4/30/2024

MS4 Program Plan

Fort Monroe Authority

Permit Number VAR040130

Fort Monroe Authority
20 Ingalls Rd
Fort Monroe, VA 23651

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APPENDICES

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1. INTRODUCTION

- This Municipal Separate Storm Sewer System (MS4) Program Plan ("Program Plan") is for the Fort Monroe property owned by the Commonwealth of Virginia ("Commonwealth") and managed by the Fort Monroe Authority (FMA). The Virginia Stormwater Program (VSMP) General Permit first became effective on July 9, 2008 and ran for five years, being subsequently renewed. This Program Plan was initially prepared during that permit cycle and has been updated during each subsequent cycle. This document is now being updated for the new permit cycle that began in November 1, 2023, and ends on October 31, 2028.

1.1 FACILITY DESCRIPTION

- Fort Monroe consists of approximately 565 acres of which 108 are submerged and 85 are wetlands. Fort Monroe is located at the southeastern tip of the Virginia Lower Peninsula between Hampton Roads to the southwest and the Chesapeake Bay to the east. Fort Monroe formerly served as U.S. Army Garrison Fort Monroe and home to the U.S. Army Training and Doctrine Command (TRADOC), a largely administrative post with few troop and industrial activities. In September 2011, the Army decommissioned Fort Monroe as an active Army base and transferred by quitclaim deed a portion of the lands at Fort Monroe to the Commonwealth of Virginia in June 2013 (~312.75 acres). The Fort Monroe Authority Act established the Fort Monroe Authority as responsible for the preservation, conservation, protection, and maintenance of the Commonwealth's real property interests at Fort Monroe and the renewal of Fort Monroe as a vibrant and thriving community. Established as a US Army coastal fortification in 1817, Fort Monroe is built on the site of earlier colonial-era forts at Old Point Comfort. Fort Monroe is a registered National Historic Landmark and in November 2011 the site was dedicated as the Fort Monroe National Monument with portions now being managed by the National Park Service.

1.2 GENERAL

- Stormwater discharges from FMA property are regulated under the terms of Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges from Small Municipal Separate Storm Sewer System (General Permit No. VAR040130) (**Appendix A**). This Plan covers the VPDES requirements for the Fort Monroe property. Fort Monroe is designated as small municipal separate storm sewer system (MS4) under the Virginia Department of Environmental Quality (DEQ).

- This Plan details a comprehensive program to minimize stormwater pollution by establishing best management practices (BMPs), measurable goals, and responsible parties to achieve compliance with the minimum control measures of the Phase II MS4 program. The BMPs utilized to address each minimum control measure are described in this Plan. Operators of small MS4s covered under the general permit that continue to discharge must file a "General Permit Registration Statement for Stormwater Dis-

charges from Small MS4s" (which is included in **Appendix B**) for continued coverage. A stormwater system map depicting the area to be covered by the general permit is included in **Appendix C**.

1.3 LEGAL AUTHORITY

- The Fort Monroe Authority has adopted "Rules & Regulations" for the site known as Fort Monroe which encompasses the entirety of the MS4. The 'Rules and Regulations' document specifically prohibits those actions that has the potential to contribute to an illicit discharge into the Stormwater System(s) of Fort Monroe. The pollution of waters language within the Fort Monroe Rules and Regulations was partially derived from 4VAC5-30-80, which is the Virginia State Parks Regulations.

- The Fort Monroe Authority Board of Trustees adopts these Rules and Regulations pursuant to the power granted by Code of Virginia § 2.2-2340(B):

- "(B) The Authority shall have the power and duty:

- 19. To adopt, amend or repeal, by the Board of Trustees, or the executive committee thereof, regulations concerning the use of, access to and visitation of properties under the control of the Authority in order to protect or secure such properties and the public enjoyment thereof, with any violation of such regulations being punishable by a civil penalty of up to $100 for the first violation and up to $250 for any subsequent violation, such civil penalty to be paid to the Authority; 20. To provide parking and traffic rules and regulations on property owned by the Authority; and 21. To provide that any person who knowingly violates a regulation of the Authority may be requested by an agent or employee of the Authority to leave the property and upon the failure of such person so to do shall be guilty of a trespass as provided in (Code of Virginia) § 18.2-119.".

