

**Virginia Stormwater Best Management Practice (BMP)  
Clearinghouse Committee Meeting**

Henrico County Training Center, Henrico, VA  
January 28, 2013

Meeting minutes by Jane Walker

**Committee Members Present**

Joe Battiata, Center for Watershed Protection  
Scott Crafton, Virginia Department of Conservation and Recreation (DCR), Committee Chair  
Ryan Janoch, Stormwater Equipment Manufacturers Association (SWEMA) /Terraphase  
Engineering, Inc.  
Greg Johnson, City of Virginia Beach  
Chris Kuhn, Williamsburg Environmental Group (WEG)  
Roy Mills, Virginia Department of Transportation (VDOT)  
Scott Perry, Imbrium  
Jim Rakestraw, Stafford County  
Jim Rice, Prince William County  
Jenny Tribo, Hampton Roads Planning District Commission

**State Agency Personnel Present**

Ginny Snead, DCR

**Technical and Administrative Personnel Present**

David Sample, Biological Systems Engineering, Virginia Tech, DCR's technical evaluator  
Jane Walker, Virginia Water Resources Research Center (VWRRC), committee administrative  
assistant

**Others Present**

Derek Berg, Contech Engineered Solutions  
Steve Curtis, Luck Stone  
Chris French, Filterra  
Vance Fuller, Filterra  
Dave Garrett, ADS  
Randy Hardman, Hanover County  
Mindy Hills, Filterra  
Marc Lelong, Kristar  
Bill Nell, Thirsty Duck  
John Newton, Henrico County  
Norman Rainer, Dynaphore, Inc.  
Steve Rossi, Concrete Specialties, Inc.  
Corey Simonpietri, ACF Environmental  
Sean Simonpietri, EXACT Stormwater Management  
Terry Siviter, Rotondo Environmental Solutions LLC.

### **Call to Order**

Scott Crafton of DCR, Clearinghouse Committee chair, called the meeting to order. Everyone introduced herself or himself.

### **Minutes of the November 13, 2012 Clearinghouse Committee Meeting**

No additions or corrections to the minutes of the November 13, 2012 Clearinghouse Committee meeting were suggested.

### **DCR Progress Report about VTAP**

Scott Crafton reported that the Virginia Soil and Water Conservation Board adopted the proposed regulations, “Procedures for Reviewing and Approving Design Specifications and Pollutant Removal Credits For BMPs,” at its December 11, 2012 meeting. These proposed, fast-track regulations reference the *Virginia Technology Assessment Protocol (VTAP)*, which was approved by the Clearinghouse Committee at its November 13, 2012 meeting.

Scott Crafton explained that all proposed regulations must have an economic impact analysis and offered that DCR is in the process of working on this analysis regarding the proposed fast-track regulations. Scott has requested field testing cost data from several BMP manufacturers and SWEMA so that DCR can present a cost per storm basis. The economic impact statement will be submitted with the regulations for review by the current Administration, and all aspects of the proposed regulations will be open for public comment, including the economic impact part.

Scott Crafton explained that if the proposed fast-track regulations pass without delay, they could go through, from start to finish, in five or six months. After review by the Administration, the regulations will be published for a 30-day public comment period. If public comments are received that require substantial time to address, the six-month timeframe could be extended. The timing is important because the new stormwater regulations go into effect on July 1, 2014, and these regulations state that except for grandfathered practices, only BMPs that are approved and listed on the Clearinghouse website can be used. Products approved for testing will be listed on the Clearinghouse website, but it appears that it could be fall 2013 or later before products will begin to be listed on the Clearinghouse website.

Scott Crafton briefly reviewed the assessment process: Applicants will submit a complete application to DCR regarding a specific manufactured treatment device (MTD). The application will be reviewed first by DCR’s technical evaluator, who will recommend a use designation and pollutant removal credit. Once reviewed by the technical evaluator, the applicant’s technical evaluation report will be posted on the Clearinghouse website for a 30-day public comment period. The Clearinghouse Committee will review all obtained information and provide its recommendations. The Agency’s director or designee will also review all information and recommendations and will approve or disapprove a use designation and pollutant removal credit. Once the Agency approves a MTD for testing, the applicant needs to select a testing site, develop a QAPP (quality assurance project plan), and have the QAPP approved by the Agency. Once the QAPP is approved, a two-year test period will begin and the MTD is permitted for use in Virginia. Because the authority of the Agency’s director is given in the proposed regulations, these regulations must pass before the assessment process can open.

A Committee member commented that at one time, DCR was considering adding MTDs that function as those listed in the handbook – hydrodynamic separators and filters – so that stormwater management (SWM) authorities would have more options of products to use. Given that the assessment process was expected to open during the early months of 2013, this plan was abandoned. The Committee member questioned if the plan should be resurrected if the opening of the process will be delayed. Scott Crafton clarified that the existing regulations allow localities to use innovative BMPs so between now and July 1, 2014, the use of such products will be allowed on a case-by-case basis.

