

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

Virginia Department of Forestry Building, Training Room  
Charlottesville, VA  
October 22, 2012

Meeting minutes by Jane Walker

**Committee Members Present**

Joe Battiata, Center for Watershed Protection

Dean Bork, Department of Landscape Architecture, Virginia Tech

Scott Crafton, Virginia Department of Conservation and Recreation (DCR), Committee Chair

Joanna Curran, Department of Civil & Environmental Engineering, University of Virginia

Jacob Dorman, City of Lynchburg

Ryan Janoch, Stormwater Equipment Manufacturers Association (SWEMA) / Terraphase Engineering, Inc.

Greg Johnson, City of Virginia Beach

Chris Kuhn, Williamsburg Environmental Group (WEG)

Craig Moore, Virginia Department of Transportation (VDOT)

David Powers, WEG

Colleen Rizzi, Loudon Water

David Sample, Biological Systems Engineering and Occoquan Watershed Monitoring Laboratory, Virginia Tech

Joe Wilder, Frederick County Department of Public Works

**DCR Staff Present**

Robert Bennett

Dave Dowling

Ginny Snead

**Virginia Water Resources Research Center (VWRRC) Staff Present**

Jane Walker

**Others Present**

Derek Berg, Contech

Nick Burns, Hydro International

Chris French, Filterra

Matt Gooch, Office of the Attorney General

Tom Grizzard, Department of Civil Engineering, Virginia Tech

Randy Hardman, Hanover County Department of Public Works

Lee Hill, Joyce Engineering

Richard Jacobs, Culpeper Soil and Water Conservation District

Whitney Katchmark, Hampton Roads Planning District Commission, alternate for Jenny Tribo

Edward Kay, Imbrium Systems, alternate for Scott Perry

Marc Lelong, Kristar

Bill Nell, Thrifty Duck

Norman Rainer, Dynaphore, Inc./Cleanway Environmental Partners

James Rakestraw, Stafford County, alternate for Rishi Baral

James Rice, Prince William County, alternate for Madan Mohan

Steve Rossi, Concrete Specialties, Inc.

Corey Simonietri, ACF Environmental

Terry Siviter, Rotondo Environmental Solutions LLC.  
Mark Williams, Luck Stone Corp.

### **Introductions**

Scott Crafton of DCR, Clearinghouse Committee chair, called the meeting to order and introduced Robert Bennett, Director of the Division of Stormwater Management at DCR. Robert Bennett thanked all members for their hard work. He highlighted the importance of the work by the Clearinghouse Committee and provided background history, stating that DCR realized the need for a new Stormwater Management Handbook (Handbook) and a need for how to incorporate new stormwater BMPs into the Handbook as the science develops. He believes the efforts of the committee will make a big difference in stormwater management in Virginia.

Following Robert Bennett's introduction, everyone introduced himself or herself and his or her represented affiliation.

### **Minutes of the Previous Meeting**

Scott Crafton announced that draft minutes of the Clearinghouse Committee meeting held on July 23, 2012 were distributed prior to the meeting and asked if there were any corrections or additions to the minutes. There were not any comments pertaining to the minutes. A representative of a stormwater manufacturer stated that he did not receive the minutes and requested a copy.

### **DCR Policy Decisions about VTAP**

Scott Crafton explained some of the policy decisions by DCR that have resulted in changes to the Virginia Technology Assessment Protocol (VTAP).

### **Regulatory Process**

Scott Crafton began by offering that DCR's stormwater management believes the VTAP process meets the definition of a regulation. Once adopted by the Clearinghouse Committee and the Soil and Water Conservation Board, DCR plans to make the VTAP part of the regulations through a fast-track regulatory process. Given the years of stakeholder input from the public and those affected by the protocol, DCR believes the protocol is eligible for the fast-track process, meaning it should take six to nine months instead of 18 to 24 months to become regulations. The DCR hopes the process can occur even quicker than a typical fast-track process. If the regulatory action is filed in December 2012 as expected, the application process could begin shortly after the beginning of the new year, and the actual testing process could begin in late spring or summer of 2013.