- A copy of the current Rules and Regulations adopted on February 17, 2022 is included in Appendix H and available at the following link.

- *https://fortmonroe.org/wp-content/uploads/FMA-Rules-and-Regulations-Adopted-by-FMA-Board-of-Trustees-on-February-17-2022.pdf*

1.4 THIRD-PARTY COLLABORATIONS

- The FMA collaborates with several entities for implementation of MS4 permit actions. All work is performed either under the direction or in collaboration with FMA, who remains responsible for completion of permit requirements. The following list describes the actions performed by each entity on behalf of the FMA.

    - Veolia Water – Implementation of MS4 programs, to include maintenance of High Priority Facility SWPPPs, Dry Weather Screening, and

- City of Hampton – Plan review and land disturbance permit until FMA receives approved Annual Standards & Specifications.

- Hampton Roads Sanitation District – Collaboration for public outreach through the askHRGreen.org program.

- National Park Service – Implementation of some public outreach and participation events

2. TOTAL MAXIMUM DAILY LOAD

The Chesapeake Bay total maximum daily load (TMDL) was published on December 29, 2010 based on the Watershed Implementation Plans (Phase I) submitted by the states that are contained in the Chesapeake Bay watershed. The TMDL is written for excessive nitrogen, phosphorus, and sediment. The TMDL established waste load allocations (WLA) for each of the subject pollutants for the major rivers and watersheds that discharge in the Chesapeake Bay. Virginia has written a Watershed Implementation Plan (Phase II) that includes WLAs for specific sections of the major rivers in the state that discharge to the Chesapeake Bay.

For compliance with the first permit cycle ending June 30, 2018, FMA utilized land conversion from impervious to managed turf that occurred due to the demolition of unneeded buildings on the property. This provided reductions above and beyond the 5% requirement in loading of the pollutants of concern (POCs), which are nitrogen, phosphorus and total suspended solids (TSS). These additional reductions will be credited toward the Phase II TMDL Action Plan reduction requirements.

The second permit cycle ending June 30, 2023 required FMA to reduce loading of POCs by an additional 35%, for a total reduction of 40% by the end of the permit cycle. The Fort Monroe Authority applied for, and received, acceptance into the Hampton Roads Sanitation District's Sustainable Water Initiative for Tomorrow (SWIFT) program to meet the required 40% total reduction prior to the end of the second permit term. The SWIFT program aims to transform treated wastewater into additional drinking water and groundwater through additional advanced treatment. This program is designed to improve and protect a broad range of ecological functions in the Hampton Roads area.

The current permit requires FMA to reduce by another 60%, for a total reduction of 100% of the pre-2009 POC loading rates. FMA drafted a draft Phase III TMDL Action as part of their permit update and registration statement. The Draft Action Plan is on the environmental website (https://fortmonroe.org/fort-monroe-authority/environmental-management/) and will continue to be updated as needed to achieve the 100% goal.

3. MINIMUM CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

- Fort Monroe Authority, as an operator of a small MS4, will continue to implement and enforce an MS4 Program designed to reduce the discharge of pollutants in the storm water to the maximum extent practicable. This is done to protect water quality, to ensure compliance with water quality standards, and to satisfy the appropriate water quality regulations and requirements of the Clean Water Act.

- The General Permit requires best management practices (BMPs) and measurable goals be established in six minimum control measures. These minimum control measures are;

    1. Public education and outreach on stormwater impacts,

    2. Public involvement/participation,

    3. Illicit discharge detection and elimination,

    4. Construction site stormwater runoff control,

    5. Post-construction storm water management in new development and redevelopment, and,

    6. Pollution prevention/good housekeeping for municipal operations.

- BMPs are measures used to prevent or reduce the potential of pollution from any type of activity. BMPs are a very broad class of measures and may include processes, procedures, scheduling activities, prohibitions on practices, and other management practices to prevent or reduce stormwater pollution. In essence, they are anything that may be identified as a method, short of actual treatment, to reduce stormwater pollution.

