



## **MS4 PROGRAM PLAN**

**FOR**

## **URBANIZED AREAS OF VIRGINIA**

### **Virginia Department of Transportation Small Municipal Separate Storm Sewer System (MS4)**

**In Compliance with:**

Individual Permit for Discharges of Stormwater from MS4 (VA0092975)  
Coverage from July 1, 2017 to June 30, 2022


**Prepared By:**

Virginia Department of Transportation  
1401 East Broad Street  
Richmond, Virginia 23219

**December 15, 2019**

## CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature  \_\_\_\_\_

Name Susan Keen, P.E.

Title State Location & Design Engineer

Date 3/4/20



## COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION  
1401 EAST BROAD STREET  
RICHMOND, VIRGINIA 23219-2000

Stephen C. Brich, P.E.  
COMMISSIONER

Date: March 6, 2019

### MEMORANDUM

**TO:** State Location and Design Engineer

**FROM:** Stephen C. Brich, P. E., Commissioner of Highways *SCB*

**SUBJECT:** Delegation of Authority

Pursuant to the authority granted by §§ 2.2-604 and 33.2-224 of the *Code of Virginia* and Part II.K.2 of Virginia Department of Environmental Quality's (VDEQ's) Municipal Separate Storm Sewer System (MS4) Permit No. VA0092975 issued to the Virginia Department of Transportation (VDOT), I hereby delegate authority to the VDOT State Location and Design Engineer to execute and administer the following plans and reports (and any modifications therein) as required by the MS4 Permit No. VA0092975:

1. the MS4 Program Plan;
2. Memoranda of Understanding (MOUs) with other parties to implement portions of the MS4 Program Plan;
3. the Chesapeake Bay Total Minimum Daily Load (TMDL) Action Plan;
4. the Local TMDL Action Plans; and

The duration of these delegations shall not extend beyond the expiration date of the MS4 Permit referenced above (June 30, 2022).

All prior delegations concerning the delegation of this duty are rescinded. If the State Location and Design Engineer is not available for a period of time to perform these delegations in a timely manner, he/she may not appoint a representative to execute these duties in his/her absence without written concurrence from the Commissioner. If the position of State Location and Design Engineer is vacant, that person appointed "Acting State Location and Design Engineer" shall have the same authority as that delegated herein to the State Location and Design Engineer.

Authorizing the State Location and Design Engineer to perform this act is in no way intended to abrogate my authority or ability to accomplish this act myself, if I so desire. Consequently, in this sense, the duties and responsibilities are concurrent. Furthermore, this expressed delegation of responsibilities is not intended to negate my authority or ability to delegate further responsibilities in specific situations, as I may deem necessary.

cc: Chief Engineer (VDOT)  
Chief of Policy and the Environment (VDOT)  
Deputy Chief Engineer (VDOT)  
Director, Governmental Affairs and Legislative Assistance Division (VDOT)  
Director, Environmental Division (VDOT)  
Director, Virginia Department of Environmental Quality (VDEQ)  
Manager, Office of VPDES Permits (VDEQ)

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High Priority Facilities

Support Facilities with Nutrient Management Plans

Revisions to Program Plan and Reference Materials

Reference Material

## ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
BMP	Best Management Practice
CGP	Construction General Permit
CRCIF	Construction Runoff Control Inspection Form
CWA	Clean Water Act
DCR	Virginia Department of Conservation and Recreation
DEQ	Virginia Department of Environmental Quality
DOD	Department of Defense
EPA	Environmental Protection Agency
ERAC	Environmental Research Advisory Committee
ESC	Erosion and Sediment Control
ESCCC	Erosion and Sediment Control Contractor Certification
HUC	Hydrologic Unit Code
IDDE	Illicit Discharge Detection and Elimination
IP	Implementation Plan
L&D	Location & Design
LDA	Land-Disturbing Activity
LUP	Land Use Permit
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NMP	Nutrient Management Plan
O&M	Operations & Maintenance
ORI	Outfall Reconnaissance and Inventory
P2	Pollution Prevention
POD	Point of Discharge
PSA	Public Service Announcement
RLD	Responsible Land Disturber
RLDA	Regulated Land Disturbance Activity
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TRB	Transportation Research Board
VAC	Virginia Administrative Code
VDOT	Virginia Department of Transportation
VESCLR	Virginia Erosion and Sediment Control Law and Regulations
VSMP	Virginia Stormwater Management Program
VPDES	Virginia Pollutant Discharge Elimination System
WIP	Watershed Implementation Plan
WLA	Wasteload Allocation

## VDOT MS4 PROGRAM PLAN BACKGROUND

The Virginia Department of Transportation (VDOT) is authorized to discharge stormwater from its municipal separate storm sewer system (MS4) by coverage under the Virginia Pollutant Discharge Elimination System (VPDES) *Individual Permit for the VDOT Municipal Separate Storm Sewer System (MS4)* (the Permit) within the urbanized areas of Virginia. As part of the original permit authorization (originally under a general permit), VDOT developed and implemented an MS4 Program Plan (the Plan) with best management practices (BMPs) to address the six minimum control measures (MCMs) and the special conditions for applicable total maximum daily loads (TMDLs) outlined in the Permit. The program plan has been refined and updated throughout the life of the program and permit(s).

In accordance with, VDOT's coverage under the 2017 Permit, VDOT has updated this MS4 Program Plan to address new permit requirements (including the addition of MCM7 – Infrastructure Coordination) as well as enhance BMPs through the adaptive management process. Implementation of these BMPs is consistent with the provisions of an iterative MS4 Program. Consistent with EPA interpretation, the Virginia Department of Environmental Quality (DEQ) has determined that implementation of the MS4 Program Plan, provided that the plan meets the requirements of the Permit, will reduce the discharge of pollutants to the Maximum Extent Practicable (MEP).

BMPs that are included in this Plan follow a prescribed alpha-numeric nomenclature that is based on the respective MCMs, the numbers of BMPs for each MCM, and the responsible Division. For example, BMP 3(B)2 refers to the following:

BMP	3	MCM 3: Illicit Discharge Detection and Elimination
	(B)	The second BMP to address the requirements of MCM 3
	2	The second VDOT Division to be assigned responsibility under the BMP

*Note: BMPs associated with the special conditions for approved TMDLs are assigned a BMP of SC1 (Chesapeake Bay TMDL) or SC2 (Local TMDLs), as appropriate.*

The area regulated by the MS4 Permit (herein referred to as the regulated area) covers areas discharging to an MS4 that is owned and/or operated by VDOT and located within one of the urbanized areas of Virginia. Urbanized areas as identified by the 2010 Decennial Census are listed below.

- Blacksburg
- Bristol
- Charlottesville
- Fredericksburg
- Harrisonburg
- Kingsport
- Lynchburg
- Richmond
- Roanoke
- Virginia Beach
- Washington, DC
- Winchester
- Staunton-Waynesboro
- Williamsburg



## VDOT RESPONSIBILITIES

The Virginia Department of Transportation, under the leadership of the VDOT Commissioner, is organized into several divisions within the Central Office, each serving under a designated Program Chief. The nine VDOT Construction Districts are each managed by a District Administrator or District Engineer who operates under the direct authority of the Deputy Commissioner/Chief Engineer. In general, VDOT employs a decentralized implementation strategy; overall program policy and guidance is provided by the appropriate Program Chiefs, while the day to day operation and implementation of VDOT's road construction and maintenance programs fall under the authority of the District Administrators/Engineers.

