



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF
ENVIRONMENTAL PROTECTION



PAUL MERCER
COMMISSIONER

March 23, 2016

StormTreat Systems, Inc.
90 MA-6A # 1
Sandwich, MA 02563
ATTN: Scott Horsley

Dear Mr. Horsley,

This letter replaces the September 2006 approval from the Department of Environmental Protection (Department) that authorized the use of the StormTreat system as a treatment structure meeting the requirements of the General Standards (Section 4.C.) of the Stormwater Management Rules (Chapter 500), provided the system includes upgradient stormwater storage. The sizing, installation, and maintenance criteria provided in this letter replace the ones given in Chapter 7.4 of Volume III of the existing Maine Stormwater Management BMP Manual. The Department authorizes the use of the StormTreat system as meeting the requirements of the General Standards (Section 4.C.) of the Stormwater Management Rules (Chapter 500) provided the system is sized, installed, and maintained in accordance with the following provisions:

1. The StormTreat system must have at least one StormTreat tank per 1,210 cubic feet of stored and treated volume. To determine the number of Stormtreat tanks required, the water quality/channel protection volume (WQv) should be divided by 1,210 and rounded up. Approximately one acre of impervious area will require 4 tanks. Multiple tanks should be arranged in parallel with a 4-inch diameter inflow pipe manifold from the upstream storage and a 2-inch diameter pipe outflow manifold. Multiple tanks should be installed at the same elevation.
2. The StormTreat tank(s) must be part of a stormwater management system that provides for the storage and release of a WQv consisting of the first 1.0 inch of runoff from impervious areas, and 0.4 inch of runoff from lawn and landscaped areas draining to the system with a discharge rate of 24 hours and a maximum of 48 hours.
3. The elevation of the bypass spillway, or diversion for upstream storage, should be no greater than 4 feet above the elevation of the StormTreat tank(s) outlet (placed at 0.5 feet above the tank bottom).
4. A valve must be located at the end of the outflow manifold to control the discharge from the system. The valve must be set by actual field measurement so that the outflow is equal to 2.0 gallons per minute per tank when the elevation of water in the system is 2.0 feet above the tank(s) outlet (or 2.5 feet above the bottom of each tank). The valve can be easily set if the inflow pipe into the first settling chamber of each Stormtreat tank is capped to prevent backflow, and by filling the tank(s) to the required elevation. Volumetric flow measurement with a known volume container and a stopwatch is the preferred means of flow measurement.
5. The gravel in the filter chambers of the StormTreat tank should consist of well-graded gravel with 4% to 8% fines passing the #200 sieve.
6. The StormTreat structures must include access for maintenance.

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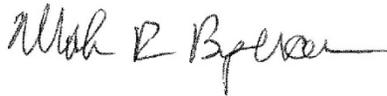
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7. Prior to construction, a five-year binding inspection and maintenance contract must be provided for review and approval by the Department, and must be renewed before the 5-year contract expiration. The contract holder should be a professional experienced with the proposed system, knowledgeable in erosion and stormwater control, and capable of performing biannual inspections and maintenance. The first year of system maintenance must be provided by the manufacturer to ensure that the system is operating according to the established specifications.
8. The overall stormwater management design must meet all Department criteria and sizing specifications and will be reviewed and approved by the Department prior to use.
9. Proposed use, layout, and sizing of the StormTreat system must be reviewed and approved by the manufacturer to ensure the conformance with the manufacturer's design specifications. The pre-treatment row must be installed under the manufacturer's representative supervision.
10. This approval is conditional to on-the-ground experience confirming that the StormTreat system's pollutant removal efficiency is appropriate. The "permit shield" provision (Section 14) of the Chapter 500 rules will apply, and the Department will not require the replacement of a properly maintained system if the pollutant removals do not satisfy the General Standard Best Management Practices.

We look forward to working with you as these stormwater management structures are installed on new projects. Questions concerning this decision should be directed to Marianne Hubert at (207) 215-6485 or Jeff Dennis at (207) 215-6376.

Sincerely,



Mark Bergeron, P.E.
Director
Bureau of Land Resources

Cc: Don Witherill, Maine DEP