- The following sections outline the FMA BMPs and goals in the six minimum control measures as required in the General Permit. A summary schedule is provided at the end of this section.

3.1 PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

- The General Permit requires that the FMA implement a public education and outreach program to educate its citizens on high priority stormwater issues that have the potential to impact water quality. FMA has identified the following high priority issues to focus on for this permit cycle.

    1. Disconnection of basement sump pumps from sanitary and conversion to stormwater discharge

2. Pet Waste / Bacteria

3. Floatable Reduction

3.1.1 Disconnection of Basement Sump Pumps

- *Issue Description:*

  Fort Monroe has a large number of basement sump pumps in residential housing. These pumps are currently connected to sanitary, but it is a goal of FMA to disconnect them from sanitary and divert them to stormwater drainage. As part of this FMA wishes to educate the residents on the importance of not storing yard chemicals, lawn equipment oil, or any other products in such a fashion that they may leak into the water being pumped into the stormwater system.

- *Target Audience:*

  The target audience for this priority issue consist of residents and leasers with basement sump pumps.

- *Communication Strategy and Schedule:*

  FMA distributes fliers regularly to residents and commercial tenants. Postings on social media often frequently highlight the program and potential effects of groundwater pollution. FMA is currently in Phase II of the sump pump disconnect program. Sump pumps in several areas were disconnected during the previous permit period. FMA will continue efforts until all planned disconnections are performed.

3.1.2 Pet Waste / Bacteria

- *Issue Description:*

  Fort Monroe is home to many residents with pets, as well as large numbers of tourists and nearby Hampton residents that utilize the property for recreation with their pets. The improper disposal of pet waste is an issue that occurs due to this. The improper disposal of pet waste can lead to high levels of bacteria in stormwater discharges and create impairment in local waterways.

- *Target Audience:*

  The target audience for this priority issue includes all residents and visitors to Fort Monroe.

- *Communication Strategy and Schedule:*

  FMA maintains pet waste stations and signage throughout locations where pets are commonly walked. Postings on social media often frequently highlight the program. The program continues with regular maintenance and social media postings.

3.1.3 Floatable Reduction

- *Issue Description:*

  As Fort Monroe is a tourist destination and National Monument, the reduction of human litter is a high priority action. If littering does occur, it often ends up in waterways as floatables. These floatables can adversely affect marine life in addition to being a visual nuisance.

- *Target Audience:*

  The target audience for this priority issue includes all residents and visitors to Fort Monroe.

- *Communication Strategy and Schedule:*

  FMA regularly posts on social media on the effects of floatable wastes. Signage and trash receptacles have also been placed in strategic locations. FMA participates in several activities annually, such as Clean the Bay Day, Earth Day, Clean the Moat Day, and the Casemate Museum Talks (Nature Nurturers). In addition to direct communication methods, FMA partners with HRPDC and the City of Hampton on the HRGreen program.

3.2 PUBLIC INVOLVEMENT AND PARTICIPATION

- The FMA will use applicable state, and local public notice requirements to identify, schedule, implement, evaluate and modify, as necessary, BMPs to meet the following public involvement/participation goals. The following list consists of actions the FMA may take to meet this requirement.
  - Clean the Bay Day
  - Clean the Moat Day
  - Nature Nurturers program
  - Other NPS Collaborations
  - Advertising City of Hampton household hazardous waste collection events

3.2.1 MS4/Environmental Website

- The FMA has established a website for environmental compliance. The webpage contains the documentation required under this permit including the following:
- MS4 Permit
- A copy of the MS4 Registration Statement
- MS4 Program Plan (this document)
- Annual Reports as required
- Methods for the public to provide input
- Methods to report issues, discharges, and/or spills to the FMA
- Chesapeake Bay TMDL Action Plan and annual status reports
- The current environmental website is located here: https://fortmonroe.org/fort-monroe-authority/environmental-management/

3.2.2 Public Involvement Activities

- The following public involvement activities will be performed by Fort Monroe volunteers and FMA employees to address the public involvement and participation minimum control measure requirement. Records of public communications regarding stormwater will be kept and made available to the public, in compliance with all applicable freedom of information regulations.

