

Meeting Minutes
2023 Virginia Stormwater Management Handbook
Stakeholder Advisory Group (SAG) Meeting #12
Monday, October 30, 2023
Location: DEQ Headquarters
1111 East Main Street
Richmond, VA 23219
Start - 9:30 AM

Attendees:

SAG Members

Alex Forasté, VDOT
Ashley Hall, Stantec
Benjamin Slaughter, Hazen and Sawyer
Blair Blanchette, VCAP
Brent Niemann, Strata Clean Energy
Charles Bodnar, City of Virginia Beach
Dale Chestnut, James Madison University
Darrell Marshall, Virginia Department of Agriculture and Consumer Services (VDACS)
David Maxwell, Prince William County
Doug Moseley, GKY & Associates
Elizabeth Hester, Dominion
Gavin Pellitteri, City of Alexandria
Hannah Zegler, Dominion
Jack Dawson, City of Charlottesville
Jerry Stonefield, Fairfax County
Joe Wilder, Frederick County
John Burke, Montgomery County
Joseph Caterino, RES
KC Filippino, Hampton Roads Planning District Commission (HRPDC)
Laurence Benson, Kimley-Horn
Liz Scheessele, Timmons Group
Matthew Huston, City of Harrisonburg
Melissa Burgh, JMT
Mike Hogan, ACEC Virginia/RKEK
Mike Huggins, City of Danville – alternate
Raj Bidari, Prince William County
Rene' Hypes, VA Dept. of Conservation and Recreation
Wil Orndorff, VA Dept. of Conservation and Recreation
Richard Jacobs, Culpeper SWCD
R. Wilder, Henrico County – alternate
Scott Jackson, Henrico County
Scott Smith, City of Hampton
Taylor James, Balzer & Associates

Members of the Public

Patrick Fanning, CBF

DEQ Staff

Mike Rolband, DEQ Director

Alex Samms, Chief Deputy

Evan Branosky, Chief Stormwater Policy Advisor

Meghan Mayfield, Division of Water Permitting Director

Rebecca Rochet, Division of Water Permitting Deputy Director

Kyle Kennedy, Manager, Office of Stormwater Management

April Rhodes, Stormwater Plan Review Manager

Nelson Daniel, Policy Analyst

Arcadis / Contractor for Handbook Development

Fernando Pasquel

Nirali Desai

Mike Wooden

Chris Soldan

Welcome and DEQ Updates

- Evan Branosky welcomed SAG members and went through the meeting agenda.
- DEQ Director Mike Rolband thanked members for their commitment and efforts. He said the Handbook will be a living document and will be updated regularly.
 - o Director Rolband said DEQ is planning on a 1yr transition process to fully switch to the Handbook (i.e., for plans and applications that are being developed and reviewed under the current law, regulations, and guidance, after the change to the new law, regulations, policies on July 1, 2024, DEQ will continue to accept and process those plans and applications until July 1, 2025). There will be a memo with more details about the transition. It should be available early next year.
 - o This also allows localities time to transition.
 - o The Handbook contains details about process to keep it up-to-date.
- SAG members asked when a model ordinance would be ready – DEQ staff are working on the model ordinance and expect to circulate it after the consolidated regulations are published in the Virginia Register. The objective is to make the model ordinance available as soon as possible to allow time for transition.
- SAG members asked about the phosphorus limit in regulations, 0.41 lbs/acre/yr – under the revised VRRM, the limit will be 0.26 lbs/acre/yr. Because 0.41 lbs/acre/yr is in (and will be in) the regulations, both will be allowed until the regulations are amended to incorporate 0.26 lbs/acre/yr. Director Rolband noted that the new VRRM will only be approved using the 0.26 lb/acre/yr limit.
- Evan reminded SAG members about FOIA requirements.

- The attached presentation contains information about FOIA and other topics discussed at the meeting.

