

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

Albemarle County Office Building, Room B  
Charlottesville, VA  
January 23, 2012

Meeting minutes by Jane Walker

**Committee Members Present**

Joe Battiata, Center for Watershed Protection  
Joanna Curran, Department of Civil & Environmental Engineering, University of Virginia  
Greg Johnson, Patton Harris Rust & Associates/Pennoni (PHR&A)  
John McCutcheon, Virginia Department of Conservation and Recreation (DCR)  
Roy Mills, Virginia Department of Transportation (VDOT)  
Scott Perry, Imbrium Systems  
David Powers, Williamsburg Environmental Group  
Colleen Rizzi, Vanasse Hangen Brustlin, Inc. (VHB)  
David Sample, Biological Systems Engineering and Occoquan Watershed Monitoring  
Laboratory, Virginia Tech  
Joe Wilder, Frederick County Department of Public Works

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

Jane Walker

**Others Present**

Derek Berg, Contech  
Campbell Bolton, Draper Aden Associates  
Steve Curtis, Luck Stone Corp.  
Chris French, Filterra  
Matt Griffin, Contech  
Randy Hardman, Hanover County Department of Public Works  
Lee Hill, Joyce Engineering  
Steve Rossi, Concrete Specialties  
Adam Sapp, Contech  
Corey Simonpietri, ACF Environmental  
Terry Siviter, Contech  
Mark Williams, Luck Stone Corp.

Because of icy road conditions in certain regions of the state and low attendance, John McCutcheon of DCR and Chair of the Clearinghouse Committee postponed calling the meeting to order until 10:15 a.m. John announced that 60% (14 of the 23 members of the Clearinghouse Committee) is needed for a quorum, and with only 10 members present, the committee did not have a quorum so would not be voting on items of business at this meeting.

John McCutcheon announced that as part of DCR's reorganization, he has a new position title: Training and Certification Program Manager. He added that he also has a new office address, 900 Main Street, Richmond. Following John's introduction, everyone in attendance introduced herself or himself.

**Minutes from October 24, 2011 Meeting** – Jane Walker distributed draft minutes from the previous meeting. She explained that the minutes have not been reviewed and approved by the Director's office at DCR so some changes are expected. As requested at the previous meeting, members of the Clearinghouse Committee will receive a marked-up version of the minutes once approved by DCR. John McCutcheon invited anyone with comments on the minutes to please send them to Jane Walker. The final minutes will be posted on the Virginia Regulatory Town Hall website, <http://townhall.virginia.gov/>.

**Stormwater Regulations Update** – John McCutcheon explained that DCR is in the midst of an outreach campaign. Joan Salvati, Local Implementation Program Manager in DCR's central office, along with DCR regional managers are currently meeting with localities that are potentially voluntary adopters of a stormwater management program. As voluntary adopters, these localities are not required to have a program under the new stormwater regulations. The initial phase of the outreach campaign is expected to be complete by the end of February 2012. Then, DCR personnel will continue their outreach efforts by meeting with the mandatory program adopters. DCR staff will work with the mandatory adopters to help them get their programs together.

John McCutcheon stated that DCR is in the process of developing a checklist of all required program elements to give to anyone wanting to adopt a program. The checklist would explain what the locality needs to show to the Virginia Soil and Water Conservation Board to get the program approved. He added that the checklist is heavily geared toward what the ordinance should have in it. DCR is working on developing a model ordinance to provide an example of an acceptable ordinance. John estimated that the draft of the checklist is 90-95% complete. Once completed, DCR staff will distribute the checklist to four local governments with stormwater management programs and will request feedback from them. In this way, DCR will gain information from localities that are presently running programs. DCR staff will then revise the checklist to include the additional information.

