

Virginia Stormwater BMP Clearinghouse Committee Meeting

Virginia Department of Forestry (DOF) Building, Training Room
Charlottesville, VA
January 24, 2011

Meeting minutes by Jane Walker

Committee Members Present

Gary Boring, New River Highlands RC&D Council
Dean R. Bork, Department of Landscape Architecture, Virginia Tech
Colleen Collins, Vanasse Hangen Brustlin, Inc. (VHB)
Joanna Curran, University of Virginia (UVA)
Lee Hill, Virginia Department of Conservation and Recreation (DCR)
Mary Johnson, Thomas Jefferson Soil and Water Conservation District/Virginia Association of
Soil and Water Conservation Districts
Roy Mills, Virginia Department of Transportation (VDOT)
Madan Mohan, Prince William County
Scott Perry, Imbrium Systems
David Powers, Michael Baker, Jr. Inc.
Dave Rundgren
David Sample, Biological Systems Engineering and Occoquan Watershed Monitoring
Laboratory, Virginia Tech
George Simpson, Roanoke County
James Talian, City of Lynchburg

Department of Conservation and Recreation (DCR) Staff Present

Ved P. Malhotra
John McCutcheon

Virginia Water Resources Research Center (VWRRC) Staff Present

Jane Walker

Others Present

Joe Battiata, Center for Watershed Protection, alternate for David Hirschman
Derek Berg, Contech
Kirk Bowers, Sierra Club
Edward Kay, Filterra
Chris Kuhn, Williamsburg Environmental Group, alternate for Doug Beisch
John Olenik, VDOT
Terry Siviter, Contech
Tiffany Smith, Hampton Roads Planning District Commission
Jenny Tribo, Hampton Roads Planning District Commission, alternate for Julia Hillegass
Mark Williams, Luck Stone

Call to Order and Introductions

Lee Hill of DCR called the meeting to order and thanked everyone for coming. Each person introduced herself or himself. Lee explained that this meeting represents the last official meeting of the 2010 year. Individuals with terms that end following this meeting -- Rishi Baral, Doug Beisch, Joanna Curran, David Hirschman, David Powers, David Rundgren, and David Sample -- can be re-appointed. Lee Hill explained that each will be asked if they want to be re-appointed for the 2011-2013 term. One member thanked DCR and the committee for the opportunity to serve but reported that he would not be able to serve another term. Lee Hill asked that he consider submitting the name of a replacement from the area he represents.

Minutes from Meeting on August 12, 2010

No changes were suggested regarding the draft meeting minutes from the August 12, 2010 meeting. Once reviewed and approved by DCR staff, the official minutes will be posted on the Virginia Regulatory Town Hall Website: <http://townhall.virginia.gov/>.

Stormwater Regulations Update

Lee Hill provided an update on the progress of five subcommittees of the regulatory advisory panel (RAP): grandfathering, water quality, water quantity, offsets/credits, and local programs. The RAP is working on the stormwater management regulations, Virginia Stormwater Management Program (VSMP) Permit Regulations Parts I, II, and III. The RAP's subcommittees are reviewing the regulations and developing recommendations regarding revisions to the draft final regulations. Discussions by all of the subcommittees are ongoing.

Lee Hill explained that the draft regulatory language will be posted on DCR's website in the coming weeks (<http://www.dcr.virginia.gov/lr2d.shtml>). He explained that even if the regulations are adopted this spring (2011), they will not be implemented until July 1, 2014. Localities can adopt the regulations before July 1, 2014, but they cannot implement them until that day. This delay in implementation gives localities time to adopt ordinances to support the new regulations.

Grandfathering:

Lee Hill offered that this subcommittee has almost finished developing its recommendations. He summarized that as currently proposed, construction activities operating under the VSMP General Permit prior to July 1, 2014 will not be subject to the technical criteria of "Part II A," but they will need to comply with the technical criteria of "Part II B, Grandfathered Projects," until expiration of the permit on June 30, 2019. Approved construction activities that are not covered under the general permit are grandfathered (not subject to the technical criteria of "Part II A") until June 30, 2019. Starting July 1, 2019, all land-disturbing activities will need to follow the new regulations, unless exceptions are made.

Water Quality:

The language as currently recommended by the subcommittee addressing water quality issues for new development includes the following: "The total phosphorus load of new development projects shall not exceed 0.36 pounds per acre per year." This proposed phosphorus load is more restrictive than what is called for in the Chesapeake Bay total maximum daily load (TMDL). Some on the subcommittee suggested increasing the load limit.