Another Committee member asked if the extension to use products not listed in the handbook carries over to the requirements in the construction permits, adding that in the past, developers had to use the products listed in the Blue Book. Scott Crafton speculated that he would expect that it would, but he was not certain.

A member of the public commented that at one time DCR was considering posting language on the Clearinghouse website to alert SWM authorities that products other than those listed in the handbook could be used; he suggested that DCR reconsider doing this if the opening of the evaluation process is delayed. Scott Crafton agreed that doing so would be advisable. A Committee member suggested requiring manufacturers of devices not currently included in the handbook to complete the online questions in the BMP Registry if they wanted reciprocal credit.

Scott Crafton stated that the proposed regulations have a section to address manufactured pretreatment devices. As proposed, applicants can apply for use as a pretreatment device in Virginia with data obtained through the Technology Acceptance Reciprocity Partnership (TARP) or Technology Assessment Protocol – Ecology (TAPE). Virginia may be able to give a reciprocal credit, but the credit would be for sediment (total suspended solids, TSS) removal, not phosphorus removal. If the manufacturer wants phosphorus (P) removal credit, the product will need to be tested through the VTAP. It is up to the manufacturer to decide whether to try for P removal credit or sediment removal credit. Someone asked if a product is currently listed in the handbook, would it need to undergo testing. Scott Crafton explained that if the product is to be used just for pretreatment, then the product would not need to undergo additional testing if previously approved by TARP or TAPE – i.e., the pretreatment application process could be followed. If nutrient removal credit is desired, however, the product would need to go through the VTAP testing process. A member of the public noted that the TARP, TAPE, and VTAP protocols differ so that approval would need to relate back to the testing that was performed (e.g., sizing, rainfall intensity, etc.). Scott Crafton agreed with this and noted that DCR's Technical Evaluator would consider the parameters and account for them in any recommendation to DCR regarding the device.

A member of the public requested that DCR clarify its position on the time period so that manufacturers have a better sense of direction when interacting with communities.

A Committee member commented that thus far, the discussions have centered on two classifications of products: hydrodynamic separators and filters. He added that there are many other types of innovative products that could be useful for treatment. Scott Crafton requested

assistance for how to test other types of BMPs and explained that this topic would be discussed in more detail later during the meeting.

Scott Crafton explained that the information associated with the proposed regulations would be posted on DCR's website, and the Clearinghouse website would link directly to the appropriate DCR page. He also added that DCR has created a new email address, [vtap@dcr.virginia.gov](mailto:vtap@dcr.virginia.gov), whereby questions and applications can be submitted.

### **Pending Product Presentations**

Scott Crafton explained that several individuals representing non-MTD BMPs have approached DCR requesting the opportunity to present their research findings. For example, Virginia Beach is using the harvesting of phragmites as a non-proprietary means to remove nutrients. As another example, Bill Nell works with Thirsty Duck, a product that is not a treatment device but is a flow-control device. Because DCR has not considered how the presentations should be conducted, what information we are looking for, and what process will occur beyond the initial presentation, DCR has asked that these individuals wait until the next meeting to present their findings.

Scott Crafton explained that until a process is developed and in place for assessing non-MTD BMPs, DCR will ask for presentations regarding the functioning and testing of the BMP and will rely on input from experts outside the Committee in addition to input from the Committee to make decisions.

### **Development of Testing Procedures for Non-Proprietary BMPs**

Scott Crafton stated that Part II of the proposed regulations addresses non-proprietary BMPs (see Virginia Regulatory Town Hall, minutes of the December 11, 2012 Soil and Water Conservation Board meeting: <http://townhall.virginia.gov>). Scott explained that a subcommittee is needed to develop testing procedures for non-proprietary BMPs. He added that the subcommittee could also discuss how to address other non-treatment BMPs. He asked interested individuals to join the subcommittee by sending an email message expressing this interest to him (send to [vtap@dcr.virginia.gov](mailto:vtap@dcr.virginia.gov)). The subcommittee will likely have its first meeting in mid-to-late March. Scott Crafton stated that the subcommittee membership is open to anyone, and he asked Jane Walker to distribute an invitation by email to all Committee members and those who have expressed interest in the Clearinghouse website.