John McCutcheon explained that two bills of particular interest to this group are proposed before the legislature, HB1065 and SB407, and are often called the "consolidation" bills or "streamlining" bills. The bills have identical language. The intent of the bills is to synchronize the way water quality and permitting programs work. The bills integrate the Erosion and Sediment Control (E&S) Act, the Stormwater Management (SWM) Act, and the Chesapeake Bay Preservation Act. The main purpose of the bills is to streamline the plan approval process at the local government level. Currently, local governments have separate E&S approval and SWM approval. The bill would allow local governments to give one approval for E&S and SWM. DCR uses the term "one-stop shopping" to describe the purpose of the bills. The second component of the bills makes the stormwater management program mandatory for all localities except towns; towns would fall under the county SWM program in which it lies. The bills have support from the Administration. As an outcome of the bills, if passed, DCR would require

certification for people conducting plan reviews and inspections for a SWM program, similar to what is currently required for E&S programs.

One member of the Clearinghouse Committee asked what kind of feedback DCR was receiving regarding the consolidation bills. He was curious if there is pushback to expanding the stormwater management program to the entire state. John offered that Joan Salvati reported receiving generally positive responses from local governments, but added that the potentially voluntary adopters have been noncommittal about adopting a stormwater management program. John explained that DCR would rather have mandatory adoption because the Agency feels it is better for each local government to run its own program. That way, the locality does not need to wait for DCR to approve projects. DCR's role would be to provide technical assistance and oversight. John added that smaller localities may be concerned with the unknowns of dealing with a permitting program. He stated that although a SWM program is similar to an E&S program (another permitting program), stormwater is more technical, requiring more knowledge of hydrology and hydraulics.

John McCutcheon mentioned that other issues related to the consolidation bills include staffing, maintenance, and training. Some localities want to know what level of staffing it would take to run a stormwater program. He noted that DCR staff will ask local governments with stormwater programs what kind of staffing is needed and share this information. He added that the bill would make everyone look at long-term maintenance of BMPs. Localities will need to ask what staff and equipment are needed to maintain BMPs. John added that DCR is currently working to develop some training. DCR will offer internal training first, and then the Agency plans to train local government staff, followed by training for plan preparers, engineers, stakeholders, and others wanting to be trained.

John added that localities and the development community seem to like the idea of a "one-stop shop."

Someone asked if DCR would partner with another organization, such as the Center for Watershed Protection, to offer the trainings. John McCutcheon said that DCR does not have the resources to move forward yet so he can not comment on who specifically would lead the training.

A member commented that DCR is attempting to get a grant for assistance to local governments in developing their SWM programs since they differ from E&S programs. This member added that DCR would allow counties to work together or with conservation districts to review plans. He also extended his appreciation as a representative of a local government that DCR has been responsive to smaller localities with their requests for help with these issues.

A member suggested that DCR should set a fee to cover the costs for training. Another member added that there would be a lag time because the fees would not be collected until July 2014, when the new regulations are implemented. A third member added that grants should be available for training. John McCutcheon noted that Joan Salvati is looking into the grant amount needed for training.

An observer added that localities want training, but DCR needs staff and fees to fund a training program. He does not think DCR could offer training if it does not have the staff and a fee to fund it. He proposed that other organizations, such as the International Erosion Control Association or Stormwater Management Institute, could conduct the training and offer certifications. Virginia could accept their certifications and could offer training classes without certification on the BMPs and Runoff Reduction Method. John McCutcheon added that DCR management is looking into setting fees that would cover the costs of training. He further added that the consolidation bill requires that DCR provide a training and certification program. A member added that VDOT provides a list of certified training instructors. The instructors on this list charge what they want for the training and certification. He stated that when there are enough trainers for competition, the training fee is reasonable.

A member asked if DCR was putting much effort into updating the E&S manual. John McCutcheon responded that DCR has not dedicated much effort to updating the E&S manual at this time. He explained that DCR staff is meeting with local government staff after E&S program reviews but before finalizing them so that localities understand what DCR found and what corrective actions are needed, if any. DCR also allows localities the opportunity to call attention to mistakes that DCR may have made. He explained that DCR is working harder to stay in touch with local government staff during and after a program review. DCR is also trying to coordinate the E&S reviews with the Chesapeake Bay Act compliance evaluations. DCR contacts both staffs within the respective local government for a meeting at the same time. He offered that although these are concurrent reviews (not one review), they illustrate DCR's efforts to make stormwater a unified issue.