### **Fees**

DCR believes that it has the authority to establish fees through a regulatory action. It is likely that until the regulation is in place, that fee payments will be deferred until the end of the application review process. Someone asked what the fees would cover. In reply, Dave Dowling of DCR reported that the Agency would need to establish contracts to have the applications, status reports, and other items reviewed by professional scientists. Scott Crafton added that DCR has a contract with the VWRRC for administrative assistance and website development of the Clearinghouse. The Agency needs to have a way to pay these contractors.

A placeholder fee of \$10,000 was suggested by DCR management, citing that DCR believes a fee at that level would provide the operating funds to establish the program. Dave Dowling added that should such a fee be added into the regulations, we would likely revisit the fee structure in two years so the fee could be adjusted up or down depending on the actual costs to administer the program. Scott Crafton requested feedback from the vendors as to the appropriateness of this initially proposed level.

Representatives of two manufacturers present reported they would find a \$10,000 application fee acceptable. A representative of a manufactured treatment device (MTD) stated that his company would be more comfortable with fees established following a cost-benefit analysis. Another representative of a MTD manufacturer asked: If the place-holders fees are set too high, would DCR repay companies that paid the higher fee? Scott Crafton offered to look into this as he was unsure if the Agency has a way to pay rebates.

#### Limitation of Installations

DCR management decided not to limit the number of installations allowed once the testing period starts. As defined in the VTAP, the testing period begins once the first Quality Assurance Project Plan (QAPP) is approved. Because of the new policy – whereby installations are not limited during testing – and to help even the playing field, the DCR decided that a guidance document to address MTDs listed in the 1999 Handbook is not needed.

#### Regulations vs. Guidance Document

The structure of the current VTAP document includes both policy and technical aspects. The VTAP needs to be divided into two documents: one document will become the regulations and the other document will be the guidance referenced in the regulations. The VTAP adoption motion by the Clearinghouse Committee will therefore need to allow DCR staff the flexibility to separate the document into regulations and technical guidance documents.

#### Voting on the VTAP

Scott Crafton explained that according to the Clearinghouse Committee Charter, 60% of the members of the Clearinghouse Committee must be present at a meeting to have a quorum. Scott announced that the meeting is shy of reaching a quorum by one member so unless someone else arrives, a vote would not be taken at the meeting. Scott added that according to the charter, a member may send a representative to the meeting, but the alternate cannot vote. A member asked if votes could be established by proxy. DCR staff replied that they would look into the matter.

November 13, 2012 was suggested as a possible meeting date to vote, but another date may be needed if a quorum is not possible on November 13<sup>th</sup>. A member noted that the committee will become a working committee where a quorum would be needed at each meeting in order to allow for votes in establishing the use designations and pollutant removal credits. It would be a disservice to the applicants if there was not a quorum at each meeting. Without a quorum, all votes would need to be pushed off to the next meeting. Scott Crafton added that the Charter may need to be altered.

#### Other Topics Discussed

Scott Crafton clarified that the current stormwater regulations will not go into effect until July 1, 2014 so the six MTDs listed in the Handbook and Technical Bulletin #6 can continue to be installed until that date. Establishing the assessment process as quickly as possible is therefore of greatest importance to those MTDs not currently listed in the Handbook or Technical Bulletin. A representative of the company associated with Technical Bulletin #6 stated that DCR plans to revoke the bulletin once the company is approved for testing through the VTAP. DCR staff explained that the Agency plans to revoke the bulletin following the Board meeting in December 2012, but the rescindment would not become effective until a later date. The representative of the company requested that DCR provide an illustration of how the process would work with established target dates so the company can be assured that the transition will be seamless.

A committee member requested clarification that products not listed in the current Handbook could be installed if approved by the local government. Scott Crafton agreed with the interpretation but noted

that local governments look to DCR for assurance that the product works before approving it. Thus, manufacturers of products not listed in the Handbook have a much harder time convincing local governments to approve their use. The member requested that DCR publish a policy statement that MTDs listed in the Handbook are there because they existed at the time of publication of the Handbook and have not been tested by DCR or received an endorsement by DCR. He further suggested that DCR announce that it is in the process of establishing an assessment program and that no products have gone through the process to date. He noted that many are confused about the Clearinghouse and the status of some MTDs. Scott Crafton offered that DCR would consider this request and possibly develop a policy statement that could be published on the Clearinghouse website.

