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March 26, 2021

Erin Belt
Virginia Department of Environmental Quality
1111 E. Main St., Ste. 1400
Richmond, VA 23219
Online Submission

RE: BMP Clearinghouse Follow-up on the Proposed Guidance to Replace Guidance Memo No. 14-2009

Erin,

The Stormwater Equipment Manufacturers Association (SWEMA) appreciates you allowing stakeholder comment on the draft Manufactured Treatment Device (MTD) Guidance, which was provided to interested parties during the December 2020 Best Management Practices (BMP) Clearinghouse meeting. SWEMA represents a diverse group of innovative stormwater solution providers, as well as other associate and professional members. Our membership is extremely vested in seeing water quality improvements within Virginia. We are very much affected by the implementation of any new guidance concerning the review and approval of MTDs and hope to work with you to help establish robust standards that encourage much needed innovation in stormwater treatment without negatively impacting local water quality.

This is a critical moment for the stormwater program respective to the evaluation of MTDs. We believe the draft generally addresses the need for a consistent review and approval process which puts the program on more solid footing, though we feel a few key areas can be reinforced. Stronger guidance will better protect water quality moving forward by avoiding a recurrence of past evaluation inconsistencies.

To help you refine the proposal, we would like you to consider the following recommendations from SWEMA members:

1. Hold the line at NJDEP and TAPE: New Department of Environmental Quality (DEQ) guidance should be straightforward, especially given the policy shortcomings highlighted by Clearinghouse stakeholders during the interim guidance period. An approval process reliant on effective, widely recognized, and scientifically sound evaluation protocols, such as the New Jersey Department of Environmental Protection (NJDEP) laboratory testing process and the Washington Department of Ecology's (Ecology) Technology Assessment Protocol- Ecology (TAPE) General Use Level Designation (GULD) for Total Phosphorus (TP) field testing process will be most beneficial to water quality in Virginia. Opening the door to alternatives will not improve the program. Doing so will only perpetuate issues with multiple standards, inconsistent reviews, and varying tiers of allowable data. Maintaining the status quo isn't the course correction staff noted was needed at the last BMP Clearinghouse meeting in 2019.



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The proposed guidance also aligns with the intent of HB882, which specifically states, *“Provide for the use of a proprietary best management practice only if another state, regional, or national certification program has verified and certified its nutrient or sediment removal effectiveness”* TAPE and NJDEP are the most established verification and certification programs in United States, with the largest databases of approved technologies.. TAPE and NJDEP will form the basis of the national verification program, known as the Stormwater Testing and Evaluation for Products and Practices (STEPP), currently under development by the National Municipal Stormwater Association (NMSA) and others, including SWEMA, EPA, ITRC, Ecology, and NJDEP.

We also encourage the use of the TAPE program as the mechanism for meeting HB882’s requirement that DEQ, *“Provide for the evaluation and potential inclusion of emerging or innovative nonproprietary stormwater control technologies that may prove effective in reducing nonpoint source pollution.”* The TAPE protocol has been effectively used for monitoring public domain stormwater BMPs. DEQ could easily direct researchers and others interested in advancing public domain practices to use the TAPE protocol to gather adequate data for evaluation and verification purposes. Doing so will standardize the stormwater sector and provide for a comparability of research studies.

SWEMA Position: We support use of NJDEP and TAPE GULD for TP as the only acceptable means of MTD and nonproprietary stormwater BMP approval in Virginia. This can be expanded to STEPP once that program is fully functional.

2. Remove the Total Phosphorus (TP) cap: We continue to believe the cap restricting the maximum amount of TP credit awarded to MTDs to 50% is arbitrary and unnecessary. This performance cap penalizes MTDs versus land-based practices, discourages innovation leading to even more effective treatment options, and artificially restricts the options available making compliance with stormwater quality requirements more challenging and costly. Technologies that have completed long-term field testing in compliance with TAPE with greater than 50% TP removal should be credited as such. Ecology assigns the General Use Level Designation (GULD) for emerging technologies that have achieved the monitoring and reporting requirements specified in the TAPE protocol. For a TAPE GULD for TP, this means a technology achieved both at least 80% TSS and 50% TP removal. These figures are minimum thresholds, not maximum performance levels. Ecology verifies TAPE Technical Evaluation Reports (TERs) for each technology wherein a manufacturer demonstrates compliance with the TAPE protocol and discloses overall pollutant removal effectiveness. Furthermore, for those technologies achieving a TP GULD, Ecology releases TP results in the “findings of fact” section of the TAPE certification letter specific to each technology. For examples, see the linked approval letters. These do not represent all the systems that have achieved GULD for TP via TAPE:



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Contech® Engineered Solutions Stormwater Management StormFilter®:

https://fortress.wa.gov/ecy/ezshare/wq/tape/use_designations/STORMFILTERphosphosorbCONTECHguld.pdf

Oldcastle Infrastructure™ Perk Filter:

https://fortress.wa.gov/ecy/ezshare/wq/tape/use_designations/PERKFILTERkristarGULD.pdf

ADS™ BayFilter™

https://fortress.wa.gov/ecy/ezshare/wq/tape/use_designations/BAYSAVERbayfilterEMCGuld.pdf

SWEMA Position: We believe the cap on TP credit should be removed and replaced with the lower 95% confidence level (LCL) TP percent removal figure from findings of fact in TAPE approval letter. The science-based 95% LCL is a conservative value, allowing DEQ to incorporate a margin of safety in the agency's guidance program.

3. Clearly specify a technology's hydraulic loading rate (HLR): Both NJDEP and TAPE identify a technology's HLR in the respective approval letters. DEQ should stipulate that these HLRs be used to assist with properly sizing the device in VA. Otherwise, MTDs can be undersized and not fully treat the required design storm. Confusion currently exists among local plan reviewers and site design professional due to the lack of clear and easily understandable sizing guidance. Proactively including the HLR in the respective protocol approval letters will help prevent undersized MTDs from being installed.

SWEMA Position: We seek to have DEQ publish the NJDEP and TAPE specified HLRs in the corresponding approval letters so that local stormwater programs can verify proper MTD sizing. We also recommend sizing requirements for future innovative stormwater BMPs be provided based on the verified studies used for their approval.

New, robust guidance will improve certainty and consistency around the use of MTDs as a water quality compliance tool and allow the BMP Clearinghouse to move forward in addressing other critical program needs. Please do not hesitate to contact us with any questions. Thank you once again for hosting the recent meeting and for continuing the effort to improve guidance regarding MTD utilization in VA.

Sincerely,

A handwritten signature in blue ink that reads "Greg Williams".

Greg Williams, Ph.D., P.Eng.

SWEMA President

StormTrap



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

Jay Holtz
SWEMA GARC Chairman
OldCastle Infrastructure

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James Mailloux
Alden Laboratories

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Jacob Dorman
SWEMA GARC Liaison
Contech Engineered Solutions

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Joel Garbon
Imbrium Systems

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Chris French
SWEMA GARC Liaison
BioClean, A Forterra Company

A handwritten signature in blue ink, appearing to read "Dan Fajman".

Dan Fajman
StormTrap

A handwritten signature in blue ink, appearing to read "P. Taylor".

Phillip Taylor
Hydro International

A handwritten signature in blue ink, appearing to read "Nancy Sullins".

Nancy Sullins
ParkUSA