For development on prior developed lands with no net increase in impervious cover, the total phosphorus load shall be at least 20% below the predevelopment load for projects disturbing greater than or equal to one acre and at least 10% below the predevelopment total phosphorus load for projects disturbing less than one acre. For prior developed lands with projects that increase impervious cover, the design criteria for new development shall be applied to the entire disturbed acreage, or in the case of a linear development project, the total phosphorus load may be reduced 20%. For all projects on prior developed lands, the total phosphorus load shall not be required to be reduced to below the applicable standard for new development unless a more stringent standard has been established by a qualifying local program.

Water Quantity:

The regulations set minimum standards for channel protection and flood protection. As recommended by the subcommittee, there are no requirements for channel or flood protection for development sites with a contributing drainage area less than or equal to 1.0% of the total watershed area.

Lee Hill explained that for channel protection in natural stormwater conveyance systems, the suggested improvement factor (I.F.) is 0.8 for sites greater than one acre and is 0.9 for sites less than or equal to one acre in the calculation:

$$Q_{\text{Developed}} \leq \text{I.F.} * [Q_{\text{Pre-Developed}} * \text{RV}_{\text{Pre-Developed}}] / \text{RV}_{\text{Developed}}$$

where Q = peak flow rate of runoff and RV = runoff volume.

Offsets/Credits:

Changes proposed to the offsite compliance options include the addition of a stormwater nutrient program, established by the Virginia Soil and Water Conservation Board (Board), for areas outside the Chesapeake Bay watershed.

Allowances on the use of nonpoint nutrient offsets to meet the water quality technical criteria as currently proposed include:

- Up to 25% of phosphorus reductions for new development projects disturbing 5 or more acres or needing to reduce phosphorus by more than 8 pounds.
- Up to 100% of phosphorus reductions for projects (either new development or prior development) disturbing less than 5 acres or needing to reduce phosphorus by less than or equal to 8 pounds.
- Up to 90% of phosphorus reductions for prior development projects disturbing 5 or more acres or needing to reduce phosphorus by more than 8 pounds.

Work by this subcommittee is ongoing to ensure that the recommended language is protective of water quality.

Local Programs:

The term "local program" refers to the methods employed by a locality to manage the quality and quantity of runoff resulting from land-disturbing activities. Local programs include ordinances, permit requirements, policies and guidelines, technical materials, plan review, inspection, enforcement, and evaluation. To authorize a qualifying local program, the Board must find that

the ordinances adopted by the locality are consistent with the VSMP General Permit for Discharges of Stormwater from Construction Activities.

Review of Virginia Technology Assessment Protocol (VTAP)

Lee Hill explained that since the August 12, 2010 Clearinghouse Committee meeting, he has met with DCR and VWRRC staff several times. As a result of these meetings, the VTAP has been updated based on input from the August Clearinghouse Committee meeting and further consideration of the questions raised. The updated VTAP document has several questions embedded within it to be addressed by the Clearinghouse Committee. The decisions reached by the committee in responding to these questions include the following:

- Site information requested in “**Appendix G – Stormwater BMP Demonstration Site Summary**” will be useful in determining how well a site represents conditions in Virginia.
- Include all parameters currently listed in “**Appendix B – List of Parameters for Sampling**” (solids, metals, and nutrients).
- Require total suspended solids (TSS), suspended sediment concentration (SSC), particle size distribution (PSD), and specific gravity data as parameters needed for phosphorus monitoring.
- Additional guidance is needed on the methodology to be used in determining PSD (e.g., specify a method for analyzing particles greater than 250 µm).
- Remove “**Subsection 5.5.1.2. – Parameter Selection for Solids Monitoring**” because it is redundant.
- Require analysis only for total phosphorus (TP), PSD, and percent total volatile solids (TVS) for accumulated sediment in BMPs.
- Keep “**Appendix D – Laboratory Methods**” intact as currently written, except change the title of the table to remove the word “recommended.”
- In “**Appendix E – Use Designation Application Form**,” remove “Question 4” (Pollutant[s] the Technology is Designed to Treat) and reword “Question 13” to more clearly state that certification is given only for phosphorus removal.
- Convert “**Table 6.2 – Information to be included in the technical evaluation report for certification in Virginia**” to a list of bulleted items.
- Change the wording in the first two items from **Table 6.2** by deleting the word “or” (Change to: “Influent and effluent PSD, TSS, and SSC requirements” and “Representative PSDs and gravimetric TSS and SSC measurement to distribute the PSD % volume data for each sample of the influent and effluent.”)

