

June/25/2021

Florida Dept. of Environmental Protection
Attn: Stormwater TAC
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
Submitted Electronically to: Stormwater2020@floridadep.gov

RE: Feedback on Manufactured Stormwater Treatment Device (MTD) Evaluation, Sizing, and Local Acceptance

FLDEP and Stormwater TAC Members,

We appreciate the ongoing dialog taking place amongst the TAC and FLDEP staff and have been listening in to the TAC meetings online. We are very pleased to learn that FLDEP is giving careful consideration to the evaluation and acceptance of different types of stormwater best management practices (BMPs) including innovative manufactured treatment devices (MTDs). MTDs now include a diverse suite of different types of stormwater management solutions that have varying degrees of effectiveness for different pollutants of concern. MTD performance is also influenced strongly by sizing such that more conservative sizing generally improves performance. That said, applying a robust and consistent policy to the evaluation, acceptance, and sizing of these practices is critical to ensuring an equitable program and that MTDs are meeting local performance expectations. We encourage the TAC and FLDEP to carefully consider the suggestions offered herein while devising policy for the acceptance and use of MTDs as part of the current rulemaking effort.

1. A consistent process should be applied to all stormwater treatment practices being considered for acceptance. To make the process equitable and ensure comparability across different types of BMPs, each should be vetted against the same criteria and there should be no grandfathering of previously approved BMPs once new standards are adopted.
2. For MTDs, there should be a single, well-defined pathway for local acceptance. Example: MTDs must be tested in accordance with WA TAPE Field testing protocol and shown to remove xx % of the suspended solids load and xx % of the TP load. Allowing data collected under a variety of different protocols to be submitted for consideration will create inequity and reduce comparability across technologies.
3. Lab testing has its merits for MTD evaluation, but the general industry consensus is that it is best suited for estimating removal of suspended solids. It is generally agreed that field testing is likely warranted when evaluating the removal of other pollutants such as nutrients and metals or when evaluating longevity.
4. Data collected in other geographic regions is transferable as long as the same tested hydraulic loading rates are maintained in approving and sizing the technology locally. For example, if a BMP is tested in an area with lower rainfall intensity than what occurs locally it is generally true that a smaller BMP can be used per unit area being treated. However, during testing, we identify the design hydraulic loading rate that the system meets pollutant removal goals. This is generally expressed as gallons per minute per ft² (gpm/ft²) of surface/settling area for sedimentation devices like hydrodynamic separators or gpm/ft²

of filter surface area for filtration and biofiltration BMPs. If BMPs are required to be sized such that they do not exceed the hydraulic loading rates they were tested at during the local water quality design storm they will maintain the same pollutant removal capability. This would generally mean larger systems per acre treated in a place like Florida to maintain the same hydraulic loading rates. This same principal is applied to other systems like ponds, biofilters, sand filters, etc. which are made larger or smaller based on the local the local design storm and area being treated.

5. There is a national effort underway known as the STEPP program which is planning to serve as a national BMP performance verification process. This program plans to use both the NJDEP laboratory protocols and the WA TAPE field protocol as a starting point and is also working with ASTM to refine these protocols into ASTM standards. Currently the NJDEP and TAPE protocols are considered the gold standards for evaluating MTDs and data generated from these programs is accepted by regulators all over the North America and beyond. More info on the STEPP program can be found at:
<http://nationalstormwateralliance.org/stepp/>
6. Many MTD providers, including Contech, have extensive experience participating in the various testing and evaluation programs around the country, so we strongly suggest engaging with MTD providers to gain insight on what other programs have done, what has worked/failed and how MTD sizing is typically adjusted to local conditions.
7. Ultimately, we recommend that FLDEP establish a list of MTDs that have been vetted against agreed upon testing and performance requirements. Simply creating a catch all list or library of available reports and technologies would not serve the interest of identifying those solutions capable of meeting local requirements.

I urge you to contact me at your convenience to discuss any of the comments made herein in more detail or pose any additional questions you may have!

Respectfully,



Derek M. Berg

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