A representative of a device used for flow control offered to submit an application for a test run of the VTAP process. The product would not need a phosphorus removal credit, but he would like to be listed on the Clearinghouse website. DCR staff explained that to get the process moving forward, the VTAP protocol was altered to focus on phosphorus so the latest edition of the VTAP has removed the text related to peak rate control. Scott Crafton stated that he was unsure how to answer the request at this time. The individual related that he is being told by localities that he needs to gain VDOT approval and be listed on the Clearinghouse website. Scott believes that after July 1, 2014, the product would need approval by the agency director and be posted on the Clearinghouse website but not until then. A member of the Clearinghouse Committee suggested that the committee could evaluate such products without going through the formal VTAP process.

### **Review of the VTAP**

David Sample, the Clearinghouse Committee member who headed a panel of academic experts that helped write the VTAP, and Jane Walker of the VWRRC went through the most recent version of the VTAP in an attempt to explain where and why changes were made to the document. In addition to making changes that reflect the DCR policy decisions, changes were made following input from the public. A document that lists the questions and comments in reference to the VTAP as received from the public and the DCR responses to the submissions was distributed prior to the meeting (Appendix A). Two versions of the VTAP document were also distributed prior to the meeting: one version shows where changes were made and the other “clean” copy incorporates all of the suggested changes. Jane and David went through the version with markups (Appendix B). Text associated with questions posed by the public are indicated with comments on the side. Most text that has been altered was done so using MSWord’s “track changes.” When this feature was not used for additions to the VTAP, the text is highlighted. Highlighting is also used to call attention to changes. Jane Walker stated that she attempted to remove redundant statements within the document and reorganized parts of the document so there appear to be more changes than there are.

DCR staff requested that the Board approval date be removed from the cover until the VTAP is actually approved. Dave Dowling stated that the language throughout the document may be tweaked by DCR to be sure the VTAP conforms to other state standards; however, these changes are not expected to affect the functionality of the process.

As a general comment, a committee member requested that instead of using the word “should” use the phrase “it is recommended.” Dave Dowling prefers the term “shall” instead of “must” because the VTAP will be part of the regulations. Dave offered that the use of “shall” and “may” would be helpful.

### **Section 1-- Introduction**

Jane Walker summarized the changes made to this section of the VTAP prior to the meeting:

- Approval is only for MTDs (not all BMPs) – A representative of a MTD manufacturer noted he was disappointed that non-proprietary BMPs would not be assessed at this time. Scott Crafton

noted that DCR will consider addressing the testing of non-proprietary BMPs, but given some of the differences that apply to them, there is insufficient time to do that adequately as part of this VTAP approval process.

- A definition for MTD was added.
- The document is only for evaluating MTDs that control phosphorus.
- The role of the Board was added to **Section 1.4 -- Roles and Responsibilities**.
- Proponents of the technology must only notify the Agency of installations made in Virginia during the testing period.
- Language was added regarding how confidential information will be handled.

The following additional changes were requested at the meeting:

- Because approvals will be made by the director of DCR, refer to the Agency director title once and from then on, simply refer to the “Director.”
- List the agency name, DCR, once and from that point forward, refer to it as the “Agency.”
- Add text to **Section 1.5 -- Protocol Limitations, Release of Liability, and Disclosure** stating that if DCR contracts with another entity, it will establish a confidentiality agreement with the contracted entity prior to sharing confidential information.

### Section 2 -- BMP Certification Designations

The changes to Section 2 prior to the meeting included the following:

- The number of installations allowed in Virginia will not be limited during the test period, but the testing period for the pilot use designation (PUD) and conditional use designation (CUD) is limited to 24 months from the date the first QAPP is approved (the Agency may grant extensions to the testing period, if needed).
- Table 2.1 (summary of the testing requirements) was updated to include only one field study that focused on total phosphorus (TP) to obtain a CUD.
- To receive a general use designation (GUD), the test sites must represent urban stormwater conditions expected in Virginia; conditions representative of those in Virginia are recommended to receive a PUD or CUD but are not required.