John McCutcheon added that the proposed consolidation bills, if adopted, would dissolve the Chesapeake Bay Local Assistance Board and would move its powers and responsibilities to the Virginia Soil and Water Conservation Board.

An observer asked if DCR had an opinion concerning the governor's proposal to move the MS4 (municipal separate storm sewer system) Program to the Virginia Department of Environmental Quality (DEQ). The observer noted that this proposed change is in draft form and originated from the committee on streamlining the government. John McCutcheon commented that as far as he knows, DCR does not have an opinion on the topic. John added that the plan also includes a one-year study before possibly moving the rest of the stormwater program to DEQ in subsequent years.

A member asked if the Virginia Stormwater Management Handbook would become part of the regulations once it is finalized. John McCutcheon noted that the Handbook is cited in the regulations, but added that DCR is trying to maintain flexibility. An observer commented that two items in the Handbook are part of the regulations: the approved BMPs and the Runoff Reduction Method. He added that BMPs can be added if approved by DCR and posted on the Clearinghouse website. He hoped that the rest of the Handbook would not be part of the regulations due to the problems that would arise if DCR wanted to make updates to it; if the Handbook becomes part of the regulations, the regulatory process would need to be opened in order to update to it. Likewise future changes to the Runoff Reduction Method could become

problematic because it is part of the regulations. John McCutcheon commented that he would investigate the matter in more detail and get back to the committee.

Another member offered that he sees a conflict with having the Handbook as part of the regulations if an updated version of a BMP listed in the Handbook is approved and posted on the Clearinghouse website. For example, he can envision that someone could come up with a better specification for a practice, and if the committee and DCR approve the update, DCR would have to continue to accept the former version even though a better performing practice exists. An observer added that unless DCR opens up the regulatory process, the Agency has to approve the version currently in the handbook.

**Status of Virginia Technology Assessment Protocol (VTAP) and Guidance for Submitting MTD (Manufactured Treatment Device) Certification Application** – John McCutcheon announced that the Virginia Soil and Water Conservation Board approved the VTAP in concept at its meeting on December 7, 2011.

John McCutcheon explained that DCR has started developing written guidance for submitting an application for evaluation. Jane Walker distributed a handout: *Draft Virginia VTAP Verification Process Guidance* (Appendix A). John stated that the document is a draft developed by Scott Crafton with DCR that largely follows the NJ CAT (New Jersey Corporation for Advanced Technology) guidance. DCR is working on appendices to accompany the document, but these are not included in the handout. He explained that DCR is hoping to generate feedback on the guidance so encouraged those with comments to send them to Jane Walker, Scott Crafton, or himself.

John McCutcheon added that DCR is having internal discussions on how it will handle the DCR evaluator role. It is not yet known if DCR will conduct the evaluation reviews or if the Agency will contract the work to others.

An observer asked if there is a timeline so manufacturers will know what to expect when they submit an application. They would want to know the expected reasonable response time to hear back from DCR. John McCutcheon promised to seek further clarification on this question and stressed that DCR is anxious to get the process going.

Another observer asked if his company can begin monitoring while DCR works out the administrative issues with the VTAP evaluation process. John McCutcheon commented that if monitoring is occurring in accordance with the VTAP, it should be acceptable; the bottom line is that the research meets the guidelines of the VTAP and is conducted under conditions similar to those in Virginia.

Another observer asked if VELAP (Virginia Environmental Laboratory Accreditation Program) lab certification is required for past research since the VELAP only became fully established on January 1, 2012. This observer wondered if data collected prior to the establishment date would be grandfathered. He added that other state agencies are grandfathering data collected prior to this date. A committee member stated that he thought the data from each project would need to be reviewed on a case-by-case basis. The observer suggested that it may make sense for the

evaluator to coordinate with the Quality Assurance/Quality Control (QA/QC) officer at DEQ who has experience with this regulation.