Scott Crafton noted that DCR acknowledges past comments made by representatives of proprietary MTDs that suggest the processes be the same for both proprietary MTDs and other BMPs; he added that, as a matter of policy, DCR disagrees with this assessment for two main reasons: (1) there is a large amount of data for many non-proprietary BMPs from years of testing throughout the U.S.; and (2) there is no financial incentive to test non-proprietary BMPs and no funding source readily available for such testing. Furthermore, researchers in other states have no incentive to follow a Virginia-prescribed process unless the process is based on logical steps that are already being performed. The subcommittee will need to develop a process that acknowledges these differences. Scott pointed out that DCR is therefore not interested in revisiting the MTD manufacturers' position on this matter when the subcommittee meets. However, the subcommittee will be able to draw from the VTAP document and lessons learned

during the development of that document. Scott added that he envisions that another expert panel will likely be convened to provide insight and help develop this document as well.

A Committee member asked if EPA (U.S. Environmental Protection Agency) will establish efficiencies for non-proprietary BMPs as part of the Chesapeake Bay TMDL (total maximum daily load). Ginny Snead offered that up to now, EPA has been using generic efficiencies. Scott Crafton added that for the TMDL, DCR will report its removal efficiencies to EPA, and the other Bay states will report their efficiencies to EPA. EPA is then attempting to normalize the different state reports through graphs and charts; the normalized information will be used in the Bay model to determine if progress is being made. Scott added that the approach makes sense because the model uses averages and because the assumptions upon which the model is based are acknowledged. Ginny Snead offered that the efficiencies to be developed are part of a separate process that deals with state regulations. A different Committee member expressed concern that MS4 (Municipal Separate Storm Sewer Systems) localities, which must report to both EPA and DCR, may be faced with a confusing scenario if efficiencies developed by the state differ from those developed by EPA.

A Committee member asked for more specifics on the vision for the goal of the process. He asked, "Is the process intended to compel change? Will someone need to apply for credit or will Committee members search for data and tweaks to established designs?" Scott Crafton replied that he does not foresee submissions of incremental tweaks in designs. Instead, he expects that over periods of 5-10 years various academic researchers around the Country may test new hypotheses regarding different non-proprietary BMPs, and periodically DCR may review the on-going research and consider updating design specifications when it is likely that significant benefits may be achieved (improved pollutant removal performance, smaller sizing, lower costs, etc.). At such times, DCR will probably be the entity proposing approval of an updated design. Also, Scott expects that the Committee will be asked to evaluate new practices, such as regenerative wetlands, floating wetlands, or stream restoration. A Committee member added that each practice will need an advocate, such as the City of Virginia Beach advocating for the use of phragmites harvesting.

Scott Crafton explained that the Center for Watershed Protection is in the process of making corrections and adjusting the specifications for the non-proprietary BMPs already listed on the Clearinghouse website. These changes will need to be brought before the Committee. Even though no fundamental changes in the removal credits awarded are expected, the Clearinghouse Committee will need to review the changes, and the changes will be advanced to the Agency's director. Any approved changes will be listed as a new version, with a new date. Both versions will be listed (the current version is listed in the regulations, but the second version will be promoted for its improvements). A Committee member stated that non-proprietary BMPs are much harder to manage because DCR, by default, becomes the owner. Scott Crafton added that traditional sources of funding to test such non-proprietary BMPs no longer exist, which makes for an additional challenge.

### **Clearinghouse Committee Charter: Possible Changes**

Scott Crafton stated that DCR recognizes the importance of having a quorum for voting purposes at all future meetings. Therefore, the Agency plans to review the Clearinghouse Committee

Charter and recommend changes to it, particularly the sections dealing with the structure of the membership and the number of members. Secondly, several manufacturers have questioned having a manufacturer on the Committee because the member will be unable to vote on a device owing to a conflict of interest. Scott noted that up to this time having a representative of a manufacturer on the Committee has been very helpful and beneficial in developing the assessment process. Also, some members have requested participating in meetings via teleconferencing and wondered if the charter allows for such participation. Scott stated that any changes to the Charter need to be approved by the Committee, and he expects that any recommended changes will be voted on at the next meeting or this summer.

### **Clearinghouse Committee 2013-2015 Member Nominations**

Jane Walker reported that the terms of six members end following this meeting: Dean Bork, Roy Mills, Scott Perry, Jim Rice, Colleen Rizzi, and Jae Yoon. All are eligible to serve another three-year term. Scott Crafton asked these members to let him know if unable to continue to serve. He noted that Scott Perry and Ryan Janoch are representing manufacturers and therefore may not be able to serve if the Charter is altered. If anyone would like to nominate someone, this is the time to do so. DCR attempts to balance the membership among the different regions of the state as well as the different stakeholder groups.

### **Clearinghouse Website Changes**

Jane Walker announced that the outdated draft of the VTAP document has been removed from the Clearinghouse website. She stated that once DCR posts the current version of the VTAP and the proposed regulations on its website, the Clearinghouse website will have a direct link to that particular page of the DCR website.

Jane Walker explained that for various reasons the development of several pages envisioned for the Clearinghouse website has been delayed. Therefore, these pages have been temporarily removed: BMP Selection Tools, BMP Costs, and Frequently Asked Questions (FAQ). Once the material for these pages is developed, they will be added to the site.