### Division Responsibilities

General oversight of the MS4 Program is assigned to the Location & Design (L&D) Division. The Stormwater Policy Committee Chairman and MS4 Steering Committee Chairman are represented by L&D staff. However, individual VDOT Central Office Divisions are responsible for the continued development and/or implementation of specific BMPs identified in this MS4 Program Plan as follows:

Lead Division	Associated BMPs
Construction	4(B), 6(C)3
Environmental	2(C), 3(B)2, 3(C), 6(A)2, 6(C)1, SC1(A), SC2(A)
Land Use	2(B)
Location & Design	1(A), 1(C), 2(D), 2(E), 3(A), 3(B)3, 3(D), 4(A), 5(A), 5(C), 6(E), 7(A)
Maintenance	1(B), 2(A), 3(B)1, 5(B), 6(A)1, 6(B), 6(C)2, 6(D)
Workforce Development	6(C)4

### District Responsibilities

Each District will generally be responsible for program implementation within the specific Urbanized Areas. VDOT Central Office staff will provide ongoing support to the Districts and will also develop the required annual reports with data provided by the Districts.

### Stormwater Policy Committee Responsibilities

The Stormwater Policy Committee generally meets on an annual basis to discuss the status of Program Implementation and address other administration concerns. The Policy Committee is largely comprised of Division and District Administrators.

### MS4 Steering Committee Responsibilities

The MS4 Steering Committee generally meets on a quarterly basis to discuss and develop program-wide policies and procedures, including implementation, reporting, and assessment tools.

### Responsibilities of Sub-Committees

The Stormwater Policy Committee and/or MS4 Steering Committee may establish other standing or special committees, as they deem advisable, to address specific elements or components of the MS4 Program Plan.

**MS4 INDIVIDUAL PERMIT CROSS REFERENCE TABLE**

Permit Reference	Permit Description	MS4 Program Plan BMP
Section I.B.2.c	List of documents incorporated by reference	Reference Document List
<b>MCM1</b>		
Section I.C.1.a.i-iv	Maintain a webpage	BMP 1(A)
Section I.C.1.b.i	Maintain a webpage	BMP 1(A)
Section I.C.1.b.ii	Program for illicit discharges, trash, debris and litter	BMP 1(A,B)
Section I.C.1.b.iii	Signage for pet waste, etc.	BMP 1(B)
Section I.C.1.c	Allowance for regional partnering	N/A
Section I.C.1.d	Include written procedures for Implementation	BMP 1(A-C)
Section I.C.1.e	Annual report requirements	BMP 1 (C )
<b>MCM2</b>		
Section I.C.2.a.i	Adopt-A Highway	BMP 2(A)
Section I.C.2.a.ii	Stenciling Program	BMP 2(B)
Section I.C.2.a.iii	Development of local TMDLs	BMP 2(C)
Section I.C.2.a.iv	Promote four stream cleanups	BMP 2(D)
Section I.C.2.b	Include written procedures	BMP 2(A-D)
Section I.C.2.c	Annual report requirements	BMP 2(E)
<b>MCM3</b>		
Section I.C.3.a	Prohibit non-stormwater discharges	BMP 3(B), 6(E)
Section I.C.3.b	Maintain IDDE manual	BMP 3(C)
Section I.C.3.c	Training program	BMP 3(C)
Section I.C.3.d	Spills	BMP 3(B)2
Section I.C.3.e	GIS System Map	BMP 3(A)
Section I.C.3.f.i	Program Plan requirements	MCM2 (footnote)
Section I.C.3.f.ii	Program Plan requirements	BMP 3(C)
Section I.C.3.f.iii	Program Plan requirements	MCM2 (footnote), 3(B)2
Section I.C.3.f.iv	Program Plan requirements	BMP 3(A)
Section I.C.3.g	Annual Report	BMP 3(D)
<b>MCM4</b>		
Section I.C.4.a	Standards and Specs	BMP 4(A)
Section I.C.4.b	Procedures for Compliance Inspections	BMP 4(B)
Section I.C.4.c	Track compliance	BMP 4(B)
Section I.C.4.d	Program Plan requirements	BMP 4(A), 4(B)
Section I.C.4.e	Annual Report requirements	BMP 4(B)
<b>MCM5</b>		
Section I.C.5.a	Standards and Specs	BMP 5(A)
Section I.C.5.b	Standards and Specs	BMP 5(A)
Section I.C.5.c	Inspection BMPs	BMP 5(B)

Permit Reference	Permit Description	MS4 Program Plan BMP
Section I.C.5.d	Documentation of BMPs	BMP 5(B)
Section I.C.5.e	Definition of Maintenance	N/A
Section I.C.5.f	Database of BMPs	BMP 5(A)
Section I.C.5.g	Report installation for post construction	BMP 5(A)
Section I.C.5.h	Report installation not reported in 5.g	BMP 5(B)
Section I.C.5.i	Annual Reporting Requirements	BMP 5(C)
<b>MCM6</b>		
Section I.C.6.a.i-v	Written maintenance procedures	BMP 6(A)1, 6(A)2
Section I.C.6.b	Dumping yard waste	BMP 6(A)
Section I.C.6.c	Management of leaked fluids	BMP 6(B)
Section I.C.6.d	Vehicle wash pad	BMP 6(A)
Section I.C.6.e	HPF SWPPPs	BMP 6(A)
Section I.C.6.f	Management of roadways and parking lots.	BMP 6(A)
Section I.C.6.g	Turf and Pesticide Management	BMP 6(A), 6(B)
Section I.C.6.h	Training	BMP 6(C)
Section I.C.6.i	Program Plan Requirements	N/A
Section I.C.6.j	Annual Report Requirements	BMP 6(E)
<b>MCM7</b>		
Section I.C.7.a	Annual coordination meeting	BMP 7(A)
Section I.C.6.b	Mapping	BMP 7(A)
Section I.C.6.c	Chesapeake Bay TMDL Action Plans	BMP 7(A)
Section I.C.6.d	Other TMDL Action Plans	BMP 7(A)
Section I.C.6.e	Credit for TMDL Implementation	BMP 7(A)
Section I.C.6.f	IDDE	BMP 7(A)
Section I.C.6.g	Small MS4 Coordination	BMP 7(A)
Section I.C.6.h	Annual Report	BMP 7(A)
<b>TMDL SC Requirements Affecting other MCMs</b>		
Section I.E.3b	Septic Requirements	BMP 6(A)2
Section I.E.4.b	Excessive sediment loading	Annual S&S
Section I.E.4.c	Excessive sediment loading	BMP 3(C)
Section I.E.5.b	PCB reporting	BMP 3(C)

# **MCM#1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS<sup>1</sup>**

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<sup>1</sup> VDOT's Permit does not define the term "public". However, VDOT is required to provide outreach to the public including its employees and contractors regarding proper disposal of pet waste and trash and identification and reporting of illicit discharges. VDOT is also required to implement the use of signage at its safety/rest areas to promote proper trash disposal. Therefore, the public, for the purposes of this permit condition, is considered to be VDOT's employees, hired contractors, and travelers using VDOT's fixed facilities such as rest areas. VDOT does not consider travelers along the roadway system as part of the "public" for the purpose of developing targeted public outreach strategies. However, VDOT has developed education material that may incidentally reach these travelers, which will have a positive benefit outside of VDOT's right-of-way.

**BMP 1(A) – Maintain and Update Stormwater Webpage**

<b>Description and Measurable Goal:</b>	Maintain and update a webpage dedicated to MS4 and stormwater, as it pertains to roads, highways, and permittee owned or operated facilities on the VDOT website (referred to herein as the “VDOT Stormwater Webpage”).
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	VDOT Stormwater Webpage

<b>Efforts and Expected Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Maintain and update VDOT Stormwater Webpage to communicate MS4 program elements.	Webpage was previously developed. VDOT will update webpage with necessary information as discussed in other parts of this Program Plan.	Link to dedicated VDOT stormwater webpage.  Ensure that current MS4 permit is provided on webpage.  Ensure that links are provided to the MS4 Program Plan and Annual Reports.
Provide instructions for the public on how to report illicit discharges, improper disposal, or spills to the MS4 or other potential stormwater pollution concerns	Webpage was previously developed. VDOT will update webpage with necessary information as discussed in other parts of this Program Plan.	Verify that links and contact information for reporting are valid and updated.