Stormwater Program Updates

- Evan presented information to the SAG about activities DEQ has undertaken to improve the stormwater program (see attached presentation)
 - o All erosion and sediment control and stormwater guidance documents are now posted on the DEQ website (including all information from the BMP Clearinghouse website that Virginia Tech hosted, particularly MTD information); going forward, more information will be provided on the DEQ website;
 - o DEQ has issued guidance that provides options and expectations for streamlined plan review and a design guide;
 - o The Virginia Stormwater Handbook has been written to reflect Chapter 875 (the consolidated erosion and sediment control, training, and stormwater management regulation);
 - o Staffing – 90+% positions filled;
 - o The General VPDES Permit for Discharges of Stormwater from Construction Activities, 9VAC25-880 (CGP), is being re-issued with a July 1, 2024 effective date;
 - o Revisions to the Virginia Runoff Reduction Method (VRRM) are in progress with an expected effective date of July 1, 2024 (concurrent with Chapter 875, the CGP, and Handbook) – information about the VRRM revisions is on the DEQ website, staff are working on a detailed responses to informal review and request for comments – the responses should be issued soon; and
 - o A draft of the Virginia Stormwater Handbook went to SAG members on Friday, October 27, 2024 so they can review it and provide feedback.
- Handbook Project Schedule
 - o SAG members should review the Handbook – focusing on new content and areas in which they have individual expertise – and provide comments on the Excel spreadsheet no later than November 27, 2023.
 - o DEQ’s goal is to have a final version of the Handbook ready for public review by December 22, 2023. The final version will have to go through an internal review process before the mandatory 30-day public comment period opens. With internal review and other timing requirements in the Administrative Process Act, DEQ expects the public comment period will begin in late January or early February.
- SAG Review and public comment (see presentation)
 - o Evan asked SAG members to focus their review on new content and areas in which they have individual subject matter expertise. Comments should also be prioritized as indicated on the spreadsheet.
 - o SAG members asked if the comments they submitted during development of chapters and BMP specs – and responses – would be available during the review period. Evan responded that all of the comments that had been submitted had also been logged in a spreadsheet and, after some discussion about how and what information to share, agreed to provide the comments and responses to SAG members. DEQ and Arcadis need to review the comments/responses and format them for release to the SAG.

- DEQ/Arcadis will develop a separate response to comments document for comments received from the SAG on the October 27, 2023 draft Handbook.

DEQ Training Program Update – Alex Samms (slide)

- DEQ intends to revamp training program for Chapter 875 and the Handbook. The tentative schedule for training will begin in February/March 2024 with training for DEQ staff and trainers. Training for individuals that currently hold certifications will be in April through June 2024. New material will be incorporated in all training concurrent with the effective date for Chapter 875, the CGP, and the Handbook.

Handbook Digital Platform – enCodePlus

- Bret Keast, provided an overview of the enCodePlus platform and some of its features. He indicated that it would take about 5-6 wks to build the platform for the Handbook.
 - He noted some of the platform’s unique features, including the capability to record public comment
 - The Handbook will be on a unique site for DEQ
 - Any user will be able to subscribe to the site – email will notify subscribers of changes
 - Overview of features –
 - During drafting, will be able to enter and review comments
 - Key terms will be defined (pop-up)
 - Figure and table numbers, cross-references can be updated automatically
 - Cross-references can be linked in document and to external sources
 - Navigation tools will be built in to help drill down to desired material
 - Will maintain a history table – showing all changes that have been made in the document – to include changes in law/regulation, by a specific date, etc.
 - May include custom indexing
 - Briefly discussed maintenance module – where DEQ staff will be able to make changes (noted comment features, revision history, etc.)
 - Evan highlighted features on Menefee Ca, and how some of those may be incorporated into the Handbook (highlighting certain topics (such as BMPs), planning tools, indexing, etc. [<https://online.encodeplus.com/regs/meniffee-ca/index.aspx>])
 - SAG members asked if there is a public comment, can others see the comment and responses? Bret said that others can see the comment and talked about ways of managing comments that come in, including a use of filters.