Once the issues above were discussed by the group and consensus reached on these items, Lee Hill opened the meeting for general comments on the VTAP document. He encouraged everyone to voice her/his opinions and concerns and offered to accept written comments until February 11, 2011. Lee explained that the VTAP document will be updated. The updated document and received written comments will be discussed with the director of DCR, David Johnson, and then the document will be sent to the Board for review and consideration.

One representative of a BMP manufacturing company offered that his biggest concern is the number of testing sites needed to receive a general use designation (GUD). He suggested that the number of testing sites be brought down to one for the conditional use designation (CUD)

and two for GUD, explaining that monitoring costs \$250,000 per site. Lee Hill clarified that if a company was awarded a CUD based on total phosphorus data, they would need to only test at two more sites to reach the GUD level (four total sites to receive a GUD, not four additional sites).

The company representative offered that he would rather see the number of installations reduced to 10 for the pilot use designation (PUD) and 20 for the CUD if that would make DCR more comfortable with a reduction in the testing sites.

One member of the Clearinghouse Committee offered that he would be satisfied with two field testing sites for the conditional use designation (CUD) and three sites for the GUD. Two additional committee member voiced support for testing at two sites to receive a CUD and three sites to receive a GUD certification. Another committee member added that she supports the document as currently written: testing at two field sites to receive the CUD, and testing at four field sites to receive the GUD.

Another Clearinghouse Committee member cited that North Carolina set a standard of testing at three field studies and monitoring 10 storms (less than half of what Virginia is proposing), and not one manufactured treatment device (MTD) has gone through their process. Another member voiced that the biggest problem, in his opinion, with North Carolina's approach was the requirement to retrofit.

A different Clearinghouse Committee member asked what would be the advantage to having four sites versus three or two sites for the GUD. Another member asked, "What's the parity of forcing the MTDs to be rigorously tested when other BMPs are not rigorously tested?" He questioned what is gained from field testing over lab testing.

An alternate stressed that ultra-urban areas need MTDs; he added that field testing tells if the product is sized correctly and if it has a clogging issue. A Clearinghouse Committee member responded by asking, "What is and isn't a MTD?" The alternate replied that a BMP could be classified as a MTD if it is sized like a MTD or if it is sized like a traditional system. A different Clearinghouse Committee member suggested that size would not, in his opinion, be the best way to define a MTD. Others asked if text could be suggested for defining a MTD and included in the VTAP.

One Clearinghouse Committee member offered that Virginia runs the risk of reducing innovation if the VTAP is too strict. Others asked how flexible DCR would be in accepting data that did not strictly comply with that set out in the VTAP.

Another issue was raised when the representative of a MTD asked what the fee structure would be. He also wanted to know if the fee for a GUD includes what had already been paid for the PUD or CUD levels (e.g., Would the GUD fee be a flat rate or could the CUD fee be subtracted from it if the CUD fee had already been paid and the BMP had been awarded a CUD). Lee Hill explained that he did not know what the fee structure would look like at this time; DCR does not have the information for how much reviewing the application will cost.

The MTD representative suggested that if the certification process could be shortened, it would be better. He cited the process in “**Figure 4.1 – Flow chart illustrating the certification process in Virginia for stormwater BMPs**” as being too long.

Lee Hill concluded this part of the meeting by requesting that written comments be submitted to Jane Walker (jnewalk@vt.edu) by February 11, 2011.

Next Meeting Dates

The next meetings of the Clearinghouse Committee were set for

April 18, 2011

July 25, 2011

October 24, 2011

January 23, 2012.

Meetings will begin at 10:00 a.m. and may continue until 3:00 p.m. The meeting location will be determined closer to the time of the meeting. Jane Walker offered to request the current room as the Committee’s first choice for a place to meet.

A representative of a MTD requested that since he has been attending meetings could he be added to the contact list to receive messages about upcoming meetings and meeting cancelations. Lee Hill offered that those who have been participating and attending the meetings could request to be added to the list for receiving messages about upcoming meetings.

With no further business, the meeting was adjourned.