**BMP 1(B) – Signage at Rest Areas and Welcome Centers**

<b>Description and Measurable Goal:</b>	Provide informational signage at rest areas identified in permit.
<b>Lead Division:</b>	Maintenance
<b>Reference Materials:</b>	Templates for Pet Waste and Litter Signage

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to install and maintain informational signage for disposal of pet waste, litter, debris and trash at rest areas and welcome centers within urbanized areas*.	Message signs were previously developed and reported to DEQ. Facility signage was installed during first six months of permit term. VDOT will continue to maintain signage.	The number, type and location of informational signs posted.  Verification that signage is in place and functional will be conducted during year 5 of the permit and reported in the last annual report.

*Note: \* Informational signage is required at 1) Dale City; 2) Fredericksburg; 3) New Kent\*; 4) Manassas; 5) Bristol; 6) Abingdon; 7) Troutville\*; and 8) Winchester. Those rest areas above denoted with an “\*” are not physically located within a CUA; therefore, the municipal stormwater discharges from these rest areas are not regulated by this permit.*

**BMP 1(C) – Annual Reporting and Effectiveness Review**

<b>Description and Measurable Goal:</b>	Provide annual reports and assess effectiveness of outreach efforts.
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	VDOT Stormwater Webpage*

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to post Program Plans and Annual Reports.	The Program Plan will be posted on the VDOT webpage within 30 days after submittal to DEQ. Within 30 days of any modification to the Program Plan, the latest version will be posted. Annual reports will be posted on the web page within 30 days of submittal to DEQ, or by November 1 <sup>st</sup> of each year.	Confirm that Program Plan updates and annual reports have been posted. Also, provide a weblink to the VDOT stormwater webpage where the MS4 Program Plan and annual reports are posted.
Assessment of the effectiveness of the outreach program	Annually	<p>Estimated number of individuals reached through outreach including 1) illicit discharge program, 2) disposal of trash, debris, and litter program; and 3) informational signage at rest areas.</p> <p>Identify any entities with which VDOT partnered with to achieve this MCM.</p> <p>Provide list of education and outreach programs other than those listed and discuss whether these additional activities are anticipated to continue in subsequent permit years.</p> <p>Summary assessment of the effectiveness based on measurable goals above.</p>

# **MCM#2: PUBLIC INVOLVEMENT/PARTICIPATION**



**BMP 2(A) – BMPs for Public Involvement Activities: Adopt a Highway**

<b>Description and Measurable Goal:</b>	Promote, support, and maintain public involvement activities that encourage public awareness of stormwater pollution
<b>Lead Division:</b>	Maintenance
<b>Reference materials:</b>	Adopt-A-Highway Documentation VDOT's Stormwater Webpage

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to promote the Adopt-A-Highway program.	Annually promote Adopt-A-Highway through use of VDOT's stormwater webpage*.	The number of miles adopted statewide in the Adopt-A-Highway program for the reporting period, including a description of where, and an analysis of whether public participation has increased or decreased in the previous 5 years.

**BMP 2(B) – BMPs for Public Involvement Activities: Storm Drain Stenciling**

<b>Description and Measurable Goal:</b>	Promote, support, and maintain public involvement activities that encourage public awareness of stormwater pollution
<b>Lead Division:</b>	Office of Land Use
<b>Reference materials:</b>	VDOT's Stormwater Webpage LUP-SDS The number and location of LUPs that were issued for stenciling activities.

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Promote and support a public storm drain stenciling program through the Land Use Permit Program to promote public awareness of stormwater pollution	Annually promote storm sewer stenciling through use of VDOT's stormwater webpage.	The number and location of Land Use Permits that were issued for stenciling activities.

**BMP 2(C) – Participation in Development of Local TMDLs**

<b>Description and Measurable Goal:</b>	Track activities in which VDOT participated related to development of Local TMDLs.
<b>Lead Division:</b>	Environmental
<b>Reference Materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to participate in the development of local TMDLs in watersheds located within the CUA and in which the VDOT MS4 discharges.	Annually participate in TMDL and IP development meetings, when applicable.	Identify the name of TMDL and IP meetings that were attended.

**BMP 2(D) – BMPs for Public Involvement Activities: Stream Cleanups**

<b>Description and Measurable Goal:</b>	Promote, support, and maintain public involvement activities that encourage public awareness of stormwater pollution
<b>Lead Division:</b>	Location & Design
<b>Reference materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Promote four local area stream clean-ups sponsored by VDOT or other organizations.	Annually promote Local Stream Clean-Ups through use of VDOT’s stormwater webpage.	The local area stream cleanups promoted, including date of the event, and how they were promoted.

**BMP 2(E) – Annual Reporting and Effectiveness Review**

<b>Description and Measurable Goal:</b>	Report efforts and results of Public Involvement/Participation BMPs in the Annual Report and Monitor Effectiveness
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Summarize Activities in BMP 2A-2D as required by permit.	Annually.	Specific reporting items listed under BMP 2A-2D.
Summarize other public involvement activities.	Annually.	A summary of any other activities (other than those listed in BMP 2A-2D) in which VDOT participated (e.g. workshops, meetings) or which the permittee sponsored with the goal of reducing stormwater pollutant loads; improving water quality; and supporting local water quality restoration. The summary should include a discussion if these additional activities are anticipated to continue in subsequent permit years.
Identify Partners	Annually.	Identify entities with which VDOT partnered to fulfill the requirements.
Evaluate and describe effectiveness of each strategy and practice.	Annually.	Summary of effectiveness based on measurable goals.

## **MCM#3: ILLICIT DISCHARGE DETECTION AND ELIMINATION<sup>2</sup>**

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<sup>2</sup> BMP 3(C) – Illicit Discharge Detection and Elimination Program Note: VDOT has developed an Illicit Discharge Detection and Elimination (IDDE) Program to address illicit discharges that originate within VDOT’s property and right-of-way as well those that originate outside of VDOT’s right-of-way, but enter VDOT’s MS4. VDOT actively screens, investigates, and eliminates illicit discharges that originate within its right-of-way to the MEP. VDOT actively screens and investigates illicit discharges that enter its MS4 from an external source. However, VDOT does not have direct legal authority to prohibit or eliminate these sources, as VDOT has limited enforcement authority outside its right of way or property boundaries. As such, VDOT refers discovered illicit dischargers to the regulatory agencies and other MS4s as described in VDOT’s IDDE manual.

In addition to any regulatory requirements, VDOT, DEQ, and VDEM have established guidelines regarding coordination of transportation-related pollution incidents. The guidelines were outlined in the April 5, 2005 version of the DEQ Pollution Response Manual and provide a framework whereby DEQ, VDEM, and VDOT work with first responders (e.g. local fire departments, state and local police) to ensure these incidents are handled appropriately and in an efficient manner. The spill response program may include a combination of response actions by the permittee, and/or another public or private entity. For purposes of this permit:

- Fluids from vehicular accidents are not handled through the IDDE program;
- For Section I.C.3.g.ii-“Significant spills” is defined as those that require formal regulatory reporting or pose an imminent threat to human health or the environment.

**BMP 3(A) – Storm Sewer Map**

<b>Description and Measurable Goal:</b>	Develop and maintain a storm sewer map that supports a successful Illicit Discharge Detection and Elimination (IDDE) Program. The map, at a minimum, will include: <ul style="list-style-type: none"> <li>• The permittee’s MS4 service area based on the CUA as determined by the U.S. Census Bureau’s 2010 census;</li> <li>• Location of all outfalls owned or operated by the permittee discharging to state waters;</li> <li>• Known points of discharge to downstream, directly adjacent MS4s;</li> <li>• A unique identifier for each outfall and point of discharge;</li> <li>• Names of receiving waters to which the outfalls discharge; and</li> <li>• Stormwater management facilities owned or operated by the permittee.</li> </ul>
<b>Lead Division:</b>	Location & Design
<b>Reference materials:</b>	Storm Sewer Map VDOT Right of Way Determination and Mapping Protocols VDOT Outfall Inventory Manual

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Complete storm sewer system map.	Storm sewer map was previously developed. VDOT will update with necessary information as needed.	A statement that the GIS map of the storm sewer system is being updated in accordance with the written procedures.

