

DEQ Certification Class Presentations

Class presentations are provided for study/review purposes only. Printouts of these PowerPoint slides will not be allowed into the exam testing centers.

July 2024

Plan Reviewer for Erosion and Sediment Control

Department of Environmental Quality
Office of Training Services

Course Materials

Participant Guide (PG), Virginia
Stormwater Management Handbook
Chapter 7, and ESC Law & Regs

- Purchased at
<https://bambooink.com/deq/>
- OR download from ELMS

***The PG, VSWHB Chapter 7, and the Law and
VESM Regs are the only resources needed to
take to Pearson-Vue for the ESC Plan
Reviewer exam.**

Plan Reviewer for Erosion and Sediment Control

Participant Guide

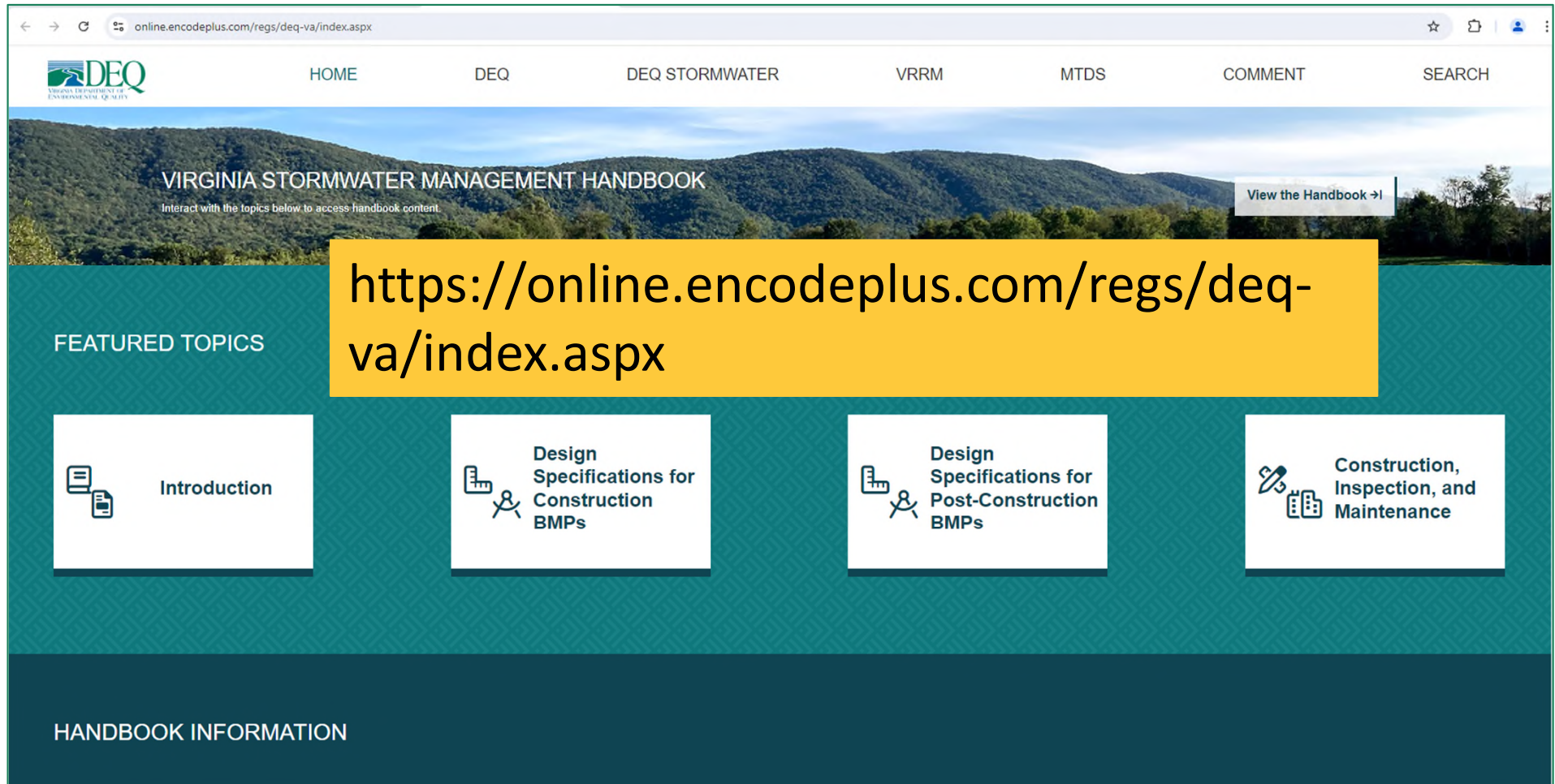


Training provided by the Virginia Department of Environmental Quality
Office of Training Services

Version 5.0

June 2024

The 2024 Virginia Stormwater Management Handbook - Online



The screenshot shows a web browser at the URL online.encodeplus.com/regs/deq-va/index.aspx. The page features a navigation bar with links: HOME, DEQ, DEQ STORMWATER, VRRM, MTDS, COMMENT, and SEARCH. Below the navigation bar is a banner image of a forested mountain range with the text "VIRGINIA STORMWATER MANAGEMENT HANDBOOK" and a "View the Handbook" button. A large yellow box overlays the page with the URL <https://online.encodeplus.com/regs/deq-va/index.aspx>. Below the banner, the "FEATURED TOPICS" section includes four white boxes with icons and text: "Introduction", "Design Specifications for Construction BMPs", "Design Specifications for Post-Construction BMPs", and "Construction, Inspection, and Maintenance". The bottom of the page has a dark teal section labeled "HANDBOOK INFORMATION".

online.encodeplus.com/regs/deq-va/index.aspx

HOME DEQ DEQ STORMWATER VRRM MTDS COMMENT SEARCH

VIRGINIA STORMWATER MANAGEMENT HANDBOOK
Interact with the topics below to access Handbook content.

View the Handbook →

<https://online.encodeplus.com/regs/deq-va/index.aspx>

FEATURED TOPICS

Introduction

Design Specifications for Construction BMPs

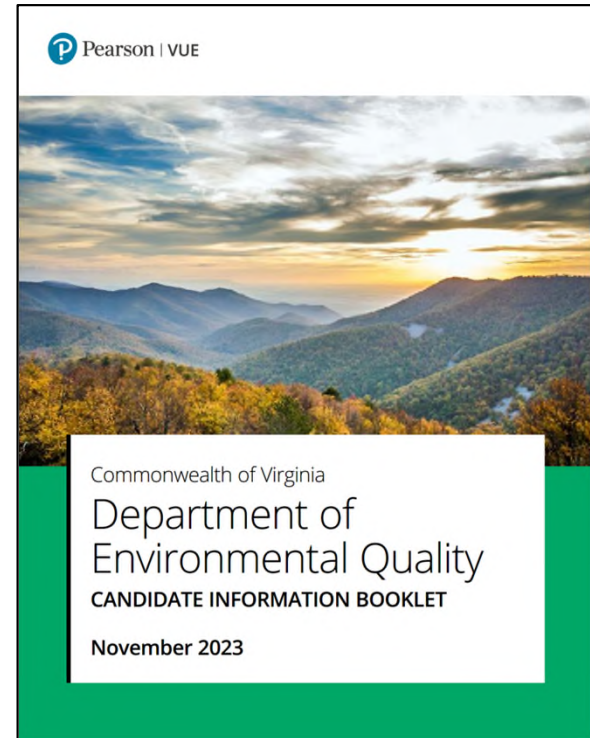
Design Specifications for Post-Construction BMPs

Construction, Inspection, and Maintenance

HANDBOOK INFORMATION

Course Materials – Pearson Vue Candidate Information Booklet

- Exam scheduling
- Testing center locations
- What to bring
- What NOT to bring
- Exam outlines
- Download from Pearson site:



- <https://home.pearsonvue.com/va/deq>

Course Materials - May I make notes in my Participant Guide?