Discussions pertaining to Section 2 of the VTAP focused on the following topics:

#### *Table 2.1*

Much of the discussion focused on the accepted protocols that could be used to receive the CUD and/or GUD. Some representatives of MTD manufacturers were vocal in their support to allow the use of the Technology Acceptance Reciprocity Partnership (TARP) to earn the CUD, provided the testing focused on TP removal. Dave Dowling offered to determine if dates are required or not for the specific protocols although he suggested that it is likely that they are necessary. A representative of a MTD noted that the TARP reference should be the 2003 version, not the New Jersey Department of Environmental Protection’s 2009 document (which consists of New Jersey-centric amendments to the TARP). Committee members and representatives of MTD manufacturers discussed the costs and benefits of requiring two field tests that followed the VTAP to receive a GUD.

The committee recommended the following changes:

- Update the CUD status in Table 2.1 to allow the use of TARP when the testing monitored TP, i.e., cite “VTAP, TARP, TAPE and other protocols accepted by the Agency.”
- Update the GUD status in Table 2.1 – 2 field; TP; and “At least one test site must follow VTAP.”

To reflect the updates in Table 2.1, the following sections also need to be updated: **2.1 -- PUD, 2.2 -- CUD, 2.3 -- GUD, and 2.4 -- Applying for the Appropriate Use Designation.** In addition, the pollutant removal credit may not exceed 30% for the PUD.

*Table 2.2 (urban stormwater test conditions for approval in Virginia)*

One of the public comments suggested listing a range of influent phosphorus concentrations expected for urban stormwater in Virginia. The committee heard input from the manufacturers present at the meeting on this topic. Following several minutes of discussion, Scott Crafton proposed that Table 2.2 not be updated to include a range or ranges of typical TP concentrations required for test conditions. There appeared to be general agreement with this proposal because influent characterization is very site-specific.

*Special Issues*

An alternate asked if the VTAP has provisions for how to handle special issues such as high water tables. In reply, David Sample offered that the proponent is told to list site requirements and limitations of the MTD in the application. Scott Crafton added that testing is not being required for different types of sites. A committee member offered that it is the responsibility of the proponent to provide the necessary information, and it is the responsibility of the locality to review the provided information before deciding whether or not to allow MTDs to be used within that locality. The VTAP is not designed to cover all circumstances; it is just an attempt to level the playing field.

*Locality Responsibilities*

A plan reviewer and approver in attendance at the meeting asked what affect the Agency's stance of not requiring the removal of MTDs found to be underperforming would have on localities. Would localities need to require that such MTDs be removed and replaced with other BMPs in order to meet the desired performance standard? DCR staff explained that when the plan approval process is being performed under the general construction permit, and the BMP is designed and installed as the Agency specifies, the stormwater management (SWM) rules have been satisfied from a compliance point of view. The Agency will assume that the load meets the 0.41 pounds per acre per year load of phosphorus. If the locality is a MS4 (Municipal Separate Storm Sewer System) and especially if it is under an individual permit, the U.S. Environmental Protection Agency (EPA) may require additional performance verification. Some compensation may be needed, but at this time, no one knows what that might be. Localities have the option to allow or disallow the use of MTDs within the locality and have the ability to place conditions on installed MTDs.

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Note: The meeting broke for lunch, and following the break, the discussion concerning updates to the VTAP continued.

Section 3 -- Assessment Process

Jane Walker noted that text was added to clarify when suspensions and cancellations of use designations would be needed.

Dave Dowling stated that the required deadlines will be articulated in the regulations. Jane Walker explained that because the Agency director will be the person to establish use designations and pollutant removal credits, more time was added to the estimated time for the approval process, i.e., extended from 15 days to 45 days following the recommendation by the Clearinghouse Committee. The flow chart was updated to show this change and was altered to illustrate that the testing period begins once the Agency approves the first QAPP.

A member of the committee asked for clarification that DCR would begin to review completed applications in the order that they were received. The committee did not request changes to Section 3 of the VTAP.

#### Section 4 -- Field Monitoring and Data Evaluation

David Sample explained that the panel of academics that originally proposed the field methodology was asked by DCR to review the submitted questions and suggestions posed by the public regarding the VTAP. He explained that the panel met three times to discuss how best to address these questions. David summarized the updates made to this section of the VTAP following the meetings of the panel.