A site map was recently developed and added. Several subcommittees have developed material for posting on the “References and Tools” page and on the “Operation, Inspection and Maintenance” page, but this material has not been approved by DCR at this time so is not yet posted. Jane is in the process of checking and updating the links on these two pages. For example, she found 30 broken links on the References and Tools page since its last update (in October 2011). She will forward any questions she has to members of the Clearinghouse Committee and members of the respective subcommittee. Jane requested that anyone with knowledge about websites regarding additional BMP evaluation programs (city or state program) send this information to her for posting on the References and Tools page.

Scott Crafton explained that because the Virginia Soil and Water Conservation Board has adopted the proposed regulations and its technical document (VTAP), DCR plans to post PDF versions of these documents on its website. He added that DCR also plans to develop and post a policy statement on the use of alternative BMPs until July 1, 2014, as requested. He noted that it will likely take several weeks before the PDFs will be posted. He noted that the documents will

be available through the Clearinghouse website by a direct link to the DCR page containing the information.

A Committee member asked if the Clearinghouse website will have links to the laws and the regulations regarding stormwater management and erosion and sediment control. Jane Walker stated that the Clearinghouse website has a page dedicated to the stormwater management regulations. Scott Crafton offered that, if needed, links could be added to the References and Tools page.

### **2013 Committee Meetings**

Scott Crafton announced that unless he hears compelling reasons not to continue meeting on the 4<sup>th</sup> Monday of April, July, October and January, the meeting dates for 2013 will be on April 22, 2013; July 22, 2013; October 28, 2013; and January 27, 2014. The location of these meetings will be announced closer to the meeting date.

### **General Comments**

A member asked for an outline of what DCR expects for a BMP presentation at the next Clearinghouse Committee meeting for the BMPs to be considered. Scott Crafton offered to meet outside the current meeting to consider this question in more detail. He envisions that the presentations will, in general, include an overview of the BMP, the process used to gather data, the test results, and recommendations regarding performance.

Scott Crafton suggested that the two pilot-case applications and presentations to be considered at the next meeting be submitted to DCR on CDs. He advised the advocates to make enough copies of their CD to be distributed to all Committee members. Someone asked if the report and presentation could be posted on a website, and Scott Crafton replied that he thought it could be. A Committee member requested that DCR make a policy that the report and presentation be in the hands of Committee members at least one-week prior to the meeting.

Another Committee member asked for more details on the presentation procedures: “Who gets to present and what is the length of period allowed for each presentation?” Scott Crafton reiterated that the process is still being established. The phragmites harvesting and Thirsty Duck BMPs have agreed to serve as pilot cases. Kristar has requested to be in line for having one of their products reviewed. Four to six other manufactures indicated they would have a BMP application ready to submit in the next three to six months.

A Committee member asked for an update on the status of the Runoff Reduction Method (RRM). Scott Crafton replied that the spreadsheet is included in the stormwater management regulations so will be required to be used starting July 1, 2014. Scott noted that DCR is encouraging localities to begin using it now. Because the RRM and new BMPs are linked, localities that use the new BMPs are required to use the RRM spreadsheet. The spreadsheet version is being updated by the Center for Watershed Protection. Similarly, the redevelopment and the rainwater harvesting spreadsheets are being updated and will likely be posted as new versions. The original version is the one that is incorporated into the stormwater regulations. The answer one gets when using the original version will be basically the same as what one gets when using the updated version. Some of the numbers have been somewhat rounded off, which might give

slightly different answers. The updated version is simply more user friendly. Scott Crafton stated that the new version will not be official until it can be amended into the regulations. However, DCR intends to accomplish that through a fast-track regulation process that can be completed prior to July 1, 2014, after which the new regulations and tools must be used.

A member of the Committee asked about the timeframe for updated versions of the non-proprietary BMP specifications listed on the Clearinghouse website. Scott Crafton stated that the Center for Watershed Protection has completed the updated drafts for all except for the bioretention and rainwater harvesting specifications. All specifications are expected to be complete by the end of February. The Clearinghouse Committee will likely have the opportunity to review the updated versions prior to the next meeting, and members should plan to discuss them at the next meeting. The modified BMP design specifications will not be posted on the Clearinghouse website until they have been evaluated by DCR staff, DCR's technical evaluator, and the Clearinghouse Committee and approval has been granted by DCR's director.

A Committee member announced that the Virginia Center for Transportation Innovation and Research is testing pervious asphalt in a parking lot in Prince William County. The purpose of the research is (1) to look at plan design to make sure it can meet all the water quality criteria and (2) to evaluate maintenance alternatives (frequency of cleaning, etc.). This test site is expected to be installed this spring.

With no further comments or questions, the meeting was adjourned.