Yes! See the Allowed References, CLB p. 5

ALLOWED REFERENCE MATERIALS



ALLOWED	NOT ALLOWED
Three 3-ring binders	Loose paper
Reference materials (see below)	Handwritten notes on separate paper
Dividers (any type)	Typed notes
Sticky tabs (used as dividers)	Practice quizzes
Handwritten notes on reference materials	Powerpoint presentations
Handwritten notes on dividers	
Handwritten headings on sticky tabs	
Highlighted reference materials	
Typed table of contents/ index (Created by candidate)	



This class will help you:

- Prepare for your exam administered at a Pearson Vue Testing Center
- Train for your role as an ESC Plan Reviewer



Agenda Day 1

8:30 – 9:00 Module 1 – Introduction

9:00 – 9:15 Module 2 – Fundamentals of Erosion and Runoff

9:15 – 10:00 Module 3 – Erosion Law for Plan Reviewers Activity

10:00 – 10:15 Break

10:15 – 11:30 Module 5 – MS-19 and Water Quantity Regs

11:30 – 12:00 Module 4 – Minimum Standards 1-18 Activity

12:00 – 1:00 Lunch

1:00 – 2:30 Module 6 – Virginia Stormwater Management
Handbook Specifications

2:30 – 2:45 Break

2:45 – 4:30 Module 6 & 7 – VSWHB Specs continued &
Outlet Protection Calculations

Agenda Day 2

8:30 – 9:30 Module 6 – VSWHB Specifications (to SB)

9:30 – 10:00 Module 8 – Sediment Trap & Sediment Basin
Calculation Review

10:00 – 10:15 Break

10:15 – 11:15 Module 6 – VSWHB Specifications

11:15 – 12:00 Module 9 – Hydrology

12:00 – 1:00 Lunch

1:00 – 2:30 Module 9 - Hydrology continued

2:30 – 2:45 Break

2:45 – 3:45 Module 10 – Graphical Peak Discharge

3:45 – 4:30 Exercise: TR55 worksheet

Agenda Day 3

8:30 – 9:15 Module 11 – Energy Balance

9:15 – 10:00 Exercise: TR55 – EB Worksheet

10:00 – 10:15 Break

10:15 – 12:00 Module 12 – Channel Adequacy (with exercises)

12:00 – 1:00 Lunch

1:00 – 2:30 Module 13a, b – Plan Reading and Narrative Plan Review

2:30 – 2:45 Break

2:45 – 4:00 Module 13c – Illustrative Plan Review

4:00 – 4:15 Module 13d – Reviewing for Water Quantity

4:15 – 4:30 Questions and Answers

Quickpoll

Which part of this course do you anticipate being the most challenging on the exam?

- a. Certification Requirements and Exam
- b. Administering an Erosion Program
- c. MS 1-18 and VSWHB Specifications
- d. MS 19 and Water Quantity Regs
- e. Hydrology and Graphical Peak Discharge
- f. Energy Balance and Channel Adequacy

Course Goal – Plan Reviewers:

- Provide knowledge and tools to effectively implement plan review for an erosion program within the requirements of the ESCL or VESMA and Regulations
- Ensure health, safety, and welfare of Virginia's citizens and waters
- Examine Construction Best Management practices from Handbook for design, planning, and construction
- Evaluate flow rate capacity and velocity requirements for compliance with VESM Regulations and Act

Module 1 Contents

1a. Virginia Erosion and Sediment Control Program Overview

*Background and History covered in:
Managing Erosion Online Course*

1b. Training and Certification

*Module 1: Training and Certification for ESC and
SWM Online Course*

Module 1a.

Virginia Erosion Program Overview

Background and History included in:

Managing Erosion Online Course

Program Goal

- To control erosion and sediment deposition from non-agricultural land-disturbing activities
- Prevent damage to downstream properties and natural resources from construction sites

Soil loss rates from construction sites can be 1,000 times the average of natural soil erosion rates and 20 times that from agricultural lands (Keener et al. 2007).