#### *Section 4.2 -- QAPP and Documentation*

David Sample stated that the panel had requested additional input on acceptable methods for determining peak flow rate. The input David received indicated that the use of the calculation in Virginia's Handbook is a good approach. A representative of a MTD manufacturer clarified that the Virginia approach is different than that taken by New Jersey. Several representatives of MTD manufacturers suggested removing text that other methodologies could be used with approval by the DCR.

David Sample explained that the panel felt that the use of accredited laboratories is important to provide an assurance of standardization. To comply with Virginia regulations, accreditation or certification through the Virginia Environmental Laboratory Accreditation Program (VELAP) is required. However, if a constituent does not have a VELAP-certified procedure, it will be reviewed on a case-by-case basis as part of the QAPP. A representative of a MTD manufacturer stated that he believes VELAP, National Environmental Laboratory Accreditation Program (NELAP), and any state accreditation program, such as California, should be allowed to be used. He suggested that DCR should talk to the Department of Environmental Quality's (DEQ's) quality assurance officer, James Beckley; Jane Walker noted that she had talked to James Beckley about this issue previously. The individual suggested that DCR obtain written response from DEQ on this matter. As an alternative approach, it was suggested that the Division of Consolidated Laboratory Service (DCLS) laboratories could be used, but others explained that these labs could not be used for commercial purposes.

David Sample commented that QAPPs not only need to address the general requirements in the QAPP section of the VTAP (Section 4.2) but also specific requirements requested in **Sections 4.3 -- Monitoring Program Design** and **Section 4.5 -- Sample Collection, Analysis, and Quality Control**.

#### *Section 4.3 -- Monitoring Program Design*

David Sample explained that Figure 4.1 (sample effort needed for paired testing) was removed from the VTAP. It had previously been included to help explain the reason for monitoring sequential storms but was being removed because it raised several questions from the public thereby causing more confusion than clarification. He added that only 18 qualifying storms are needed if the confidence level exceeds 50% and if approved by DCR; otherwise 24 qualifying storms must be sampled. David Sample noted that the VTAP has relaxed the "ten consecutive storm" requirement to five paired storms (for a total of ten events), which consist of back-to-back events. It was suggested to add the term "qualifying storms" to the sentence describing the minimal number of back-to-back storms.

Two representatives of stormwater MTD manufacturers voiced a preference for the updated version of the VTAP that requires one storm with more than 1-inch of rainfall and three storms with more than 0.5-inches of rainfall. They were not concerned with leaving in or taking out the 15-inch minimal total of all storms, stating that meeting such a goal would be easy if monitoring 24 storms and meeting the other

requirements. A third representative of a MTD manufacturer stated that he prefers to eliminate the 15-inch minimal requirement.

#### *Section 4.4 -- Monitoring System Design and Installation*

A change in the VTAP allows for the use of area-velocity (AV) meters to monitor flow. David Sample clarified that if AV meters are used, the devices must be calibrated according to the equipment manufacturers' guidelines and an estimate of its accuracy of flow at the given site must be provided (estimate that the equipment will range within plus or minus [ $\pm$ ] a given amount). A representative of a manufacturer requested that DCR consider listing a threshold over which the device should not be used. Scott Crafton clarified that the commenter is looking to minimize subjectivity as much as possible. David Sample commented that these issues will be sorted out prior to testing in the QAPP approval process.

#### *Section 4.5 -- Sample Collection, Analysis, and Quality Control*

A representative of a MTD manufacturer requested that the document be clarified to differentiate between flow that was diverted from entering the MTD (i.e., external bypass) and flow that entered the MTD but was not treated (i.e., internal bypass). David Sample agreed that DCR should modify the language of the VTAP to meet this request. The language was intended to avoid cases that may affect the mass balance of the system; diversions before flow measurements do not affect the mass balance.

David Sample stated that one of the public comments indicated that measuring more than TP for each sample is "overkill." He reminded those in attendance that the Clearinghouse Committee decided at a previous meeting that the following parameters in addition to TP need to be measured: total soluble phosphorus (TSP), total suspended solids (TSS), suspended sediment concentration (SSC), and particle size distribution (PSD) for all MTDS and soluble reactive phosphorus (SRP) when the MTD uses sorption.

