



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

March 13, 2015

CONTECH Engineered Solutions LLC
71 US Route 1, Suite F
Scarborough, ME 04074
ATTN: Derek Berg

Dear Mr. Berg,

This letter is to inform you that the Department of Environmental Protection (Department) will authorize an adjusted sizing for the Stormwater Management StormFilter as a filter meeting the requirements of the General Standards (Section 4.B.) of the Stormwater Management Rules (Chapter 500), provided the system is sized, installed and maintained in accordance with the following provisions:

1. The total number of cartridges required is calculated from the allowable release rate to drain down the water quality volume (WQv) from the site over 24 hours at the maximum allowable drain down rate of 0.27 gallons per minute (gpm) per square foot of filter media surface area. Table 1 shows the number of cartridges required per impervious acre for each of the standard cartridge sizes. Note that taller cartridges require more drop across the StormFilter.

Table 1. Approximate Number of StormFilter Cartridges Per Impervious Acre			
Cartridge Height (in)	12"	18"	27"
Media Surface Area (ft²)	5	7.5	11.25
Allowable Flow Per Cartridge (gpm)	1.4	2.0	3.0
Surface Area Specific Loading Rate (gpm/ft²)	0.27	0.27	0.27
Approximate Cartridges Per Impervious Acre	14	10	7

2. The StormFilter must be part of a stormwater management system that provides for storage and release through the StormFilter of a WQv consisting of 1.0 inch of runoff from impervious areas draining to the system, and 0.4 inch of runoff from lawn and landscaped areas draining to the system. The outlet of the system must be designed so that the WQv is detained for a minimum of 24 hours and a maximum of 48 hours.
3. The up-gradient detention storage must be designed to provide effective pretreatment for the StormFilter, with the goal of removing at least 50% of the sediment load prior to discharging to the filter. The up-gradient system must provide access for the physical removal of accumulated sediment and debris.
4. Per the manufacturer's design, each cartridge must contain an outer band of fine Zeolite media and an inner band of fine alumina media, each representing 50% of the total media volume. The system must be delivered to the site and installed under the manufacturer's representative supervision.

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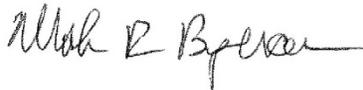
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5. The configuration of the StormFilter cartridge system with detention and pretreatment is expected to have an operational longevity of at least one year.
6. Each system must be inspected at least once every six months, and the filters maintained annually per the manufacturer's guidelines, and this approval, to maintain the established efficiency for pollutant removal. A five-year binding inspection and maintenance contract must be provided prior to review and approval by the Department, and must be renewed before contract expiration.
7. 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.
8. Review and approval by the manufacturer for the proposed use and sizing of the StormFilter cartridge system at each specific project is required to ensure conformance with the manufacturer's design specifications.
9. All structures containing the StormFilter cartridges must include sufficient maintenance access for the removal of the canisters and accumulated sediment or debris.
10. This approval is conditional to on-the-ground experience confirming that the StormFilter cartridges' pollutant removal efficiency and sizing are appropriate. The "permit shield" provision (Section 14) of the Chapter 500 rules will apply, and the Department will not require the replacement of the system if, with proper maintenance, 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, Division of Land Resource Regulation
Bureau of Land & Water Quality

C: Don Witherill, Maine DEP