Break (10:35 – 10:45)

Handbook Development Tasks and Comment Instructions

- Arcadis provided an overview of the Handbook, beginning with new content in Chapter 1
- Review process (slide)
- Chapter 7 – Design Specifications for Construction BMPs
 - 59 BMPs

- Request to focus on front-end matter, new numbering and nomenclature
 - Symbols for original 39 ('92 VESCH) remain the same
- Chapter 8 – Post-construction BMPs
 - Includes information about MTDs
 - Adds tree-planting BMP (tree planting done for water quality purposes, not just landscaping)
 - SAG members asked about including RSC – it is a new practice in the Handbook, some back-and-forth about the efficiencies (individual components are existing BMPs) – some efficiencies are shown in red text (needing internal review) – Arcadis suggested providing input (Evan requested an email about red text in case is simply a formatting update)
 - There was a later comment about the lack of values in the RSC – almost certain to use wet swale efficiencies (99% certain). Because the Handbook will use wet swale, there will not be any runoff reduction efficiency. Arcadis or DEQ will circulate updated table to subcommittee, without updating text of the handbook – Arcadis will make revision in post-SAG comment period
 - Yellow text – things that need input from SAG; Red text indicates things that Arcadis needs to resolve; also some formatting/internal links that enCodePlus will resolve
 - Question about SWPPP content – there is a BMP for concrete washout, but not other practices for good site practices
- Appendix B, VRRM – very short, overview of changes from VT, actual guidance and user guide will be separate from the Handbook
 - Please do not use the Handbook as vehicle for comments/feedback on VRRM
- Appendix F, Bioretention Design and Background Information – new content for SAG consideration (Slide) (background/additional user information, bulk of the content came from VT research... this is separate from the BMP specification)
- Arcadis provided a very brief overview of other appendices
 - Appendix H, BMP Design Nomographs, Construction, and Maintenance Checklists
 - Appendix I - Standard Worksheets for E&S Control
 - Appendix J - CADD standard details (links) for E&S Controls and selected components of BMPs
 - Appendix K - Standards & Specifications Reporting Template

Closing comments from Evan – expressed gratitude for everyone’s contributions

Next significant communication from DEQ – VRRM response to comments

Public Comment DEQ – none

Meeting concluded 11:30 am



2023 Virginia Stormwater Handbook

Stakeholder Advisory Group

Meeting #12 (October 30, 2023)

Agenda

- **Welcome & DEQ Updates**

- ✓ FOIA Information
- ✓ 11th Meeting Content and Outcomes
- ✓ Stormwater Program Updates
- ✓ DEQ Training Program Update

Mike Rolband, DEQ
Alex Samms, DEQ
Evan Branosky, DEQ

- **Handbook Digital Platform**

- ✓ Platform Overview

enCodePlus

- **Handbook Development Tasks and Comment Instructions**

- ✓ Planned Schedule and Final Review Period
 - Review Updated Schedule
 - Discuss SAG Review and Public Comment Plans
- ✓ Prioritized Content Update
 - Chapter 1 and Handbook Update Process
 - Chapters 7 and 8 (Front Matter and Tree Planting BMP)

DEQ
Arcadis

Break

Agenda

- **Handbook Development Tasks (Continued)**

- ✓ Prioritized Content Update

- Appendix B - VRRM
- Appendix F - Bioretention Design - Background Information
- Appendix H - BMP Design Nomographs, Construction, and Maintenance Checklists
- Appendix I - Standard Worksheets for E&S Control
- Appendix J – CADD Standard Details
- Appendix K – Standards & Specifications Reporting Template

DEQ
Arcadis

- **Next Steps**

Break (if needed)

- **Public Comment**

Evan Branosky, DEQ

- **Wrap-Up**

Evan Branosky, DEQ

Welcome & DEQ Updates

FOIA Information

1. The SAG is a public body subject to the Freedom of Information Act (FOIA). As such, all business of the group must be conducted in a public forum that has been noticed in accordance with the Act and minutes must be prepared.
 2. Emails may be considered as the conduct of business. Thus, individual members of the SAG should not use "reply to all" when receiving emails from DEQ. Also, any member of the SAG that wants to provide information to the group should send it to the DEQ Project Manager for distribution.
 3. If more than two members of the SAG serve on a subcommittee, those subcommittees are also public bodies and thus subject to FOIA rules.
- **11th Meeting Recap**
 - **Stormwater Program Update**
 - **DEQ Training Program Update**