David Sample offered that following the suggestion from a public comment, the panel decided to make the measurement of specific gravity a required parameter for accumulated sediment as well as for stormwater.

David Sample explained that to date, there are no National Environmental Laboratory Accreditation Conference (NELAC) methods for measuring SSC, PSD, and specific gravity. Jane Walker stated that the VTAP now clarifies that if a parameter does not have a NELAC certified method, it does not need to be performed in a VELAP accredited or certified laboratory.

David Sample stated that one comment from the public seemed to recommend limiting the methodology for measuring PSD to wet sieving. The panel did not think this was necessary because laser diffraction is an acceptable method of measuring PSD and is less labor intensive to perform and less expensive to analyze once the instrument is purchased. A representative of a MTD manufacturer noted that measuring PSD using the different methods would give different results, and David Sample agreed that the specific method chosen needs to be used throughout the entire testing period.

David Sample explained that the panel attempted to clarify that there are numerous ways to calibrate flow metering systems and thus added more examples of methods that could be used.

David Sample stated that the term "decontamination" was removed from the document following the objection to its use by a reviewer. He explained that decontamination has a specific meaning in the hazardous waste field and noted this meaning was not intended in the VTAP. Therefore, the term "decontamination" was replaced with "equipment cleaning or maintenance."

A representative of a MTD manufacturer asked if there are criteria related to the results associated with field blanks. David Sample replied that the QAPP should address what the researchers intend to do if the field blanks are above the reporting limit. The DCR evaluator will carefully review this aspect of the QAPP and work with each proponent to ensure an acceptable process. David Sample commented that **Appendix D -- Laboratory Methods** has been updated to include the table in the *Technology Assessment Protocol – Ecology* (TAPE) 2011 version (no longer using the table cited in the TAPE 2008 version). The reporting limit for TP is thus now 0.01 mg/L (instead of 0.001 mg/L as listed in TAPE 2008).

A committee member asked if the VTAP could provide more flexibility on the use of VELAP certified labs by allowing testing to begin prior to VELAP accreditation/certification. David Sample and another member of the committee stated that the proponent would be at risk in doing it that way. In the event that their methodology needed to be altered, their past monitoring results would be called into question (and thus would not meet the VTAP requirement of using a VELAP accredited/certified laboratory). A representative of a MTD manufacturer stated that to his knowledge DEQ still uses data collected prior to when the VELAP regulations came into being. Several members suggested that the VELAP reference in **Section 4.5.8 -- Laboratory QA/QC Procedures** could be removed because it was redundant to earlier statements in **Section 4.2.1 -- Preparation of a QAPP**. Scott Crafton offered that the part about needing at least 180 days to gain VELAP certification could be added to the earlier statements. Jane Walker offered to update the VTAP to ensure it covers all the VELAP information provided in this version (October 19, 2012) while removing redundancies.

David Sample requested input on the method of using half the detection limit for statistical analysis of non-detects. A representative of a manufacturer stated that he liked the approach so was glad to see it stated in the protocol. A member suggested that it should be half the reporting limit (not detection limit of the instrument). He noted that different labs have different confidence levels in their methodology so it should be half the limit of the lab's reporting limit. David Sample offered to research it further and provide a response to this request in writing.

#### *Section 4.6 -- Data Verification, Validation, and Certification*

David Sample called attention to a modified statement: "Data validation is based on the verified data and data validation records, and it needs to be performed by person(s) independent of the activity which is being validated." Jane Walker explained that the VTAP used to specify that the proponent's technical advisor would be the one to validate the data, but in the instance where the proponent's technical advisor performs the testing, it should be validated by an independent person or entity.

A member asked why "efficiency" was replaced by "pollutant removal (PR) credit." Scott Crafton explained that DCR was trying to make the VTAP compatible with the Handbook and other DCR documents by using the same terminology in all.