The individual added that there is pending legislation in the General Assembly clarifying VELAP exemptions for out-of-state laboratories and universities. (Note: HB302 and SB52 state, "...laboratory certification shall be required before any tests, analyses, measurements or monitoring performed by a laboratory ... for the purposes of ... the State Water Control Law.... Laboratories located outside of Virginia that are certified or accredited under a program determined by the Division to be equivalent to the program established under this section shall be deemed to meet the certification requirements.... Any laboratory subject to this section may petition the Director of the Division for a reasonable variance from the requirements of the regulations promulgated under this section.... The provisions of this section shall not apply to laboratories when performing tests, analyses, measurements, or monitoring utilizing protocols pursuant to § 10.1-104.2 to determine soil fertility, animal manure nutrient content, or plant tissue nutrient uptake for the purposes of nutrient management.")

A member asked for an explanation for the difference between VELAP and NELAC (National Environmental Laboratory Accreditation Conference). Several explained that VELAP refers to the Virginia certification process whereas NELAC refers to the national certification. In response to a question, a member offered that there are more than ten VELAP-certified labs in Virginia.

A committee member asked if the application fees proposed in the VTAP are in flux or set. John McCutcheon stated that he thought the fees would stay at this figure but added that they may change. John asked how the VTAP fees compare with other state approval programs. The member stated the proposed values are about twice what other states charge and would be a barrier to entry. An observer added that New Jersey's fees are on a sliding scale. A different member added that he thought TAPE (Technology Assessment Protocol – Ecology) charged \$10,000-20,000 per use level designation. Another person added that he was unsure of the exact figure because TAPE recently updated its evaluation process, but he is confident that the TAPE fees are less than \$40,000. A member added that the TAPE program in Washington has less expensive fees than does New Jersey. An observer suggested that it may be interesting to compare the VTAP fee figures to the VPDES (Virginia Pollutant Discharge Elimination System) permit fees, acknowledging that the fees are for two different programs. He then asked if the VTAP fee would be charged per company or per BMP. John McCutcheon explained that the VTAP fee is per BMP evaluation and is used to pay for the evaluation.

An observer asked if the process draft document is open for comments. John McCutcheon encouraged him to bring forth his comments before the group. The observer said he had not studied the draft enough to comment at this time. John offered that anyone with comments on the draft document should submit them to Jane Walker, Scott Crafton, or himself.

**MTD Registry Questionnaire:** John McCutcheon reminded the group that at the last meeting the committee approved the MTD registry questionnaire, except for the certification statement. The certification statement in the draft questionnaire was taken from DCR's permit document. John has communicated with the Agency's contact in the Attorney General's (AG's) office

regarding the statement. The AG's representative voiced concern that the certification statement could leave a company open to a Freedom of Information Act (FOIA) request if it is seen as a part of the regulatory process by being linked to a federal permit. To avoid such a possible interpretation, John McCutcheon suggested that the certification statement be simplified.

Several members offered that the certification statement in its current form does not meet the group's purpose for having a certification statement. One member admitted that the committee likely went overboard in borrowing language from a permit certification. He explained that there are gray areas in the claims that could make their way into the responses to the questionnaire. In his view, the point of the certification was to avoid unsubstantiated claims. Another member voiced that he feels the point of the certification statement is to establish accountability by an officer in the company and added that the statement in its current form does not accomplish this goal.

Some members asked if a certification statement was needed; others thought that a statement was needed and should include penalties for providing false information. Some suggested using broad language: "DCR reserves the right to take action if false information is provided." Another member suggested that the penalty should be stated: "I understand that if false information is provided, the product will be removed from the registry and may not be considered for certification in the future." Someone else suggested that the penalty could be a one-year suspension from being included on the MTD registry. Another member offered that the product could be removed from the registry until reviewed by the Clearinghouse Committee. Another suggested that the penalty could be that the BMP evaluation application would not be accepted for two years. Two other proposed statements were combined: "I certify this document and the attachments in it were prepared by qualified personnel and are true, accurate, and complete. I understand that DCR reserves the right to remove this information from the MTD registry at any time." There was general consensus for this combined statement.

One member commented that the other vendors will watch what is being said, and if they see something that is clearly misrepresentative, they will be the first to call and report it. Then DCR will need to take down the information until the Agency can figure out what to do. Another member added that rather than simply removing the information, he thought it would be a bigger deterrent to falsifying information if a red "X" is placed over the product and a description for the reasoning is listed, e.g., "This product is under review by DCR" or "This MTD has been removed by DCR."