Selected DEQ Strategies

Improvement	Status
1. All guidance documents on website <ul style="list-style-type: none"> All materials migrated from external hosts 	<ul style="list-style-type: none"> Completed
2. Streamlined Plan Review Guidance	<ul style="list-style-type: none"> Effective 1/19/2023
3. Design Guide Guidance	<ul style="list-style-type: none"> Effective 2/20/2023
4. SWM/ESC Reg Consolidation - HB1250 & SB673 (2016) <ul style="list-style-type: none"> HB2390 & SB1168 Approval (2023) 	<ul style="list-style-type: none"> SWCB approved 6/22/2023 Effective 7/1/2024
5. Agribusiness SWM Guidance	<ul style="list-style-type: none"> Effective 7/1/2023
6. Recruiting Staff	<ul style="list-style-type: none"> Very successful- 90% staffing achieved 7/1/2023
7. Construction General Permit (CGP)	<ul style="list-style-type: none"> Automated 7/1/2023
8. Virginia Runoff Reduction Method (VRRM) Update	<ul style="list-style-type: none"> Informal comment period ended 8/21/2023 Effective 7/1/2024
9. New ESC & SWM Handbook	<ul style="list-style-type: none"> Draft circulated on 10/27 Website build initiated To be completed end of 2023 & effective 7/1/2024

Project Schedule

NOTE: Schedule is for *planning* purposes only and subject to change.

	2022							2023													
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec		
Engage Stakeholders • SAG Invitation & RFP Posting • SAG/Subcte. Monthly Meetings	■		●	●	●	●	●	●	●	●	●	●	●	●			●				
Conduct Procurement	■																				
Produce Handbook Digitize/Create website				■															■		
Conduct SAG Comment																	■				

● Release of 1st Draft of Handbook

SAG Review and Public Comment

- **1st Draft of Handbook**
 - Prioritized SAG for Review
 - Please focus your review on sections not reviewed before and on your area of expertise
 - Please mark priority comments in the spreadsheet
 - Chapters and appendices in separate folders to facilitate review
 - Release included a list of items not reviewed by SAG before
(e.g., Chapter 1, Chapters 7 and 8 front matter, Tree Planting BMP Spec, several appendices)
- **Final Draft Content on New Platform: December 2023**

DEQ Training Program Update

- Issued RFP for “Environmental and Leadership Training Services” on May 3, 2023
- Contracts are “as needed” over a five-year term and allow awards/negotiation with multiple firms
- Content areas include air, environmental enforcement, land, leadership and professional development, ***stormwater and erosion and sediment control***, water, and wetlands and streams
- SW/ESC tasks will include developing and/or updating training materials based on new handbook, and delivering training