3.2.2.1 Household Hazardous Waste

- FMA will collaborate with the City of Hampton and Virginia Peninsula Public Service Authority (VPPSA) for household hazardous waste collection events. FMA will aid in promotion of events to Fort Monroe residents. Five events per year are anticipated to be held in Hampton.

Measurable Goal

- Number of participants reporting participation will be used as success criteria.

Reporting and Record Keeping

- Records of event participation will be collected for each event. A summary of results will be included in each annual report.

Responsible Party

- The Fort Monroe Authority, Operations and Heritage Assets Department, City of Hampton, VPPSA.

3.2.2.2 Environmental Awareness Events

- Host, promote, or establish two annual events in conjunction with the Chesapeake Bay Foundation or other interested environmental advocacy groups where Fort Monroe volunteers pick-up trash and debris from property and shorelines (Clean the Bay Day, the Great American Cleanup and/or Earth Day will be used to increase awareness/participation of these outreach activities).

Measurable Goal

- FMA will assess success of environmental awareness events by number of participants and area covered during events.

Reporting and Record Keeping

- Retain a copy of the event brochure, poster, or announcement. Track the type and number of participants. A summary of events will be included in each annual report.

Responsible Party

- The Fort Monroe Authority, Operations and Heritage Assets Department.

3.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

- Illicit discharges are those not made entirely of stormwater and are not otherwise allowed to be combined with stormwater runoff by the permit. Refer to Section 1.3 for a list of allowable non-stormwater discharges. Illicit discharge examples include vehicle wash water where detergents/degreasers are used, fuel spills, and industrial wastewater (cross-connections).

3.3.1 MS4 Mapping

- The MS4 infrastructure has been mapped to the best of FMA's knowledge. The current MS4 map can be found as **Appendix C.** A table data table depicting information on outfalls is also available.

3.3.2 IDDE Procedures

- FMA, in collaboration with their Public Works contractor, has developed IDDE procedures for surveying outfalls and detecting illicit discharges. FMA surveys and inspects outfalls annually and reports signs of illicit discharges. IDDE procedures can be found in **Appendix D**.

3.3.3 Stormwater Interconnections

- FMA currently has no known interconnections to its MS4.

3.4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- Fort Monroe is located in a jurisdiction designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act. As such, specific construction goals are required for construction site stormwater runoff controls.

- The FMA is governed by a Board of Trustees with staff management of Commonwealth lands at Fort Monroe without police power ordinances. An Erosion and Sediment Control policy/construction permit requirement has been implemented that requires erosion and sediment controls on construction activities that result in land disturbance of greater than or equal to 2,500 square feet. This program is consistent with the Virginia Erosion and Sediment Control Regulations found at 9 VAC 25-850-10 et seq. and the approved Erosion and Sediment Control Annual Standards and Specifications filed with the Department each year.

- FMA's Annual Standards and Specifications are found in **Appendix E**.

- FMA certified staff will review the Erosion and Sediment Control Plans submitted by construction contractors, or others, for adherence to the state Erosion and Sediment Control Law and the approved Fort Monroe Erosion and Sediment Control Annual Standards and Specifications.

- FMA will maintain a copy of the Erosion and Sediment Control plan for each applicable construction activity and maintain log of all projects reviewed by Fort Monroe.

- In addition, FMA trained staff provide oversight inspection for construction activities to ensure compliance with state standards for erosion and sediment control and the VSMP Construction General Permit Programs. Copies of all inspection forms and notes are retained for future reference.

3.5 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

- Fort Monroe is located in a jurisdiction designated as subject to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted pursuant to the Chesapeake Bay Preservation Act (CBPA). As such, specific post-construction pollutant management is required for post-construction discharges from land disturbance in excess of 2,500 square feet. In addition, Fort Monroe has adopted Stormwater Management Annual Standards and Specifications in accordance with the Virginia Stormwater Management Regulations (9 VAC 25-870 et seq.).

- Currently FMA is not maintaining Stormwater Management Facilitys, also knowns as Best Management Practices (BMPs), but as development occurs and this provision becomes applicable, this document will be updated with the required inspection and tracking procedures.