**BMP 3(B)1 - Prohibition of Non-Stormwater Discharge**

<b>Description and Measurable Goal:</b>	Prohibit non-stormwater discharges into the storm sewer system through updated manuals of practice.
<b>Lead Division:</b>	Maintenance
<b>Reference materials:</b>	Maintenance Best Practices Manual*

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to develop and refine appropriate practices in the Maintenance Best Practices Manuals to prohibit non-stormwater discharges from VDOT operations.	This BMP is currently implemented and is continuously updated. Revisions will be made as appropriate to update this Manual.	Summarize changes to guides as they apply to prohibition of non-stormwater discharges



**BMP 3(B)2 - Prohibition of Non-Stormwater Discharge**

<b>Description and Measurable Goal:</b>	Prohibit non-stormwater discharges into the storm sewer system
<b>Lead Division:</b>	Environmental
<b>Reference Materials:</b>	Waste Management and Pollution Prevention Guides Transportation-related Incident Procedures

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to develop and refine appropriate practices in the Waste Management & Pollution Prevention Guides to prohibit non-stormwater discharges from VDOT operations.	This aspect of the BMP is currently implemented and is an ongoing effort. The WM/PP Guide will be reviewed each year.	Summarize changes to guides as they apply to prohibition of non-stormwater discharges.
Continue to support VDOT's role consistent with the guidelines detailed in the DEQ, VDOT, and VDEM Coordination of Transportation-Related Incidents, or subsequent agreement, in response to spills that may discharge into the MS4 via roadside ditches.	This aspect of the BMP is currently implemented and is an ongoing effort.	Summarize any changes to the multi-agency guidelines/agreement.

**BMP 3(B)3 – Prohibition of Non-Stormwater Discharge**

<b>Description and Measurable Goal:</b>	Review of legal authorities to continue providing adequate legal authority.
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	Law, Regulations, permit(s), Program Plan and related VDOT Governance Documents.

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Review and update legal authorities, if necessary, such as permits, orders, contracts, and inter-jurisdictional agreements.	24 months from permit effective date (6/30/2019).	VDOT has conducted a review of legal authorities and did not note any necessary changes in the annual report due October 2019. Any associated change(s) that may be identified as necessary in the future will be documented in subsequent Annual Report(s).

**BMP 3(C) – Illicit Discharge Detection and Elimination Program**

<b>Description and Measurable Goal:</b>	Utilize written procedures to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to VDOT’s MS4.
<b>Lead Division:</b>	Environmental
<b>Reference Materials:</b>	VDOT IDDE Program Manual VDOT IDDE Field Guide IDDE Geodatabase Storm Sewer Map

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Ensure that proper notifications are made if certain pollutants are identified as entering VDOT’s system from non-VDOT sources.	Incorporate notification provisions into VDOT IDDE Field Guide during PY19. Update IDDE Program Manual as appropriate.	Document that proper notification (for excessive sediment or PCB sources in Local TMDL watersheds) requirements have been incorporated into the IDDE Field Guide and/or Program Manual, as appropriate. Document updates to the IDDE Manual and reporting procedures and date of published revision.
Maintain, modify and update the IDDE Program Manual and Field Guide, as warranted.	This aspect of the BMP is currently implemented and is an ongoing effort.	Summarize any modifications or updates to the IDDE Program Manual and Field Guide.
Develop, update, offer and deliver IDDE Training Materials for appropriate VDOT staff, maintenance operators, and contractors in how to identify and report illicit discharges.	This aspect of the BMP is currently implemented and is an ongoing effort. Appropriate VDOT maintenance operators and contractors will be offered IDDE training once every five years.	Summarize any updates to the IDDE Training Materials and Program delivery.  Document the number of staff and contractors trained in IDDE during the reporting year.
Continue to perform investigations associated with potential illicit discharges as appropriate using VDOT’s IDDE Program Manual procedures. Effort is to be coordinated with Maintenance Division and other VDOT Divisions, as appropriate.	This aspect of the BMP is currently implemented and is an ongoing effort – follow-up investigations will be performed in accordance with the VDOT IDDE Program Manual.	Document a summary of IDDE investigations conducted for potential illicit discharges consistent with Section I.C.3.g. of the Permit.  Summarize significant spills to the MS4s where VDOT was the responsible party, including the sources of the spill, description of follow-up activities, and the resolution of the incident.

**BMP 3(D) – Annual Reporting and Effectiveness Review**

<b>Description and Measurable Goal:</b>	Report efforts and results of IDDE Efforts in the Annual Report and Monitor Effectiveness
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Annual Report containing permit required elements.	Annually.	Itemized in BMP 3A-3C above.
Evaluate and describe effectiveness of each strategy and practice.	Annually.	Summarize BMP effectiveness based on measurable goals.

**MCM#4:**  
**CONSTRUCTION SITE STORMWATER RUNOFF**  
**CONTROL**

**BMP 4(A) – Annual Standards and Specifications**

<b>Description and Measurable Goal:</b>	VDOT will utilize its annual ESC and SWM Standards & Specifications to address discharges entering the MS4 from VDOT land-disturbing activities regulated by the VPDES and VSMP.
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	VDOT's Annual ESC and SWM Standards & Specifications Database to track land-disturbing activities regulated under CGP

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to obtain annual approval of VDOT's ESC and SWM Standards & Specifications from DEQ.	Update components of the Standards & Specifications as regulations and operations warrant.	Statement that ESC and SWM Standards & Specifications were updated and the annual approval was received.  Update DEQ approval date of Annual Standards and Specifications within 30 days of approval.
Continue to require the ESC plan to be developed in accordance with VDOT's annual ESC Standards & Specifications prior to commencing land disturbing activities.	This aspect of the BMP is currently implemented and is an ongoing annual effort.	Statement that required ESC Plans were developed in accordance with VDOT's annual ESC Standards & Specifications.
Continue to require applicable RLDA to secure the necessary state permit authorizations from DEQ to discharge stormwater from construction sites.	This aspect of the BMP is currently implemented and is an ongoing annual effort.	Document the required info from the MS4 Permit, including: (1) Total number of regulated land-disturbing activities**; and (2) Total number of acres disturbed**.

**BMP 4(B) – Annual Reporting and Effectiveness Review**

<b>Description and Measurable Goal:</b>	Inspect and enforce compliance with the VPDES Construction General Permit and attending regulations on applicable projects.
<b>Lead Division:</b>	Construction
<b>Reference Materials:</b>	VDOT's Annual ESC and SWM Standards & Specifications

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Perform construction inspections for compliance with VESCLR, CGP and Annual ESC and SWM Standards & Specifications.	This aspect of the BMP is currently implemented and is an ongoing effort – VDOT will inspect regulated land-disturbing activities in accordance with the Annual ESC and SWM Standards & Specifications.	<p>Until VDOT can develop and implement its central electronic database (see below), VDOT will estimate the number of inspections performed based on the number of existing construction projects, the duration of each project for the permit year, and the prescribed inspection schedule. The enhanced inspection schedule required by the CGP is applied statewide of whether or not an Impaired, TMDL, or Exceptional water is present.</p> <p>Provide a statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current DEQ approved Standards and Specifications for Erosion and Sedimentation Control.</p>
Require compliance with SWPPP plans including the ESC Plan, and require changes/ modifications to SWPPPs, as necessary, to maintain compliance with applicable regulations. Also, utilize enforcement authority if necessary.	This aspect of the BMP is currently implemented and is an ongoing effort.	VDOT will report a summary of the enforcement actions carried out, including the total number and type of enforcement actions taken during the reporting period. [After tracking mechanism below is completed and implemented, VDOT will report number of inspections, number of inspections with deficiencies noted, number of corrective actions performed, and a summary of the type of corrective actions.]
Develop procedures to perform periodic compliance inspections.	This aspect of the BMP is currently implemented and is an ongoing effort. Periodic compliance inspections are conducted quarterly.	<p>Document periodic BMP Inspections.</p> <p>Document the total number of third-party QA inspections conducted.</p>

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Develop a mechanism to track compliance inspections and associated deficiencies.	No later than June 30, 2019, VDOT must develop a mechanism for tracking of compliance inspections, deficiencies noted, corrective actions and nature of corrective actions.	Report on progress of development of compliance inspection tracking mechanism.  Upon completion and implementation of tracking mechanism, report annually on number of compliance inspections where deficiencies were discovered, the number of corrective actions completed and a summary of the type of corrective actions.
Evaluate and describe effectiveness of each strategy and practice.	Annually.	Summarize BMP effectiveness based on measurable goals.