Draft Handbook Chapters

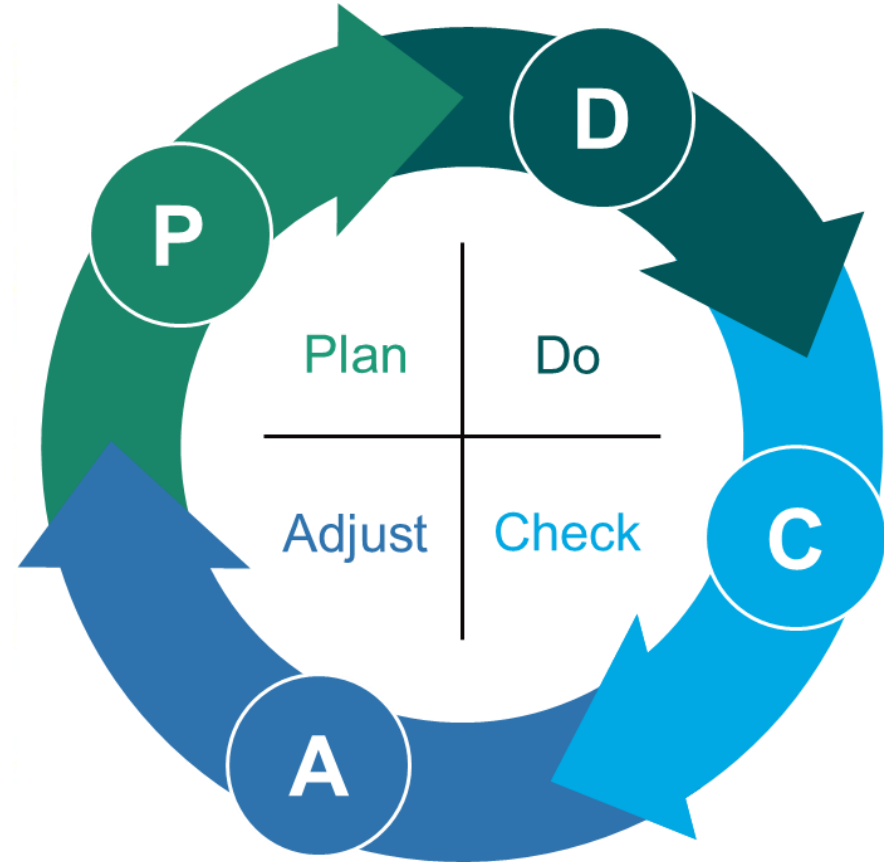
Chapter 1	Introduction	Chapter 9	BMP Construction
Chapter 2	Why Erosion and Sediment Control and Stormwater Management Matter	Chapter 10	BMP Inspection and Maintenance
Chapter 3	Laws and Regulations	Appendices	
Chapter 4	Regulatory Compliance Process		
Chapter 5	Erosion and Sediment Control and Stormwater Management Requirements		
Chapter 6	Site Design and BMP Selection		
Chapter 7	Design Specifications for Construction Best Management Practices		
Chapter 8	Design Specifications for Post-Construction Stormwater Best Management Practices		

Prioritized Content Update



Chapter 1 - Introduction

- **Purpose of the Handbook**
 - Background
 - VDEQ Objective
 - Purpose and Scope
- **Handbook Overview**
 - What is New
 - Terminology and BMP Categories
 - Overview of Chapters
- **How to Use the Handbook**
- **Development Process and Updates**
 - Handbook Development
 - Updates and Revisions
 - Technology platform: enCodePlus
- **Acknowledgements**



Handbook Update Process

Technical Review Committee

TRC composition – broad representation

Meetings (two/year)

Identify Problems and Track Comments

Users identify problems and submit comments - Technology Platform

VDEQ reviews / prioritizes comments and prepares a report

Revise and Update the Handbook

TRC reviews report, identifies solutions, and recommends changes

VDEQ reviews recommendations, makes revisions / updates, and informs users

Chapter 7 - Design Specifications for Construction Best Management Practices

Significant Updates

- Framework, numbering, and nomenclature to integrate construction and post construction BMPs

Specifications Framework

Suggested line styles and symbology for plan sheets

SEDIMENT CONTROL MEASURES		
C-SCM-01 DUST CONTROL	(DC)	
C-SCM-02 CONSTRUCTION ROAD STABILIZATION	(CRS)	
C-SCM-03 TEMP STONE CONSTRUCTION ENTRANCE	(CE)	
C-SCM-04 INLET PROTECTION	(IP)	
C-SCM-05 CULVERT INLET PROTECTION	(CIP)	
C-SCM-06 WOOD CHIP FILTER BERM	(FB)	
C-SSM-01 TREE PRESERVATION	(CD)	
C-SSM-02 TOPSOILING	(RFO)	
C-SSM-03 SURFACE ROUGHENING	(TC)	
C-SSM-04 COMPOST BLANKETS	(DS)	
C-SSM-05 SOIL STABILIZATION	(ST)	
C-SSM-06 SODDING	(SB)	
C-SSM-07 BERMUDAGRASS AND	(WOP)	
C-SSM-08 TREES, SHRUBS, VINES, AND GROUND COVER	(VEG)	
C-SSM-09 TEMPORARY SEEDING	(TS)	
C-SSM-10 PERMANENT SEEDING	(PS)	
C-SSM-11 MULCHING	(MU)	