ESC Background

VESMA

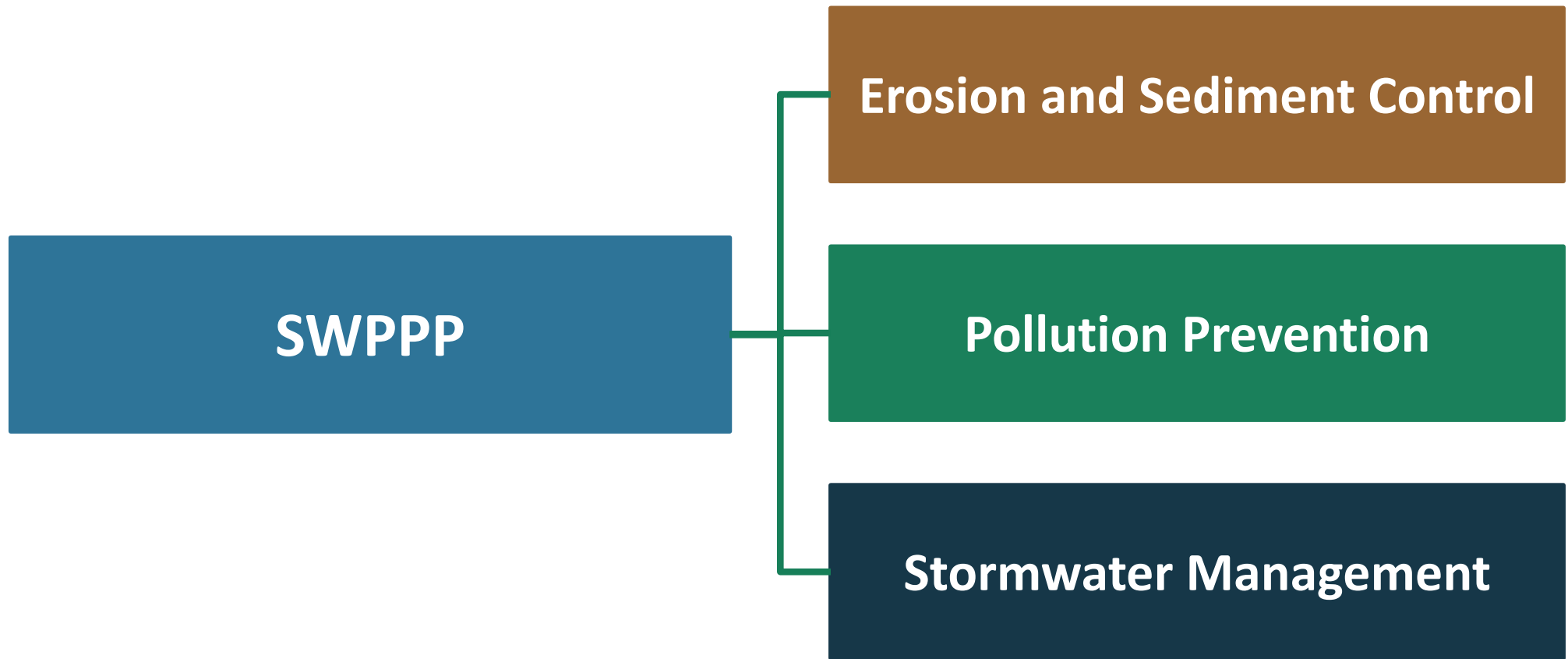
- 2016 – Virginia Erosion and Stormwater Management Act
 - Effective July 1, 2024
 - Combined the ESC and SWM programs and laws
 - Required entities administering both programs to now administer a joint VESMP

Programs' Laws and Reg

VESCP authorities: localities that only administer ESC programs will continue to operate under the *ESC Law* and *Part III of the VESM Regulation* (DEQ administers the stormwater requirements)

VESMP authorities: localities that administer both ESC and SWM programs will operate under *VESMA* and *Part II of the VESM Regulation*

Stormwater Pollution Prevention Plan



Stormwater Runoff



Always a Concern

Module 1b.

Training and Certification

*Module 1: Training and Certification for
ESC and SWM Online course*

QuickPoll

Who has to be certified?

- a. Program authority staff
- b. Contracted to perform ESC for authority
- c. Standards and Specs. Staff
- d. All of the above

Q&A



Program history
& overview



Certification



Exam



Recertification