# **MCM#5: POST-CONSTRUCTION STORMWATER MANAGEMENT**

**BMP 5(A) – Standards and Specifications**

<b>Description and Measurable Goal:</b>	VDOT will utilize its annual ESC and SWM Standards & Specifications to address post-construction stormwater runoff that enters the MS4 from regulated land-disturbing activities.
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	VDOT’s Annual ESC and SWM Standards & Specifications

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to obtain annual approval of VDOT’s ESC and SWM Standards & Specifications.	<p>Update components of the Standards &amp; Specifications as regulations and operations warrant.</p> <p>Incorporate most current DEQ approved standards and specifications for post-construction SWM.</p> <p>Update the approval dates for standards and specifications within the program plan within 30 days of DEQ approval for any changes.</p>	<p>Confirmation that the annual approval has been secured from DEQ.</p> <p>Listing of changes to annual standards and specifications.</p> <p>Verification that program plan has been updated with new approval dates within 30 days of DEQ approval of any changes.</p>
Continue to specify design criteria for post-construction stormwater runoff controls.	This aspect of the BMP is currently implemented and is an ongoing annual effort.	Statement that VDOT’s annual ESC and SWM Standards & Specifications include current design criteria for post-construction stormwater runoff controls
Continue to develop stormwater management plans that are in accordance with VDOT’s annual ESC and SWM Standards & Specifications	This aspect of the BMP is currently implemented and is an ongoing annual effort.	Statement that post-construction stormwater management plans were developed in accordance with VDOT’s annual ESC and SWM Standards & Specifications.

Expected Efforts and Results in Meeting Measurable Goal	Implementation Schedule	Annual Report Documentation
Continue to inventory post-construction SWM facilities and related hydraulic and design information.	VDOT has previously implemented this requirement and will continue to inventory new BMPs as they are brought online.	<p>For new SWM facilities brought online during the reporting year, the following information will be included*:</p> <ul style="list-style-type: none"> <li>i. The SWM facility type;</li> <li>ii. Location including latitude, and longitude (in decimal degrees);</li> <li>iii. The total pervious and impervious acres treated by the SWM (to the nearest one-tenth of an acre);</li> <li>iv. The date brought online (MMYYYY). If the date is unknown, the permittee shall use June 1, 2005 as the date brought online for all previously existing SWM facilities;</li> <li>v. The hydrologic unit code (HUC 6) in which the SWM facility is located; and</li> <li>vi. The date of last inspection of the SWM facility by the permittee.</li> </ul>
Land Disturbing Projects and SWM facilities follow appropriate requirements and are reported properly to DEQ.	VDOT will adjust queries and reports from current databases to develop such that BMPs can be reported in the next reporting period in a format compatible with the Virginia Construction Stormwater Database.	<p>A statement that the permittee submitted information for SWM facilities implemented in accordance with the Standards and Specifications for the control of post construction stormwater runoff from areas of new development and development on prior developed lands through the Virginia Construction Stormwater General Permit database in accordance with Part I.C.5.g.</p> <p>Track and report total number of LD-445D forms completed and submitted for permit termination.</p>

*Note: \* Permit requires reporting of this information using the DEQ Construction Stormwater Database or other application as specified by DEQ. For any post-construction stormwater BMPs that are brought online but not reported through the Construction Stormwater Database (i.e. CBPA Land Disturbing Activities with less than 1 ac of disturbance), they must be reported using the DEQ BMP Warehouse. VDOT submits this information in a specific tabular format that is acceptable to DEQ.*

**BMP 5(B) – Long-Term Care and Maintenance of SWM Facilities**

<b>Description and Measurable Goal:</b>	Provide adequate long-term operation and maintenance of its SWM facilities in accordance with the VDOT BMP Inspection and Maintenance Manuals.
<b>Lead Division:</b>	Maintenance
<b>Reference Materials:</b>	VDOT’s Annual ESC and SWM Standards and Specifications, including: VDOT BMP Inspection Manual VDOT BMP Maintenance Manual DEQ Construction Stormwater Database DEQ BMP Database

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to annually inspect VDOT post-construction SWM facilities in accordance with VDOT BMP Inspection Manual, and record inspections in SWM facility database.	This aspect of the BMP is currently implemented and is an ongoing effort.	Track and report the total number of inspections completed. In addition, VDOT will report the date of the most recent inspection for each SWM facility.
Continue maintenance on its post-construction SWM facilities in accordance with the VDOT BMP Maintenance Manual	This aspect of the BMP is currently implemented and is an ongoing effort.	Confirmation that SWM facilities are being maintained in accordance with the VDOT BMP Maintenance Manual.  Provide a summary of SWM facility maintenance activities performed when necessary to address structural deficiencies or other significant maintenance activities.
Report BMP Data in a format acceptable to DEQ	VDOT will modify database reports and queries as needed to adapt to reporting format required by DEQ for the next reporting period.	For BMPs not reported through the Virginia DEQ Construction Stormwater Database, provide a confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with the permit, and the date on which the information was submitted.

**BMP 5(C) – Annual Reporting and Effectiveness Review**

<b>Description and Measurable Goal:</b>	Report efforts and results of Post-Construction Stormwater BMPs in the Annual Report and Monitor Effectiveness
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Summarize Activities in BMP 5A-5B as required by permit.	Annually.	Specific reporting items listed under BMP 5A-5B.
Evaluate and describe effectiveness of each strategy and practice.	Annually.	Summary of effectiveness based on measurable goals.

**MCM#6:  
POLLUTION PREVENTION/GOOD HOUSEKEEPING  
FOR VDOT OPERATIONS**

**BMP 6(A)1 – Procedures for Operation and Maintenance Activities**

<b>Description and Measurable Goal:</b>	Develop and refine written procedures designed to minimize or prevent pollutant discharge from support facilities, daily operations, equipment maintenance, and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers.
<b>Lead Division:</b>	Maintenance
<b>Reference Materials:</b>	Maintenance Best Practices Manual

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to develop and refine applicable sections of the Maintenance Best Practices Manual for MS4 regulated activities	This BMP is currently implemented and is continuously updated. Revisions will be made as appropriate to update this Manual.	A confirmation statement that the Maintenance Best Practices Manual continues to be implemented and a list of any new protocols that were developed to reduce pollutants including those to reduce the discharge of pollutants associated with roads, streets and parking lot maintenance; as well as those associated with pesticide, herbicide, and fertilizer application.
Prohibit the dumping of yard waste and grass clippings into the MS4.	This aspect of the BMP is currently implemented through Chapter 7 of the Maintenance Best Practices Manual.	Provide a statement that the guidance related to mowing, tree removal, pruning and trimming are followed.