One member commented that it appears that DCR expects the manufacturers to trust that the Agency will act in faith, but that there appears to be little confidence that the manufacturers will act in good faith.

A member recommended that the introductory paragraph should be modified to clarify what "certified" refers to. She did not want someone to think that the certification mentioned in this paragraph refers to the certification statement in the MTD registry questionnaire. It was suggested to alter the last sentence to state: "Once there has been an opportunity to evaluate the MTD through the VTAP process, information about the MTD will be listed on the Virginia

Stormwater BMP Clearinghouse website only if certified at the pilot use designation (PUD), conditional use designation (CUD), or general use designation (GUD)”.

Jane Walker stated that the VWRRC has hired a programmer who is in the process of developing the online registry questionnaire. A member voiced concern that he does not want the registry information posted automatically because it might not be complete. Instead, he wants it to be reviewed first and then posted. Jane Walker offered that the program requires that all questions be answered before the responses would be posted. The member suggested that an email notification be sent to Jane Walker and that she review the information before posting it to the registry. He also wanted to know how documents would be attached. Jane explained that the programmer would be sure that PDF documents could be included. Others wanted to be sure that changes to the responses would be allowed and that a password would be needed before making changes to the responses.

**Clearinghouse Webpage Development:** Jane Walker distributed a handout (Appendix B) of proposed outlines for three pages of the Clearinghouse website: (1) Operation, Inspection, and Maintenance; (2) Stormwater BMP Selection; and (3) BMP Costs. Jane explained that the outlines were developed by a subcommittee in 2007-2008 and may have changed in the years since initial creation. Jane commented that the last two pages cover active areas of research and suggested that the committee might want to wait until pivotal projects (e.g., BMP Selection Tool being developed at Virginia Tech) are completed before listing information on these pages. The group was in support of this suggestion.

The discussion focused on the webpage concerning BMP operations, inspections, and maintenance. Jane Walker reviewed the topics suggested by the Website Development Subcommittee: introductory comments, general guidance, and links to the Handbook. A member suggested that the Clearinghouse website and Enterprise website should be linked. That way, new owners of property with BMPs will be able to easily link to the maintenance information of the installed BMPs. Another member suggested that it would be great if the Enterprise website could include when inspections and maintenance occur. Two members, David Sample and Greg Johnson, offered to serve on a subcommittee to gather and develop information to be posted on this page. John McCutcheon proposed that instead of having a subcommittee, perhaps Jane Walker could develop the first draft of this webpage for review by the entire committee. He also offered that DCR has information to add to this page. Jane Walker suggested that perhaps John, David, Greg, and she could meet via conference call to discuss information to be included on this page.

**Future Meeting Dates for 2012:** The group agreed to continue meeting the 4<sup>th</sup> Monday of April, July, October, and January. Thus, the proposed meeting dates for 2012 are

April 23, 2012  
July 23, 2012  
October 22, 2012  
January 28, 2013



Because many of the members were not present, Jane Walker offered to check these dates with the other members. John McCutcheon suggested that everyone review their calendars and let Jane know of any conflicts with the dates above.

**General Comments and Adjourn:** John McCutcheon asked if there were any general comments to bring before the group. No comments were provided so John adjourned the meeting at 12:15 p.m.

## Appendix A

# **DRAFT VIRGINIA VTAP VERIFICATION PROCESS GUIDANCE**

**[Note to document reviewers: The content for this guidance document has been derived from the Virginia document entitled *Guidance for Evaluating Stormwater Best Management Practices: Virginia Technology Assessment Protocol (VTAP)*. However, the formatting is not yet consistent with that of DCR Guidance documents]**

Virginia has established total phosphorus (TP) load limits as the core water quality criteria of the Virginia Stormwater Management Regulations (4 VAC 50-60), using TP as an indicator or surrogate pollutant for all others in stormwater runoff. The VTAP defines a testing protocol and process for evaluating and reporting on the performance and appropriate uses of BMPs that address post-construction stormwater runoff, including manufactured treatment devices (MTDs) and modifications to existing BMPs, manufactured or otherwise, seeking credit for TP removal. By obtaining accurate and relevant data, evaluators can assess performance claims objectively and make informed decisions about whether or not to approve BMPs for use in Virginia. The result of successfully completing this process is documentation of independent third-party confirmation of manufacturer claims. This provides valuable information to business and governmental decision-makers.