#### Section 5 -- Application and Reporting

An alternate expressed concern with the proposed deletion of nitrogen from the description of the MTD design and sizing section of the Technology Evaluation Report (TER). A representative of a MTD manufacturer asked if additional nitrogen data could be submitted and reviewed. Scott Crafton explained that to keep the process moving forward, the VTAP is only focusing on phosphorus at this time. In the future, approvals for nitrogen removal may be awarded. A member asked: If there is a TMDL for nitrogen or bacteria, would the locality be able to use the Clearinghouse to identify MTDs that remove these pollutants? Scott Crafton replied, "Not at this time." Scott added that DCR may be able to develop another way for the director to approve and list such MTDs on the Clearinghouse

website. David Sample stated that in theory, if the committee could agree on how samples are collected and if labs are VELAP accredited or certified for nitrogen then evaluating the MTDs for nitrogen removal should be possible. Another alternate noted there is nothing stopping the proponent from measuring parameters other than those listed in the VTAP. Dave Dowling suggested that with nutrient trading underway, there may be a need to include a credit for nitrogen removal. It was suggested to include the collection of nitrogen data as an option.

The group began considering the removal of other parameters such as metals, oil, and bacteria and started discussing how easy or difficult it would be to establish protocols to evaluate MTDs on the removal of these pollutants. Scott Crafton added that if the group could easily reach a consensus, then the VTAP could be updated to include these parameters, and MTDs could be evaluated for removal of these pollutants. A member suggested that the other data could simply be verified at this time but not necessarily awarded removal credit. Thus, when protocols are established for evaluating these pollutants, the data have already been verified and can be used for statistical analysis. There was general agreement with this approach, and David Sample offered to propose language for this section to provide for that.

#### Appendices

Dave Dowling suggested that all forms be removed from the VTAP appendices. The committee members appeared to be in support of removing the forms because it would increase the flexibility of the process.

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A representative of a MTD manufacturer asked what he should do if he has questions as he reviews the document more carefully. In reply, Scott Crafton requested that committee members and others with questions or comments submit them to him by Friday, October 26, 2012 if possible.

#### **Virginia MTD Registry Update**

Scott Crafton stated that the purpose of the MTD Registry was to allow MTD manufacturers the opportunity to post information about their product on the Clearinghouse website prior to the start of the evaluation process. Given that the evaluation process would soon be opened, Scott wondered if there was a need to continue with developing the MTD Registry. A representative of a MTD manufacturer stated that the MTD Registry would only benefit the manufacturer if consultants would use it to learn about the various products. A member of the committee who has worked as a consultant stated that she would likely recommend a product that has already been approved or one she has used in the past and found to be effective. She wants to be sure she has substantive data prior to recommending a product, so she would probably not use the MTD Registry. A member stated that localities might easily fall into a misconception that a product's listing in the MTD Registry constitutes an "approved" BMP listed on the Clearinghouse website, which is not what DCR intends to convey. He believes the MTD Registry would provide a false start and would not help in the long run. Another member thought that part of the purpose of the MTD Registry was to have a way to promote hydrodynamic devices that would not be going through the VTAP protocol.

### **Evaluation of Pretreatment Devices**

Scott Crafton stated that one of the public comments regarding the VTAP was to develop a pretreatment category for such devices as hydrodynamic separators that would not attempt to gain phosphorus removal credits. This category was not included in the VTAP. DCR envisions that manufacturers of such devices would apply as a pretreatment device and submit their TARP data for TSS removal. Several individuals began offering suggestions for what the pretreatment protocol could include. One person suggested that only field data should be recognized, and another suggested that parameters in addition to TSS, such as gross solids and the removal of organic material, be allowed for consideration. Scott Crafton offered that this discussion should be continued at another meeting. A representative of a MTD manufacturer asked if there was a timeline for when development of the pretreatment protocol and evaluation of pretreatment devices would begin. Scott Crafton stated that this has not been discussed. Scott noted his sense that some basic requirements could be developed for recognizing pre-treatment devices, based on their testing under the TARP, and that a separate Virginia testing protocol would not be necessary. He suggested that continuing this discussion could be part of the January Clearinghouse Committee meeting.

### **Next Meeting**

Scott Crafton offered that a confirmation on the special meeting to vote on the VTAP would be provided soon. A member asked if DCR would check into the possibility of members voting by proxy. A representative of a MTD manufacturer asked if the special meeting would be “public noticed,” and Scott Crafton replied that it would be listed on the Town Hall website just like all other Clearinghouse Committee meetings.

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With no further business, the meeting was adjourned.