3.6 POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

3.6.1 Procedures for Operations & Maintenance Activities

- An operation and maintenance (O&M) program consistent with the MS4 Program Plan will have the ultimate goal of preventing or reducing pollutant runoff from municipal operations. FMA contracts much of its Public Works and landscaping activities to outside contractors who are responsible for preventing illicit discharges and ensuring their compliance with this VPDES permit. Written procedures can be found in **Appendix F**.

3.6.2 High Priority Facilities

- FMA has identified three high priority facilities as defined by the MS4 permit. They are:

    1. Veolia / Public Works service yard

    2. Marina

    3. James River Landscaping laydown ard

- FMA is currently operating a Stormwater Pollution Prevention Plan (SWPPP) for each recognized high priority facility.

3.6.3 Nutrient Management Plan

- FMA has a current Nutrient Management Plan (NMP) for approximately 46 acres within the permit area, including areas within the Historic Village, Inner Fort, North Gate, and Wherry Quarter. The current NMP was approved January 3, 2022 and expires on December 22, 2024. A digital copy of the NMP is stored at the FMA Operations and Heritage Assets department and is included as **Appendix G**.

3.6.4 Environmental Awareness Training Program

- FMA requires an Environmental Awareness training plan for municipal personnel, and contractors which will emphasize stormwater pollution prevention program goals. The training provides information on the requirements of any SWPPP with which the employee must conduct their operations. Training programs are conducted either in person or online. The most current MS4 Training Plan is included in **Appendix I**.

4. EVALUATION AND ASSESSMENT

- In order to ensure compliance with the MS4 Program Plan, the FMA will evaluate and assess, keep the required records, and submit annual reports to the DEQ.

4.1 EVALUATION AND ASSESSMENT

- Evaluation and assessment of the MS4 program will be done on an annual basis. The FMA will evaluate;
    - Program compliance.
    - The appropriateness of the identified BMPs and their effectiveness in addressing discharges to impaired waters.
    - Progress towards achieving the identified measurable goals.

4.2 RECORDKEEPING

- Required records will be kept for at least three (3) years. Records will be made available to the public at reasonable times during regular business hours. Records to be retained include those needed for minimum control measure goals, written public comments regarding the MS4 Program Plan, illicit discharges found and corrected, land disturbing activities and acreage impacted, all stormwater monitoring data, and any other as listed in the General Permit.

4.3 ANNUAL REPORT

- An annual report for the reporting period from July 1 through June 30 is due to DEQ by the October 1 of the program year. The annual report will contain the status of the MS4 in meeting the yearly goals set and whether the BMPs selected are appropriate and effective. It helps to ensure compliance with all provisions of the current program. The annual report will be submitted to DEQ by October 1st of each year and will be posted on the above reference MS4/Environmental website.

5. STORMWATER MONITORING

- The FMA will collect a total of two stormwater samples from a representative outfall to be identified. One sample will be taken during each of the following six-month periods: October through March, and April through September. The samples will be analyzed for specific pollutants, if specified by the DEQ.

- All collected samples will be grab samples and collected within the first 30 minutes of a runoff producing event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous measurable (greater than 0.1 inch rainfall) storm event.

- Monitoring records will include;

  - Date, exact place and time of sampling.

  - Individual who performed the sampling.

  - Dates and time analyses were performed.

  - Individual who performed the analysis.

  - Analytical technique used in the analysis.

  - Analysis results.

- Monitoring records will be kept for at least three years from the time the sample was collected.

Appendix A

General VPDES Permit of Stormwater from Small Municipal Separate Storm Sewer Systems (VAR040130)

Virginia Administrative Code
Title 9. Environment
Agency 25. State Water Control Board
Chapter 890. Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s)

9VAC25-890-40. General permit.

Any MS4 operator whose registration statement is accepted by the department will receive coverage under the following general permit and shall comply with the requirements in this general permit and be subject to all applicable requirements of the Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870) and the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulations (9VAC25-31).

General Permit No.: VAR04

Effective Date: November 1, 2023

Expiration Date: October 31, 2028

GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA STORMWATER MANAGEMENT PROGRAM REGULATIONS, VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS, AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, permittees of small municipal separate storm sewer systems are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those waters specifically named in State Water Control Board regulations that prohibit such discharges.