The specific purposes of the VTAP are to:

1. Define the structure and procedures to follow for approving and listing stormwater BMPs on the Virginia Stormwater BMP Clearinghouse.
2. Establish minimum monitoring guidelines and methods for evaluating and reporting on the appropriate uses of BMPs for stormwater management (SWM).

DCR and the Virginia Stormwater BMP Clearinghouse Committee support the Technology Acceptance Reciprocity Partnership (TARP) and thus the *TARP Protocol for Stormwater Best Management Practice Demonstrations* (2003), which focuses on effectiveness at removing TSS from stormwater runoff. However, use of the TARP Protocol does not eliminate state review or approval of projects proposing to use TARP-certified stormwater management technologies in Virginia, nor does it require Virginia to “rubber stamp” the approval or certification of another state. Those seeking reciprocal certification from Virginia of practices and methods previously certified by another state must still demonstrate consistency with the procedures articulated in this document in order to evaluate TP removal performance.

The VTAP is intended to evaluate the performance of stormwater BMPs designed to (1) reduce stormwater runoff volume, (2) reduce the peak rate of runoff, and/or (3) reduce total phosphorus (TP) in runoff. The VTAP may not be suitable for all stormwater treatment practices. *The protocol is NOT for use in the evaluation of Erosion and Sediment Control technologies or products or for conducting research on experimental BMPs.*

Devices and technologies designed to remove pollutants other than phosphorus from stormwater runoff (e.g., nitrogen, oil/grease/hydrocarbons, metals, bacteria, etc.) will not be certified in Virginia at this time. Technologies with limited TP removal data will only be evaluated for the **Pilot Use Designation (PUD)**. The DCR will not consider an application for a **Conditional Use Designation (CUD)** or a **General Use Designation (GUD)** unless the application includes sufficient performance data that clearly demonstrate acceptable feasibility for TP removal and the likelihood that the BMP will achieve desired performance levels using the manufacturer’s recommended sizing criteria, pretreatment requirements, and maintenance schedule.

The Virginia Stormwater BMP Clearinghouse will maintain a list of approved BMPs on the Clearinghouse website to assist local jurisdictions in identifying stormwater technologies and products. Technologies undergoing testing to meet criteria of the **General Use Designation (GUD)** may be listed on the Clearinghouse website with either a **Pilot Use Designation (PUD)** or a **Conditional Use Designation (CUD)**.

## **PROCESS**

The process is as follows:

1. Application, initial Technology Evaluation Report (TER, usually based on previous laboratory or field testing), and application fee submitted with a general statement of claims
2. Application reviewed for completeness and consideration of initial use designation
3. Preliminary acceptance into the program and appropriate initial use designation established
4. Manufacturer employs technical advisor to develop an acceptable Quality Assurance Project Plan (QAPP)
5. QAPP submitted to DCR, reviewed, and approved
6. Field Performance testing (monitoring) commences
7. Quarterly reports submitted and reviewed
8. Upon completion of testing, updated application, additional application fee and updated TER submitted for higher use designation, if appropriate
9. Ultimately, GUD use designation approved and product posted on Clearinghouse website for general use
10. Technology deployment opportunities avail (Virginia, nationally, world-wide)

## **Field Monitoring and Data Evaluation**

The field monitoring protocol is intended for use in assessing post-construction BMPs. It is to be used in the assessment of new BMPs, including manufactured treatment devices (MTDs) and design modifications to existing BMPs, manufactured or otherwise. Assessments are not required for non-proprietary BMPs listed in Table 4.1 on the Non-Proprietary BMP page of this website (<http://www.vwrrc.vt.edu/swc/NonProprietaryBMPs.html>).

