



July 5, 2013

Rebecca Stack
Low Impact Development Specialist
Watershed Protection Division DDOE
1200 First Street, NE, 5th Floor
Washington DC 20002

Re: Filterra's comments on the Second Proposed Stormwater Management Guidebook
(June 2013)

Ms. Stack:

Filterra is pleased to have this occasion to provide comments to the District Department of Environment (DDOE) regarding the Second Proposed Stormwater Management Guidebook (Guidebook), dated June 2013.

Filterra offers our comments on the following pages. As before, our comments are identified by chapter headings.

We look forward to our continued interactions with the DDOE. Should you have any questions or concerns regarding our statements, I am happy to make myself and other Filterra staff available to discuss them with you and other DDOE staff.

Respectfully submitted,

A handwritten signature in black ink that reads "Chris French". The signature is written in a cursive, flowing style.

Chris French
Stormwater Regulatory Manager
Filterra Bioretention Systems

Filterra's comments regarding DDOE's Draft Stormwater Management Guidebook

General Comment

Filterra commends DDOE for its efforts in developing strong stormwater management standards to support the implementation of the District's MS4 program. We are pleased to see many of the updates proposed in both the Stormwater Rule and Guidebook and believe these will lead to improved water quality conditions both in and outside of the District.

We would again note we support statements previously made during the informal comment period by the Stormwater Equipment Manufacturers Association (SWEMA) that water quality treatment should be provided to the maximum extent possible for all sites; even if on-site retention and infiltration is not possible. It is our hope DDOE and its conservation partners will recognize the role water quality BMPs which do not infiltrate or retain water onsite offer in meeting the District's water quality goals and objectives. These BMPs offer tools that allows for greater on-site treatment prior to both off site discharges and consideration of potential nutrient trading/offsets. As a result, these options can provide a reasonable and cost-effective means for meeting the 80% Total Suspended Solids (TSS) requirement prior to consideration of reducing this requirement to 50% due to the individual parcel being classified as an "Extraordinarily Difficult Sites" as defined in Appendix E.

It seems to be premature to grant relief for water quality treatment requirements (via TSS) based only on the retention BMPs listed in Appendix E. There are both public domain and proprietary technologies available that can accomplish 80% TSS removal in a small footprint, making it possible to achieve greater pollution reduction onsite prior to discharge. Appendix E does not give credence to any recognized BMPs that would be allowable under Appendix T or other public domain BMPs that could also be used to meet the District's Water Quality Treatment Volume (WQTV) exclusive of the Stormwater Retention Volume (SWRV).

Filterra respectfully requests Appendix E be updated to allow the use of on-site water quality treatment BMPs to the maximum extent possible prior to granting a reduction from 80% to 50% TSS removal.

Appendix T. Proprietary Practices Approval Process

1. Again, Filterra is pleased to see the Guidebook referring to the revised New Jersey Department of Environmental Protection (NJDEP) laboratory protocols for approving manufactured stormwater treatment systems in the District. This is a substantial improvement over the proposed testing and evaluation protocol in the draft Guidebook released in Fall 2012. Thank you for your attention to the concerns expressed and for your updates.
2. Filterra is concerned with the language in Appendix T which refers to the use of the Virginia Technology Acceptance Protocol (VTAP). The VTAP protocol has not been finalized nor undergone the appropriate public procedures for regulatory adoption in Virginia. The VTAP should be considered a draft testing protocol, at best.

Appendix T states VTAP shall be used, "When a MTD is seeking to comply with the nutrient reduction provisions of the Chesapeake Bay Total Maximum Daily Load...". As you are aware, the District Stormwater Rule is designed to address individual parcel development. Reference to using the VTAP to meet provisions of the Chesapeake Bay TMDL and other local TMDLs does not fall within the scope of the District's MS4 permit and are out of place as a result. Additionally, there are stipulations in the Stormwater

Rule that allow exemptions for BMPs in order to meet specific TMDL pollution goals. This would appear to take precedence over the language referring to the VTAP.

Last, there are several technical drawbacks to referring to the VTAP; primarily due to it being an unproven test protocol. We are not aware of any scientific BMP performance studies that can meet the criteria outlined in the current draft of the VTAP (public domain or proprietary BMPs). Until a body of scientific studies that meet the VTAP are available, it is premature to incorporate the VTAP into the Guidebook.

Filtarra recommends striking all reference to the VTAP in Appendix T (Sections T.5 - T.7 and References) as a result. Once the VTAP becomes promulgated in Virginia and there are a number of completed studies and approved technologies under that program, it then would be appropriate for the District to incorporate it into the Guidebook.

3. As previously noted, Filtarra recommends DDOE utilize the 2003 Technology Acceptance Reciprocity Protocol (TARP) for any verification of a field monitoring study with water quality measurements. TARP continues to be utilized by the Maryland Department of the Environment for evaluating and approving proprietary systems. TARP studies are also reviewed by the Massachusetts Stormwater Technology Evaluation Project (MASTEP), which is used by several jurisdictions as the basis of their BMP approval process (e.g. Pennsylvania Department of the Environment). Information about MASTEP can be found at <http://www.mastep.net/>
4. As stated in a previous comment, the text in Appendix T is inaccurate in stating NJDEP and New Jersey Corporation for Advanced Technology (NJCAT) is the only state to have developed a formal evaluation and acceptance process for Manufactured Treatment Devices (MTDs) with the TARP protocol. There are other TARP participant jurisdictions – noted above - which approve proprietary systems based on TARP studies (Maryland being the closest state to the District; see <http://www.mde.maryland.gov/programs/water/stormwatermanagementprogram/documents/www.mde.state.md.us/assets/document/proprietary%202005.pdf>; also attached to this correspondence). Filtarra recommends DDOE replace this inaccurate language in Appendix T with text that accurately reflects the current state of BMP evaluation programs in TARP signatory jurisdictions.
5. Filtarra also recommends DDOE give consideration to the use of the State of Washington Department of Ecology's Technology Assessment Protocol - Ecology (TAPE) protocol for approving new technologies for use in the District. As stated in past comments, the TAPE program is considered the industry's most rigorous field testing protocol and has been updated four times since its creation. As a result, TAPE incorporates the breadth of current stormwater BMP monitoring protocols available.

While some may have stated TAPE is not applicable to the East Coast due to it being used primarily in Western Washington State (a NRCS Type IA rainfall distribution), that argument ignores that TAPE is also applicable to Eastern Washington State (a Type II rainfall distribution - similar to the District). Not only is TAPE utilized throughout Washington State, but it is applicable throughout the country when BMPs are sized according to local weather patterns and hydrology. Several jurisdictions throughout the United States give reciprocity to TAPE due to the rigorous nature of the program and its balanced program implementation.