The authorized discharge shall be in accordance with the registration statement filed with the department, this cover page, Part I - Discharge Authorization and Special Conditions, Part II - TMDL Special Conditions, Part III - DEQ BMP Warehouse Reporting, and Part IV - Conditions Applicable to All State and VPDES Permits, as set forth in this general permit.

Part I

Discharge Authorization and Special Conditions

A. Coverage under this state permit. During the period beginning with the date of coverage under this general permit and lasting until the expiration and reissuance of this state permit, the permittee is authorized to discharge stormwater and those authorized nonstormwater discharges described in 9VAC25-890-20 D in accordance with this state permit from the small municipal separate storm sewer system identified in the registration statement into surface waters within the boundaries of the Commonwealth of Virginia and consistent with 9VAC25-890-30.

B. The permittee shall develop, implement, and enforce an MS4 program designed to reduce the discharge of pollutants from the MS4 to the MEP in accordance with this permit, to protect water quality, and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations. The permittee shall utilize the legal authority provided by the laws and regulations of the Commonwealth of Virginia to control discharges to and from the MS4. This legal authority may be a combination of statute, ordinance, permit, policy, specific contract language, order, or interjurisdictional agreements. The MS4 program shall include the minimum control measures (MCM) described in Part I E. For the purposes of this permit term, implementation of MCMs in Part I E and the Chesapeake Bay and local TMDL requirements in Part II (as applicable) consistent with the provisions of an iterative MS4 program required pursuant to this general permit constitutes compliance with the standard of reducing pollutants to the MEP, provides adequate progress in meeting water quality standards, and satisfies the appropriate water quality requirements of the State Water Control Law and its attendant regulations.

C. The MS4 program plan.

1. The MS4 program plan shall include, at a minimum, the following written items:

a. The roles and responsibilities of each of the permittee's divisions and departments in the implementation of the requirements of the permit tasked with ensuring that the permit requirements are met;

b. If the permittee utilizes another entity to implement portions of the MS4 program, a copy of the written agreement. The description of each party's roles and responsibilities, including any written agreements with third parties, shall be updated as necessary;

c. For each MCM in Part I E, the following information shall be included:

(1) Each specific requirement as listed in Part I E for each MCM;

(2) A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions in Part I E;

(3) All standard operating procedures or policies necessary to implement the BMPs;

(4) The measurable goal by which each BMP or strategy will be evaluated; and

(5) The persons, positions, or departments responsible for implementing each BMP or strategy; and

d. A list of documents incorporated by reference, including the version and date of the document being incorporated.

2. If the permittee is receiving initial coverage under this general VPDES permit for the discharge of stormwater, the permittee shall:

a. No later than six months following the date of permit coverage, submit to the department a schedule for the development of each component of the MS4 program plan in accordance with Part I C 1 that does not exceed October 31, 2028, unless the department

grants a later date; and

b. Provide to the department a copy of the MS4 program plan upon completion of development.

3. If the permittee was previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, the permittee shall update the MS4 program plan to meet the requirements of this permit no later than six months after the effective date of this permit unless otherwise specified in another permit condition and shall post the most up-to-date version of MS4 program plan on the permittee's website or location where the MS4 program plan can be obtained as required by Part I E 2 within 30 days of updating the MS4 program plan. Until such time that the MS4 program plan is updated in accordance with Part I E, the permittee shall continue to implement the MS4 program plan in effect at the time that coverage is issued under this general permit.

4. 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 to the MEP. As such, revisions made in accordance with this permit as a result of the iterative process do not require modification of this permit. The permittee shall summarize revisions to the MS4 program plan as part of the annual report as described in Part I D 3.

5. The permittee may demonstrate compliance with one or more MCM in Part I E through implementation of separate statutory or regulatory programs provided that the permittee's MS4 program plan identifies and fully describes any program that will be used to satisfy one or more of the minimum control measures of Part I E. If the program that the permittee is using requires the approval of a third party, the program shall be fully approved by the third party, or the permittee shall be working toward getting full approval. Documentation of the program's approval status or the progress toward achieving full approval shall be included in the annual report required by Part I D. The permittee shall remain responsible for compliance with the permit requirements if the other entity fails to implement one or more components of the control measures.

