



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

July 16, 2015

Retain-it
560 Salmon Brook Street
Granby, CT 06035
ATTN: Scott Lander

Dear Mr. Lander,

This letter is to inform you that the Department of Environmental Protection (Department) will authorize the Retain-it stormwater management system as a subsurface concrete chamber storage system 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 Retain-it system may be used as a subsurface chamber sand filter designed per Chapter 7.3 of Volume III of the Maine Stormwater Management BMP Manual to provide storage and treatment of the water quality/channel protection volume (WQv) which consists of the first 1.0 inch of runoff from impervious surfaces and 0.4 inch from lawn and landscaped areas. The WQv should be hydraulically isolated from any additional stormwater storage by weirs or other means so that only the WQv is routed through the treatment system (sand filter). The Retain-it system must detain the WQv for a minimum of 24 hours and a maximum of 48 hours. Pre-treatment will be required.
2. A pre-treatment system must provide pretreatment for the WQv that is routed to the sand filter, prior to discharging to the storage system above the filter. The pre-treatment system must meet the following requirements:
 - The Retain-it pre-treatment structure will be underlain with a bottom surface consisting of 2 layers of ADS 315 woven geotextile (or equal) that extends 18-24 inches beyond all sides of the bottom of the concrete structure.
 - The number of chambers in the pre-treatment structure will handle the projected one-year peak flow from the drainage area without activating the overflow into the WQv treatment system with the underdrain sand filter.
 - If the area draining to the pre-treatment structure is a source of hydrocarbons or debris (i.e. parking lots, roads, drive-through commercial enterprises), the pre-treatment structure must be preceded by a practice that will trap these products.
 - The pre-treatment structure must be continuous and without obstacle for cleaning and must have access at both ends for the removal of accumulated sediment and debris. The pre-treatment system should be inspected at least once every six months 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.
3. If required for flooding control, the Retain-it system may be part of a stormwater management system that will provide for the storage and release of the peak flow with a regulated flow rate from 24-hour storms of the 2, 10 and 25-year frequencies such that

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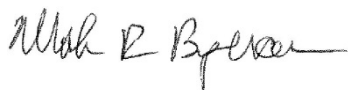
the peak flows from the project site do not exceed the peak flow prior to undertaking the project.

4. 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.
5. Review and approval by the manufacturer for the proposed use and sizing of the Retain-it system at each specific project is required to ensure conformance with the manufacturer's design specifications.
6. The Retain-It system must be delivered to the site and installed under the manufacturer's representative supervision.
7. This approval is conditional to on-the-ground experience confirming that the pollutant removal efficiency and sizing of the Retain-it system 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.

Consideration should be given to installing the Retain-it system as a uncompacted, non-weight bearing filter system, where the chambers are installed with their bottom up to contain a layered filter media similar to the media options described in Chapter 7.1 of Volume III found in the Maine Stormwater Management BMP Manual. This configuration may become a requirement for projects using the Retain-it stormwater treatment system when located in a sensitive resource (for example: watershed of an urban impaired stream or a lake most-at-risk from development). Design and configuration would be established on a case-by-case basis.

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 Quality

C: Don Witherill, Maine DEP