

TECH REPORT

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AquaShield™, Inc. is pleased to announce that both the Aqua-Filter™ and Aqua-Swirl® Stormwater Treatment Systems have been assigned Total Phosphorus (TP) removal efficiency credits by the Virginia Department of Environmental Quality (VDEQ). The Aqua-Filter™ Stormwater Filtration System is assigned a TP removal efficiency of 40%, and the Aqua-Swirl® Stormwater Treatment System is credited with 20% TP removal efficiency. These credits were assigned following a comprehensive review by VDEQ in accordance with Guidance Memo No. 14-2009, "Interim Use of Stormwater Manufactured Treatment Devices (MTDs) to Meet the New Virginia Stormwater Management Program (VSMP) Technical Criteria, Part IIB Water Quality Design Requirements" (9VAC25-870).

Effective July 1, 2013, VDEQ became responsible for construction permitting related to the control of stormwater pollution in Virginia. Instead of basing stormwater pollution in terms of suspended sediment, Total Phosphorus was established as the contaminant of concern in Virginia. Recognizing that the new post-construction water quality requirements required VDEQ's approval of MTDs to meet the stormwater management program criteria, a thorough product review process was established. Only those manufactured treatment devices that fully meet the guidance criteria are approved for use by VDEQ.

Both the Aqua-Filter™ and Aqua-Swirl® and their assigned TP removal efficiencies can now be manually added into the Virginia Runoff Reduction spreadsheet to demonstrate compliance with the Runoff Reduction Method.

The Aqua-Filter™ TP assignment letter dated August 18, 2014 is available on the Virginia Stormwater BMP Clearinghouse website at http://www.vwrrc.vt.edu/swc/documents/Aqua-Filter_TP%20Removal %20Efficiency.pdf.

The assignment of 40% TP removal efficiency for the Aqua-Filter™ is based on a combination of publically available reports and an independent field test verification from the prestigious New Jersey Corporation for Advanced Technology (NJCAT). The Aqua-Swirl® TP assignment letter dated August 13, 2014 is also available on the BMP Clearinghouse website at http://www.vwrrc.vt.edu/swc/documents/AquaSwirl_TP%20 Removal%20Efficiency.pdf.

The Aqua-Swirl® is a vortex-type hydrodynamic separator and is assigned 20% TP removal efficiency. This rating is also based on public reports and the NJCAT field test verification of an Aqua-Swirl®.

