



MEMORANDUM

To: Greenland Planning Board

From: Julie LaBranche, Senior Planner

Date: October 3, 2019

Re: Audit of Erosion and Sediment Control Regulations for 2018 EPA MS4 Permit Compliance

Upon review of the current Erosion and Sediment Control standards in the Greenland Subdivision Regulations, the following amendments are recommended to comply with Section 2.3.5 Construction Site Stormwater Runoff Control of the 2017 EPA MS4 Permit Year 1 requirements.

- 1. Subdivision Regulations Section 5.3: Recommend adding a requirement that all site plans identify whether the project is located wholly or partially within the town's MS4 area and identify all proposed stormwater discharges to surface waters and their connected wetlands and the town's MS4 drainage systems.
- 2. Subdivision Regulations Section 5.3.3: Recommend also referencing the NH Department of Environmental Services Stormwater Manual Volume 2: Post-Construction Best Management Practices Selection & Design (December 2008) for the design and selection of erosion and sediment control best management practices that will become permanent structures retained after construction.
- 3. Subdivision Regulations Section 5.3.6: Recommend that perimeter controls be implemented prior to any earth disturbance activity on a site and perimeter control inspection be added to the inspections list Section 5.3.7.
- 4. Add the following content from MS4 Section 2.3.5.3.b: Procedures for site inspections and enforcement of sediment and erosion control measures including clear designation of who is responsible for site inspections (see Subdivision Regulations Section 5.3.7 "the agent designated by the Planning board shall make inspections") and who has authority to implement enforcement procedures.
- 5. Add the following content from MS4 Section 2.3.5.3.d: Requirements to control wastes, including but not limited to, discarded building materials and debris, concrete truck wash out, chemicals, litter and sanitary wastes. These wastes shall not be discharged to the town's MS4 systems. This should also include earth materials and other materials that are prohibited for use as fill (see restrictions on the dumping and use of fill materials not exempted under NHDES Administrative Rules Env-SW 302.03.b.9 available online at https://www.des.nh.gov/organization/commissioner/legal/rules/documents/env-sw300.pdf).

- 6. Add the following content from MS4 Section 2.3.5.3.e:
 - During the site plan review process, design and implementation of best management practices
 for construction site runoff controls shall incorporate procedures for the consideration of
 potential water quality impacts, procedures for pre-construction review and site inspection, and
 procedures for consideration of information submitted by the public [during the public comment
 process].
 - Procedures shall include evaluation of opportunities for use of low impact design and green infrastructure.
 - The number of site reviews, inspections and enforcement actions shall be tracked and reported annually.

Other Recommendations

7. Note that Section 2.3.5.1 states that permittees *shall implement and enforce measures from construction activities that result in a land disturbance within the MS4 area of greater than or equal to one acre.* However, because the goal of the permit is to protect water quality, and the town is responsible for water quality discharging from its MS4 area, it is strongly recommended that these measures apply to all construction activities in the MS4 area permitted by the Planning Board under Site Plan Review Regulations and Subdivision Regulations including new development, redevelopment and amendments to previously approved site plans that involve earth disturbance. It may also be wise to include lands outside the MS4 area that drain into the MS4 area or have or will have connections to the MS4 stormwater drainage systems.

evaluated using the catchment investigation procedure,

- all dry weather and wet weather screening and sampling results and
- the volume of sewage removed

2.3.4.10 Ongoing Screening

Upon completion of all catchment investigations pursuant to Part 2.3.4.8.c and illicit discharge removal and confirmation (if necessary) pursuant to paragraph 2.3.4.8.e, each outfall or interconnection shall be reprioritized for screening in accordance with Part 2.3.4.7.a and scheduled for ongoing screening once every five years. Ongoing screening shall consist of dry weather screening and sampling consistent with Part 2.3.4.7.b; wet weather screening and sampling shall also be required at outfalls where wet weather screening was required due to SVFs and shall be conducted in accordance with Part 2.3.4.8.c.ii. All sampling results shall be reported in the permittee's annual report.

2.3.4.11 Training

The permittee shall, at a minimum, annually provide training to employees involved in IDDE program about the program, including how to recognize illicit discharges and SSOs. The permittee shall report on the frequency and type of employee training in the annual report.

2.3.5 Construction Site Stormwater Runoff Control



Objective: The objective of an effective construction stormwater runoff control program is to minimize or eliminate erosion and maintain sediment on construction sites so that it is not transported in stormwater and allowed to discharge to a water of the U.S. through the permittee's MS4.