**BMP 6(A)2 – Procedures for Operation and Maintenance Activities**

<b>Description and Measurable Goal:</b>	Develop and refine, as appropriate, written procedures designed to minimize or prevent pollutant discharge from high-priority support facilities, daily operations, equipment maintenance, and the application, storage, and disposal of pesticides, herbicides, and fertilizers.
<b>Lead Division:</b>	Environmental
<b>Reference Materials:</b>	Waste Management and Pollution Prevention Guide List of High Priority Facilities Applicable Stormwater Pollution Prevention Plans

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to develop and refine applicable sections of Waste Management and Pollution Prevention Guide that apply to MS4 regulated activities	This aspect of the BMP is currently implemented and is an ongoing effort. The WM/PP Guide will be reviewed each year.	A summary of modifications/refinements to the Waste Management and Pollution Prevention Guide, as appropriate and a list of any new protocols that were developed to reduce pollutants.
Prohibit vehicle washing except on approved wash pads.	This aspect of the BMP is currently implemented and is an ongoing effort.	
Identify High Priority Facilities as defined by the Individual Permit	The effort has been completed. The list will be annually evaluated to determine if additional facilities are determined to be high priority.	List any additions and deletions to the High Priority Facilities list, including the Facility name, location, date the SWPPP was or will be developed, and whether it is unmanned. An update was made to the High Priority Facility list in PY20 which is included in an attachment of this Program Plan.
Continue to develop and refine SWPPPs for High Priority Facilities	This aspect of the BMP is currently implemented and is an ongoing effort. Each SWPPP is reviewed annually.	Provide a summary report confirming the implementation of the required SWPPPs for the reporting year.
Continue to perform annual MS4 compliance assessments at VDOT High Priority Facilities within the MS4 Areas	This aspect of the BMP is currently implemented and is an ongoing effort.	Provide a confirmation statement that assessments were performed at all High Priority Facilities, that SWPPPs have been developed and are up to date.



<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Develop a list of facilities with onsite septic in local watersheds with a bacteria TMDL that allocates a WLA to VDOT's MS4.	Maintain list and guidance and communicate requirements to District Maintenance and/or Facilities to inspect and/or pump out septic tanks once every 5 years.	Summary report of facility list and date of inspections and pump-outs conducted during the reporting year.

**BMP 6(B) – Turf and Landscape Management**

<b>Description and Measurable Goal:</b>	Develop and refine turf and landscape nutrient management plans (NMPs) that have been developed by a certified turf and landscape nutrient management planner to minimize or prevent pollutant discharge from turf and landscape management
<b>Lead Division:</b>	Maintenance
<b>Reference Materials:</b>	List of Applicable Lands that Require NMPs Applicable Nutrient Management Plans (once developed) Roadside Development Standards and Specifications

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Identify all applicable lands where nutrients are applied to a contiguous area of more than one acre.	This effort has been completed. The list will be evaluated annually to determine if updates are required.	List any additions and deletions to the list of applicable lands, including location and total acreages.
Continue to develop and refine NMPs on all lands where nutrients are applied to a contiguous area of more than one acre.	This aspect of the BMP is currently implemented and is an ongoing effort.	The acreage of lands upon which turf and landscape nutrient management plans have been developed. Document updates as applicable to VDOT’s two current DCR-approved Nutrient Managements (1) one plan applicable to all new construction; (2) one plan applicable to all roadside management activities.
Continue to develop and refine Nutrient Management Standards & Specifications as approved by DCR for roadside development during construction and maintenance activities.	This aspect of the BMP is currently implemented with approved district specific NMPs and is an ongoing effort.	A confirmation statement that the approved Nutrient Management Standards & Specifications continue to be implemented.
Continue to specify criteria for managing yard waste and grass clippings in VDOT’s Roadside Development Standards and Specifications.	This aspect of the BMP is currently implemented and is an ongoing annual effort.	Confirmation that VDOT’s Roadside Development Standards and Specifications include management specifications for handling of yard waste and grass clippings.

**BMP 6(C)1 – Training of VDOT Forces**

<b>Description and Measurable Goal:</b>	Continue to implement VDOT’s efforts to prevent and reduce stormwater pollution from VDOT-related activities through development, deployment, and delivery of training courses and events.
<b>Lead Division:</b>	Environmental (for division specific elements of VDOT’s Employee Training Program for MS4 and Stormwater)
<b>Reference Materials:</b>	VDOT Employee Training Program for MS4 and Stormwater

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Deliver a training plan to include, but not limited to, training on the IDDE program, Good Housekeeping/Pollution Prevention, SWPPP and appropriate spill prevention and responses.	This aspect of the BMP is currently implemented and is an ongoing effort.	A summary report on the training obtained, including a list of training events, the training date, the objective of the training, and the number of employees attending the training events.

**BMP 6(C)2 – Training of VDOT Forces**

<b>Description and Measurable Goal:</b>	Continue to develop and refine VDOT’s efforts to prevent and reduce stormwater pollution from VDOT-related activities.
<b>Lead Division:</b>	Maintenance (for division specific elements of VDOT’s Employee Training Program for MS4 and Stormwater)
<b>Reference materials:</b>	VDOT Employee Training Program for MS4 and Stormwater

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Ensure that VDOT employees and contractors who apply pesticides and herbicides are properly trained or certified in accordance with the Virginia Pesticide Control Act.	This aspect of the BMP is currently implemented and is an ongoing effort.	A summary report on the training obtained, including a list of training events, the training date, the objective of the training, and the number of employees attending the training events.
Ensure that VDOT employees and contractors are trained in good housekeeping and pollution prevention practices and the IDDE Program.	This aspect of the BMP is currently implemented and is an ongoing effort	A summary report on the training obtained, including a list of training events, the training date, the objective of the training, and the number of employees attending the training events.

**BMP 6(C)3 – Training of VDOT Forces**

<b>Description and Measurable Goal:</b>	Continue to train VDOT forces to prevent and reduce stormwater pollution from VDOT-related activities.
<b>Lead Division:</b>	Construction (for division specific elements of VDOT’s Employee Training Program for MS4 and Stormwater)
<b>Reference Documents:</b>	VDOT Employee Training Program for MS4 and Stormwater

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Ensure applicable construction personnel receive training on the IDDE program and appropriate spill responses.	Starting in the second year of permit coverage, provide training to applicable field personnel.	A summary report on the required training, including a list of training events, the training date, the objective of the training and the number of employees attending training.

**BMP 6(C)4 – Training of VDOT Forces**

<b>Description and Measurable Goal:</b>	Continue to implement VDOT’s efforts to prevent and reduce stormwater pollution from VDOT-related activities.
<b>Lead Division:</b>	Workforce Development (for division specific elements of VDOT’s Employee Training Program for MS4 and Stormwater)
<b>Reference materials:</b>	VDOT Employee Training Program for MS4 and Stormwater*

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Ensure that VDOT employees and consultants serving as plan reviewers and inspectors obtain the appropriate certifications as specified in VDOT’s annual ESC and SWM standards and specifications.	This aspect of the BMP is currently implemented and is an ongoing effort.	A summary report on the total number of personnel that are certified, including those newly certified and re-certified during the reporting year.
Provide training opportunities through the Erosion and Sediment Control Contractor Certification (ESCCC) Program.	This aspect of the BMP is currently implemented and is an ongoing effort.	A summary of the number of personnel trained through each training program and date of training.

**BMP 6(D) – Oversight of VDOT Maintenance Contractors**

<b>Description and Measurable Goal:</b>	Contractual oversight procedures for VDOT contractors for maintenance of roadway or operation and use of VDOT facilities.
<b>Lead Division:</b>	Maintenance
<b>Reference materials:</b>	Maintenance contracts

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Continue to require that contractors use appropriate control measures and procedures for stormwater discharges to the VDOT's MS4 System.	This aspect of the BMP is currently implemented and is an ongoing effort	A confirmation statement that contractors are complying with the contract language.

**BMP 6(E) – Annual Reporting and Effectiveness Review**

<b>Description and Measurable Goal:</b>	Report efforts and results of Pollution Prevention/Good Housekeeping BMPs in the Annual Report and Monitor Effectiveness
<b>Lead Division:</b>	Location & Design
<b>Reference Materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Summarize Activities in BMP 6A-6D as required by permit.	Annually.	Specific reporting items listed under BMP 6A-6D.
Assure that protocols are followed	Annually.	Provide a statement that the written protocols developed above were followed to reduce the discharge of pollutants associated with VDOT owned or operated facilities and road, street and parking lot maintenance.  Provide a statement that turf and landscape management BMPs were followed.
Evaluate and describe effectiveness of each strategy and practice.	Annually.	Summary of effectiveness based on measurable goals.