Chapter 8 - Design Specifications for Post-Construction Stormwater Best Management Practices

- Overview of numbering and nomenclature, like construction BMPs
- Overview of Manufactured Treatment Devices
- BMP P-FIL-09 Tree Planting

BMP P-FIL-09: Tree Planting

BMP P-FIL-09: Tree Planting

1.0 Definition

Tree plantings as a pollution-reduction practice pertain to new, individually planted trees on developed land.

BMP P-FIL-09: Tree Planting

Table P-FIL-09-1 Summary of Stormwater Functions Provided by Tree Plantings

Stormwater Function	Tree Canopy Over Pervious ¹		Tree Canopy Over Impervious
	HSG A/B	HSG C/D	
Annual Runoff Reduction Volume	16.0%	12.0%	3.5%

Appendix B - VRRM Guidance

Includes:

**Background & Application of
Virginia Runoff Reduction
Method**

**Overview of updates in VRRM
Version 4.0**

- Loading rates aligned with values output by the Chesapeake Assessment and Scenario Tool (CAST).
- Additional land cover category (“mixed open”)
- Two additional non-proprietary BMPs (Regenerative Stormwater Conveyance and Trees) integrated into the spreadsheets
- Revised TP load for new development projects (0.26 lb/acre/year)

Links to be provided to VRRM 4.0 Guidance Memo (separate from handbook)



Appendix F - Bioretention Design - Background Information

- Supplemental information for components of the bioretention BMP
- Guidance for Amending Soils – High Conductivity
 - Procedural recommendations to decrease K_{sat} and increase contact time
 - Guide to developing a Soil Amendment Plan
- Filter Media Criteria and Testing for Bioretention
- Calculating Treatment Volume Peak Discharge
 - Modified Curve Number Method

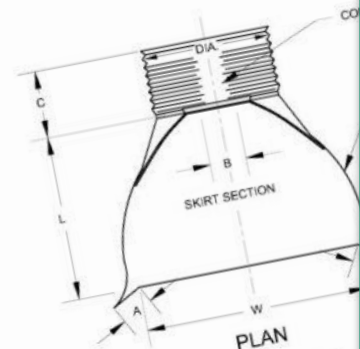
Appendices H, I, J

Appendix H - BMP Design
Nomographs, Construction, and
Maintenance Checklists

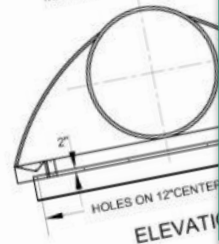
Appendix I - Standard Worksheets for
E&S Control

Appendix J - CADD standard details
(links) for E&S Controls and selected
components of BMPs

FLARED END-SECTION



WHERE FLARED END-SECTIONS ARE
TO BE USED WITH BITUMINOUS
COATED AND PAVED METAL PIPE,
THEY ARE TO BE GALVANIZED ONLY.



SOURCE: VDOT ROAD AND BRIDGE STANDARDS

APPENDIX I STANDARD EROSION AND SEDIMENT CONTROL WORKSHEET

Project Name: _____
 Location: _____
 Prepared By: _____ Date: _____
 Checked By: _____ Date: _____

COMPOST FILTER SOCK

Sock No.	Sock Diameter (in)	Location of Compost Filter Sock Segment	Slope Percent (%)	Slope Length Above Barrier (ft)

Appendix K - Standards and Specifications Template

Includes:

**Standards & Specifications
Entity Agreement Form**

**Standards & Specifications
Template**

- Agencies/Entities may submit standards and specifications (S&S), for approval by the Virginia DEQ, who serves as the VESMP authority for all S&S holders.
- The S&S Program is designed to provide a single set of S&S that describe how the entity shall conduct land-disturbing activities.
- Entity is responsible for administering, implementing, and complying with the S&S for Erosion and Sediment Control (ESC) and Stormwater Management (SWM) activities covered under the S&S.