The construction site stormwater runoff control program required by this permit is a separate and distinct program from EPA's stormwater construction permit program (see https://www.epa.gov/npdes/stormwater-discharges-construction-activities#cgp for further information).

- 2.3.5.1 Permittees shall implement and enforce a program to reduce pollutants in any stormwater runoff discharged to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. The permittee's program shall include disturbances less than one acre if that disturbance is part of a larger common plan of development or sale that would disturb one acre or more. 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.
- 2.3.5.2 The permittee does not need to apply its construction program requirements to projects that receive a waiver from EPA under the provisions of 40 CFR § 122.26(b) (15) (i).

- 2.3.5.3 The construction site stormwater runoff control program shall include the elements in Paragraphs a. through e. of this Part:
 - a. An ordinance or other regulatory mechanism that requires the use of sediment and erosion control practices at construction sites. In addition to addressing sediment and erosion control, the ordinance must include controls for other wastes on constructions sites such as demolition debris, litter and sanitary wastes. Development of an ordinance or other regulatory mechanism was a requirement of the MS4-2003 (See Part III.B.4) and was required to be effective by May 1, 2008.
 - b. Written procedures (hardcopy or electronic) for site inspections and enforcement of sediment and erosion control measures. If not already existing, these procedures shall be completed within one (1) year from the effective date of the permit. The procedures shall clearly define who is responsible for site inspections as well as who has authority to implement enforcement procedures. The program shall provide that the permittee may, to the extent authorized by law, impose sanctions to ensure compliance with the local program. These procedures and regulatory authorities shall be documented in the SWMP.
 - c. Requirements for construction operators to implement a sediment and erosion control program. The program shall include BMPs appropriate for the conditions at the construction site. The program may include references to BMP design standards in state manuals or design standards specific to the MS4. EPA supports and encourages the use of design standards in local programs. Examples of appropriate sediment and erosion control measures for construction sites include local requirements to:
 - minimize the amount of disturbed area and protect natural resources;
 - stabilize sites when projects are complete or operations have temporarily ceased;
 - protect slopes on the construction site;
 - protect all storm drain inlets and armor all newly constructed outlets;
 - use perimeter controls at the site;
 - stabilize construction site entrances and exits to prevent off-site tracking;
 and
 - inspect stormwater controls at consistent intervals.



- d. Requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes. These wastes may not be discharged to the MS4.
- e. Written procedures (hardcopy or electronic) for site plan review. If not already existing, the procedure for site plan review shall be completed within one (1) year from the effective date of the permit. Site plan review shall include a review by the permittee of the site design, the planned operations at the construction site, planned BMPs during the construction phase, and the planned BMPs to be used to manage runoff created after development. The review procedure shall incorporate procedures for the consideration of potential water quality impacts; procedures for pre-construction review; and procedures

for receipt and consideration of information submitted by the public. Site plan review procedure shall include evaluation of opportunities for use of low impact design and green infrastructure. When the opportunity exists, the permittee shall encourage project proponents to incorporate these practices into the site design. The permittee shall track the number of site reviews, inspections, and enforcement actions. This information shall be included as part of each annual report required by Part 4.4.

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

Objective: The objective of this control measure is to minimize the water quality impact from new development and reduce the water quality impact due to stormwater runoff from a redeveloped site.

- a. Permittees shall develop, implement, and enforce a program to address post-construction stormwater runoff from all new development and redevelopment projects that disturb a minimum of one or more acre(s) 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 be consistent with Section 4 Element C and Element D of the Southeast Watershed Alliance's Model Stormwater Standards for Coastal Watershed Communities⁹; OR 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 new and redevelopment sites shall be covered and loading/offloading areas shall be designed and maintained in accordance with NH DES published guidance (Fact Sheets WD-WMB-4¹⁰ and WD-DWGB-22-30¹¹) such that no untreated discharge to receiving waters results. Snow storage areas shall be located in



⁹ Model Stormwater Standards for Coastal Watershed Communities, Southeast Watershed Alliance, December 2012. http://southeastwatershedalliance.org/wp-content/uploads/2013/05/Final_SWA_SWStandards_Dec_20121.pdf.

¹⁰ Environmental Fact Sheet: Road Salt and Water Quality, New Hampshire Department of Environmental Services, 2016. http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/documents/wmb-4.pdf.

Environmental Fact Sheet: Storage and Management of Deicing Materials, New Hampshire Department of Environmental Services, 2011. http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-22-30.pdf.