# **MCM#7: INFRASTRUCTURE COORDINATION**



**BMP 7(A) – Infrastructure Coordination**

<b>Description and Measurable Goal:</b>	Coordinate with other large MS4s regarding physical interconnection of systems.
<b>Lead Division:</b>	Location & Design
<b>Reference materials:</b>	

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Meet* annually with each Phase 1 MS4 permittee for the purpose of coordination on priority issues for the Program Plan and TMDL Action Planning relevant to interconnectivity.	This aspect of the BMP is currently being implemented and is an ongoing effort.	A summary report on the meeting dates and primary issues discussed during meetings with each Phase 1 permittee.  Document coordination with physically-interconnected MS4s related to high-risk facilities.
Participate in coordination efforts initiated by Phase 1 MS4 and Small MS4 operators when the VDOT MS4 is physically-interconnected.	Engage and participate with Phase 1 and Small MS4s as requested.	Annually document meetings* with Phase 1 and Small MS4s related to physical interconnection issues addressed in the permit.

*Note: \* Meetings may be conducted individually with permittees or in a group meeting and face to face meetings, conference calls, or using electronic meeting technology may constitute a meeting.*

# SC#1: SPECIAL CONDITIONS FOR CHESAPEAKE BAY TMDL<sup>3</sup>

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<sup>3</sup> *Special condition for the Chesapeake Bay TMDL. The Commonwealth in its Phase I and Phase II Chesapeake Bay TMDL Watershed Implementation Plans (WIP) committed to a phased approach for MS4s, affording MS4 operators up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I and II WIPs to meet the Level 2 (L2) scoping run for existing developed lands as it represents an implementation of a cumulative 36.0% of L2 as specified in the 2010 Phase I WIP. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.*

- (1) *In accordance with Part I, Section D.3 of the permit, the operator has developed and submitted to the DEQ for its review an amended Chesapeake Bay TMDL Action Plan that addresses a cumulative reduction of at least 36% of the total Level 2 Scoping Run reductions.*

**BMP SC1(A) – Action Plan for Chesapeake Bay Watershed TMDL**

<b>Description and Measurable Goal:</b>	Develop and implement 2 <sup>nd</sup> Phase TMDL Action Plan for the Chesapeake Bay Watershed TMDL
<b>Lead Division:</b>	Environmental
<b>Reference materials:</b>	Chesapeake Bay 2 <sup>nd</sup> Phase TMDL Action Plan

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Develop 2 <sup>nd</sup> Phase Chesapeake Bay TMDL Action Plan for the four river basins.	Develop 2 <sup>nd</sup> Phase Action Plan within 12 months of receiving permit coverage 6/30/18.	The 2 <sup>nd</sup> Phase Chesapeake Bay TMDL Action Plan has been developed and submitted to DEQ. Any future updates made during the reporting year if any, will be submitted and documented.
Implementation of 2 <sup>nd</sup> Phase Chesapeake Bay Watershed TMDL Action Plan.	No later than the expiration date of this permit.	Submit report on progress in implementing the Action Plan including BMPs and/or strategies implemented, the estimated reduction of Pollutants, progress toward meeting the required cumulative reductions, and control measures that are planned to be implemented during the next reporting period.

## SC#2: SPECIAL CONDITIONS FOR APPROVED LOCAL TMDLS<sup>4</sup>

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<sup>4</sup> *Special conditions for approved total maximum daily loads (TMDL) other than the Chesapeake Bay TMDL. An approved TMDL may allocate an applicable wasteload to a small MS4 that identifies a pollutant or pollutants for which additional stormwater controls are necessary for the surface waters to meet water quality standards. The permittee shall develop and implement a local TMDL action plan for each pollutant for which wasteloads have been allocated to the permittee's MS4 in TMDLs approved by the Environmental Protection Agency (EPA) and listed in Attachment A of the permit as described below:*

- a. For TMDLs approved by the EPA prior to July 1, 2013, the permittee has updated the previously approved local TMDL action plans in order to meet the conditions of Part I.E.2, 3, 4, and 5, as applicable.*
- b. For TMDLs approved by EPA on or after July 1, 2013 and prior to April 1, 2017, the permittee has developed and initiated implementation of action plans for each pollutant for which wasteloads have been allocated to the permittee's MS4 in order to meet the conditions of Part I.E.2, 3, 4, and 5. Copies of the Local TMDL Action Plans for Bacteria, PCBs and Sediment are available at Environmental Division's Central Office location.*

**BMP SC2(A) – Action Plans for Approved Local TMDLs**

<b>Description and Measurable Goal:</b>	Develop and implement applicable TMDL Action Plans for approved TMDLs that have assigned VDOT’s MS4 a wasteload allocation.
<b>Lead Division:</b>	Environmental
<b>Reference materials:</b>	List of approved local TMDLs that have assigned VDOT’s MS4 a WLA Local TMDL Action Plans (once developed)

<b>Expected Efforts and Results in Meeting Measurable Goal</b>	<b>Implementation Schedule</b>	<b>Annual Report Documentation</b>
Update Existing Local TMDL Action Plans ( <i>TMDLs approved before July 2013</i> )* in accordance with Local TMDL Special Condition	Update Existing Local TMDL Action Plans within 12 months of receiving permit coverage.	Applicable existing TMDL Action Plans were updated within 12 months of receiving permit coverage. Any future updates made during the reporting year if any, will be submitted.
Develop New Local TMDL Action Plans ( <i>TMDLs approved between July 2013 and June 2017</i> )* in accordance with Local TMDL Special Conditions of Permit.	Develop Local TMDL Action Plans within 24 months of receiving permit coverage.	Applicable TMDL Action Plans were developed within 24 months of receiving permit coverage. Any future updates made during the reporting year if any, will be submitted.
Implement Local TMDL Action Plans.	Schedule to be identified during the development of the Local TMDL Action Plans.	Submit report on progress of implementing each Action Plan and the associated pollutant load reductions.
Evaluate effectiveness of applicable local TMDL Action Plans.	No later than 48 months from permit effective date (6/30/2021).	Submit effectiveness assessment to DEQ.

## **PROGRAM EVALUATION, MODIFICATION, AND REPORTING**

Through the MS4 Steering Committee meetings, VDOT will annually evaluate the effectiveness of each strategy or practice. VDOT routinely evaluates specific standards and specifications, schedules, manuals, checklists, and other documents. Revisions to the MS4 Program Plan are expected throughout the life of this permit as part of the iterative process to reduce pollutant loading and protect water quality. As such, revisions made in accordance with this permit as a result of the iterative process do not require modification of this permit. VDOT will document revisions to the MS4 Program Plan as part of the Annual Report, including an explanation as to why a specific BMP was replaced or eliminated. A list of plan revisions is included in the attachments.

Documents, policies, and procedures listed in the Program Plan are updated internally at VDOT as needed (to comport with changes to laws, regulations, implementation approach or other factors not related to MS4/Stormwater). These items are listed under “Reference materials” within each BMP section. A detailed table, included in the attachments, lists the reference material name, status, date modified (if modified). Any changes to a reference material will be tracked in the list of plan revisions.

Location & Design Division will document revisions based on the table below. In the event L&D is not the owner of a revised reference material, the owning division should provide L&D with the information needed to complete the revisions to the table.

The reference table is updated periodically for internal distribution and can be provided to DEQ upon request. A copy of this table will be provided with the annual report.

