



September 8, 2017

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Commonwealth of Virginia
Department of Environmental Quality
629 East Main Street
Richmond, VA 23219
Online Submission

The Stormwater Equipment Manufacturer's Association (SWEMA) represents a diverse group of stormwater solutions providers as well as supporting associate and professional members. We appreciate the opportunity to provide feedback to the Virginia Department of Environmental Quality (VADEQ) on proposed updates to the Virginia BMP Clearinghouse relative to manufactured stormwater treatment devices (MTDs). SWEMA's membership has a number of concerns about the current state of the BMP Clearinghouse as it relates to manufactured solutions. We respectfully offer the following comments for consideration.

1. **Conversion of Treatment Volume to Peak Flow:** We feel publication of this document is an important and valuable step to aid the stormwater community in Virginia. We encourage publication as soon as possible to ensure a consistent process is utilized to calculate an appropriate water quality treatment flow.
2. **Hydraulic Loading Rate:** As it currently stands, the MTD Application Summary Spreadsheet omits the critical information needed to properly design MTDs in accordance with the tested conditions that resulted in their approval and Total Phosphorus (TP) rating in Virginia. Specifically, without the inclusion of a maximum design hydraulic loading rate, improperly sized MTDs will remain commonplace and unnecessary burdens will be placed on the design and review professionals tasked with determining proper sizing. We request that the missing hydraulic loading rate information be clearly provided in the table. This information is readily available for the majority of studies listed in the spreadsheet currently and in fact, should be a condition of approval for these systems.
3. **Percent TP Removal:** VADEQ currently restricts the maximum amount of TP credit awarded to MTDs to 50% regardless of what level of performance was achieved during testing or how much supporting data is available. This unfairly penalizes MTDs against land based practices, discourages innovation leading to even more effective treatment options and artificially restricts the options available to comply with VADEQ stormwater quality criteria. SWEMA feels that VADEQ must remove this artificial barrier which provides no water quality benefit and instead credit those technologies that have completed long term field testing in compliance with a nationally recognized protocol with >50% TP removal.
4. **Approval Criteria:** VADEQ published a guidance memo that was intended to serve as a framework for awarding TP ratings to MTDs during an interim period while more robust long term criteria were developed. We are quite concerned that VADEQ has not adhered to its own guidance memo in awarding TP credit to MTDs. Specifically, VADEQ has awarded >20% TP removal for a hydrodynamic separator despite a published cap of 20% for this type of practice. Additionally, VADEQ has recently awarded 40% TP removal to an MTD that has never been used in the field prior to approval let alone tested in the field, has no TP data of any kind to support performance claims, and does not have the TARP certification required in Table 1 of the Interim Guidance. These exceptions ultimately disadvantage those MTD



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providers which invest in robust testing and puts water quality at risk. All MTD ratings not in strict compliance with VADEQ's interim guidance memo should be modified promptly to ensure compliance.

5. **TP Load Reduction:** Additionally, in developing permanent guidance we feel VADEQ should consider how it is crediting TP removal based on test results. For evaluating TP claims submitted that are based on field test data, VADEQ currently assigns TP ratings using the average concentration removal efficiency of each monitored event. However, this can bias the resulting average because of small events having low runoff volumes and high TP inlet concentrations. Regardless of BMP type, TP ratings that are determined from field monitoring should be based on the percent mass load reduction, which is a more representative value when concerned about annual TP load reductions.
6. **Permanent Guidance:** VADEQ has not disclosed any plans to implement permanent guidance for evaluating and approving MTDs. We strongly support VADEQ moving forward with the development of permanent guidance that is consistently applied without exception.

Thank you for your consideration of these important issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jay Holtz".

Jay Holtz, PE
SWEMA Government and Regulatory Committee Chair