly by the permittee; or by private developers and other parties.~~

Beginning with the ~~third~~ fourth 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.~~8.b. 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.