## HIGH PRIORITY FACILITIES

**High Priority Facilities with SWPPPs (with Date of Revision)**

<b>High Priority Facility</b>	<b>VDOT District</b>	<b>SWPPP Date</b>
Bristol District Complex	Bristol	Sep-16
Gate City AHQ	Bristol	Sep-16
Chancellor AHQ	Fredericksburg	Sep-16
Falmouth AHQ	Fredericksburg	Sep-16
Fredericksburg District Complex	Fredericksburg	Sep-16
Massaponax AHQ	Fredericksburg	Sep-16
Stafford AHQ	Fredericksburg	Sep-16
Bartlett AHQ	Hampton Roads	Sep-16
Downtown Tunnel State Street Facility	Hampton Roads	Feb-17
Expressway AHQ	Hampton Roads	Sep-16
Frederick AHQ	Hampton Roads	Sep-16
Hampton Roads District Complex	Hampton Roads	Sep-16
Hampton Roads TMS Operations	Hampton Roads	Sep-16
Midtown Tunnel Pinners Point Facility	Hampton Roads	Dec-16
Norfolk Residency Complex	Hampton Roads	Sep-16
Pine Chapel AHQ	Hampton Roads	Sep-16
Seaford AHQ	Hampton Roads	Sep-16
Skiffs Creek AHQ	Hampton Roads	Sep-16
Wards Corner AHQ	Hampton Roads	Sep-16
Wayside AHQ	Hampton Roads	Sep-16
Williamsburg Residency Complex	Hampton Roads	Sep-16
Lynchburg District Complex	Lynchburg	Sep-16
Timberlake AHQ	Lynchburg	Sep-16
Arcola AHQ	Northern Virginia	Sep-16
Chantilly AHQ	Northern Virginia	Sep-16
Columbia Pike Maintenance/Operations Complex	Northern Virginia	Sep-16
Dale City AHQ	Northern Virginia	Sep-16
Dumfries AHQ	Northern Virginia	Sep-16
Camp 30 Shop	Northern Virginia	Sep-16
Gainesville AHQ	Northern Virginia	Sep-16
Lake Ridge AHQ	Northern Virginia	Sep-16
Leesburg Residency	Northern Virginia	Sep-16
Manassas AHQ Storage Area	Northern Virginia	Sep-16
Manassas Residency Complex	Northern Virginia	Sep-16
Merrifield AHQ	Northern Virginia	Sep-16



High Priority Facility	VDOT District	SWPPP Date
Newington AHQ	Northern Virginia	Sep-16
NOVA Maintenance Facility	Northern Virginia	Sep-16
Reston AHQ	Northern Virginia	Sep-16
Van Dorn Maintenance Complex	Northern Virginia	Sep-16
West Parcel AHQ	Northern Virginia	Sep-16
Westmoreland AHQ	Northern Virginia	Sep-16
Ashland Residency Complex	Richmond	Sep-16
Atlee AHQ	Richmond	Feb-17
Basie Road AHQ	Richmond	Sep-16
Bethia AHQ	Richmond	Sep-16
Bon Air AHQ	Richmond	Sep-16
Chester AHQ	Richmond	Sep-16
Crater Sub AHQ	Richmond	Sep-16
I-295/Rt 10 Storage Area	Richmond	Sep-16
I-95/Rt 1 (Brook Rd) Storage Lot	Richmond	Sep-16
Mechanicsville AHQ	Richmond	Sep-16
Petersburg Residency Complex	Richmond	Sep-16
Pocahontas Parkway Storage Lot	Richmond	Sep-16
Richmond District Complex	Richmond	Sep-16
Airport AHQ	Salem	Sep-16
Christiansburg Residency Complex	Salem	Sep-16
Hanging Rock AHQ	Salem	Sep-16
Mason Creek Storage Lot	Salem	Sep-16
New London AHQ	Salem	Sep-16
Old Cave Spring Road Storage Lot	Salem	Sep-16
Route 11 Storage Area	Salem	Sep-16
Salem District Complex	Salem	Sep-16
Salem Residency/Southwest AHQ	Salem	Sep-16
Texas St Storage Lot	Salem	Sep-16
Harrisonburg Residency Complex	Staunton	Sep-16
Stephens City AHQ	Staunton	Sep-16
Verona AHQ	Staunton	Sep-16
Winchester AHQ	Staunton	Sep-16

A copy of the respective SWPPP is available Environmental Division's Central Office

# REVISIONS TO PROGRAM PLAN AND REFERENCE MATERIAL

List of Revisions to Program Plan or Supporting Documents in Materials Guide

Document Name	Revision Date	Section Revised	Summary of Revision
Annual Standards & Specifications for ESC and SWM*	6/26/2019	Select IIMs, 445 forms, and text	Changes specific to program documents that reference regulatory requirements and finalized certain IIMs that were previously draft.
IDDE Field Guide	June 2019	All Sections	Major revision of entire guide to streamline and convert to a more handheld format for maintenance and field crews.
Facility Waste Management and Pollution Prevention Guide	June 2019	Sections 3.24 & 3.26	New sections added on proper operation and maintenance of portable toilets, septic tanks and vegetation waste management
MS4 Program Plan	01/15/2020	BMP 3, 6, SWPPP List	Updates to reflect Program Manual revisions and removal of two (2) sites from High Priority Facilities with SWPPP list.
Facility Stormwater Pollution Prevention Plan (SWPPP) Training Video	2017	New Video	VDOT training video on requirements for implementing a SWPPP at a high-priority facility (pollution prevention, inspections, etc.)
VDOT Salt Infrastructure Good Housekeeping and Pollution Prevention Training Video	2017	New Video	VDOT training video on salt loading/storage good housekeeping and pollution prevention at a VDOT facility.
VDOT Facility Leak and Spill Control Awareness Training Video	2018	New Video	VDOT training video on pollution prevention for controlling leaks and spills at a VDOT facility.
VDOT Facility Erodible Stockpile Management Video	2018	New Video	VDOT training video on pollution prevention for storing erodible piles at a VDOT facility.
Good Housekeeping and Pollution Prevention for Contractors Video	2019	New Video	VDOT training video on good housekeeping and pollution prevention awareness for VDOT contractors.
Illicit Discharge Detection and Elimination (IDDE) Training Video	2019	Revised 2019	VDOT training video on IDDE program (detecting, reporting, eliminating, documenting).

\*Pending review and approval by DEQ

## SUPPORT FACILITIES WITH NUTRIENT MANAGEMENT PLANS\*

\*Presently, no VDOT support facilities have been identified which apply nutrient fertilizers. The list will be updated and amended as needed if VDOT facilities requiring NMPs are identified.

## REFERENCE MATERIAL

**List of Reference Material**

Document Name	Document Location	Document Date
VDOT Outfall Inventory Manual	Location and Design Division's Central Office	11/2011
VDOT Right of Way Determination and Mapping Protocols	Location and Design Division's Central Office	12/2017
VDOT IDDE Manual	Environmental Division's Central Office	12/2014
VDOT IDDE Field Guide	Environmental Division's Central Office	06/2019
VDOT Annual ESC and SWM Standards and Specifications*	Location & Design Division's Central Office	06/26/2019
VDOT Roadside Development Standards & Specifications	Maintenance Division's Central Office	01/2016
Maintenance Best Practices Manual	Maintenance Division's Central Office	12/16/2016
Facility Waste Management and Pollution Prevention Guide	Environmental Division's Central Office	06/2019
VDOT BMP Inspection Manual	Maintenance Division's Central Office	09/2016
BMP Maintenance Manual	Maintenance Division's Central Office	09/2016
VDOT Employee Training Program for MS4 and Stormwater	Location and Design Division's Central Office	10/2014
Chesapeake Bay TMDL Action Plan for the James, Potomac, Rappahannock, and York River Basins (Amended for the Second Permit Cycle)	Environmental Division's Central Office	06/2018
VDOT Action Plan for Local Bacteria TMDLs	Environmental Division's Central Office	06/2018
VDOT Action Plan for Local PCB TMDLs	Environmental Division's Central Office	06/2018
VDOT Action Plan for Local Sediment TMDLs	Environmental Division's Central Office	06/2018

\*Submittal on 6/26/2019 pending review and approval following previous approved submittal on 6/21/2018