The scope of the field monitoring and evaluation program consists of the following ten elements:

1. Monitoring Site Selection
2. Quality Assurance Project Plan (QAPP) and Documentation
3. Monitoring Program Design
4. Monitoring System Design and Installation
5. Sample Collection, Analysis, and Quality Control
6. Data Verification, Validation, and Certification
7. Data Management
8. Data Quality Assessment
9. Pollutant Removal and Efficiency Rating Methods
10. Preparation of the Technical Evaluation Report

A flow chart of the various steps and details of specific monitoring parameters and procedures can be found in the full VTAP document, entitled ***Guidance for Evaluating Stormwater Best Management Practices: Virginia Technology Assessment Protocol (VTAP)***, which can be found elsewhere on this website.

The following may be helpful guidance in selecting the most appropriate use designation level for which to apply:

- Proponents of BMPs with full-scale laboratory performance data and no, or limited, field testing data should submit a **PUD** application. TP, TSS, and/or SSC data can be used to receive TP certification at the **PUD** level. If TSS or SSC data from laboratory testing are reported, Sil-Co-Sil 106 should have been used.
- Proponents of BMPs with field performance data that (a) were collected from at least two field sites representing urban stormwater conditions in Virginia, and (b) conform to an established protocol such as NJ TARP, TAPE, or other protocol accepted by the DCR's evaluators should submit a **CUD** application. BMPs seeking **CUD** status for total phosphorus treatment should have performance data showing TP removal (Until July 1, 2014, proponents may submit performance data showing TSS/SSC removal as described above to receive a **CUD**).
- Proponents of BMPs with field performance data that (a) were collected from at least two field sites representing urban stormwater conditions in Virginia, and (b) conform to the VTAP should submit a **GUD** application. TP data are required to receive TP certification at the **GUD** level.

Proponents seeking a use-level designation by the DCR will need to submit an application, Technology Evaluation Report (TER), and application fee according to the following fee schedule:

PUD Application	\$20,000.00
CUD Application	\$40,000.00
GUD Application	\$40,000.00
Re-submittal Fee	To be determined, based on values established by state procurement process

Submit an electronic version, as a CD or E-mail attachment, to DCR. An electronic copy of quality assurance project plans, interim status reports, and other correspondences should also be provided to DCR.

The application fee and CD submissions should be mailed to DCR at the following address:

Virginia Department of Conservation and Recreation  
Division of Stormwater Management  
Stormwater Management BMP Clearinghouse  
203 Governor Street, Suite 206  
Richmond, VA 23219-2094

E-mail submissions and questions or requests for assistance should be sent to DCR at the following address: [SWMESquestions@dcr.virginia.gov](mailto:SWMESquestions@dcr.virginia.gov)

## Appendix B

### Draft Outlines for 3 pages of the Virginia Stormwater BMP Clearinghouse

#### Operation Inspection and Maintenance

Section 1 -- Introductory Comments:

Section 2 -- General Guidance:

- Discuss Reg. Rqmt. for “Maintenance Agreement”
- Include hyperlink to page 2 for local government contact info

Section 3 -- Provide link to handbook chapter for more detail plus links to specific inspection / maintenance checklists for each type of BMP

#### Stormwater BMP Selection

Section 1 -- Introductory Comments:

Section 2 -- VA SWM Regulation Look-up Table: Provide explanation and insert regulation table

Section 3 -- Eventually, VT BMP Selection tool: Provide explanation and link to selection tool

#### Stormwater BMP Costs

Section 1 -- Introductory Comments:

Section 2 -- Installation and Construction Costs:

Options (COULD INCLUDE MORE THAN ONE OPTION!):

- (1) Present a range of costs for each BMP, based on most current data available
- (2) Provide link to a web site or spreadsheet that breaks BMP costs into discrete components, so that users can plug in local costs (would be good to provide a completed example).
- (3) May include relevant data from DCR’s economic impact analysis of the proposed regulation revision.

Section 3 -- Operation and Maintenance Costs:

Generalize based on time to inspect X cost/hour; refer repair costs to spreadsheet above (?)