6. The permittee may rely on another entity to satisfy the permit requirements to implement a minimum control measure if:

a. The other entity, in fact, implements the control measure;

b. The particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement;

c. The other entity agrees to implement the control measure on behalf of the permittee; and

d. The agreement between the parties is documented in writing and retained by the permittee with the MS4 program plan for as long as the agreement is active.

The permittee shall remain responsible for compliance with requirements of the permit and shall document in the annual reports required in accordance with Part I D that another entity is being relied on to satisfy all or part of the state permit requirements. The permittee shall

provide the information required in Part I D.

7. If the permittee relies on another governmental entity regulated under 9VAC25-870-380 to satisfy all of the state permit obligations, including the obligation to file periodic reports required by Part I D, the permittee must note that fact in the registration statement, but is not required to file the periodic reports. The permittee remains responsible for compliance with the state permit requirements if the other entity fails to implement the control measures or components thereof.

D. Annual reporting requirements.

1. The permittee shall submit an annual report to the department no later than October 1 of each year in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department; the required content of the annual report is specified in Part I E and Part II B. The report shall cover the previous year from July 1 to June 30.

2. Following notification from the department of the start date for the required electronic submission of annual reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. The annual report shall include the following general information:

a. The permittee, system name, and permit number;

b. The reporting period for which the annual report is being submitted;

c. A signed certification as per Part IV K;

d. Each annual reporting item as specified in an MCM in Part I E; and

e. An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program's effectiveness and whether or not changes to the MS4 program plan are necessary.

4. For permittees receiving initial coverage under this general VPDES permit for the discharge of stormwater, the annual report shall include a status update on each component of the MS4 program plan being developed. Once the MS4 program plan has been updated to include implementation of a specific MCM in Part I E, the permittee shall follow the reporting requirements established in Part I D 3.

5. For those permittees with requirements established under Part II B, the annual report shall include a status report on the implementation of the local TMDL action plans in accordance with Part II B including any revisions to the plan.

6. For the purposes of this permit, the MS4 program plan , annual reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports shall be

maintained as separate documents and submitted to the department as required by this permit as separate documents.

E. Minimum control measures.

1. Public education and outreach.

a. The permittee shall implement a public education and outreach program designed to:

(1) Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;

(2) Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and

(3) Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

b. The permittee shall identify no fewer than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control, BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration projects, and illicit discharges from commercial sites.

c. The high-priority public education and outreach program, as a whole, shall:

(1) Clearly identify the high-priority stormwater issues;

(2) Explain the importance of the high-priority stormwater issues;

(3) Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues; and

(4) Provide a contact and telephone number, website, or location where the public can find out more information.

d. The permittee shall use two or more of the strategies listed in Table 1 per year to communicate to the target audience the high-priority stormwater issues identified in accordance with Part I E 1 b, including how to reduce stormwater pollution.

Table 1
Strategies for Public Education and Outreach

Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact

	sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, newspaper, or GIS story maps
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials
Public education activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials

	to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, climat e change's effects on stormwater management, volunt ary residential low impact development, or other stormwater issues

e. The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.

f. The MS4 program plan shall include:

(1) A list of the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;

(2) The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;

(3) Identification of the target audience to receive each high-priority stormwater message;

(4) Nontraditional permittees may identify staff, students, members of the general public, and other users of facilities operated by the permittee as the target audience for education and outreach strategies;

(5) Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience;

(6) Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach;

(7) The strategies from Table 1 of Part I E 1 d to be used to communicate each high-priority stormwater message; and

(8) The anticipated time periods the messages will be communicated or made available to the public.

g. The annual report shall include the following information:

(1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;

(2) A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues;

(3) A description of any changes in high-priority stormwater issues, including, strategies used to communicate high-priority stormwater issues or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of these changes ; and

(4) A description of public education and outreach activities conducted that included education regarding climate change.

2. Public involvement and participation.

a. The permittee shall develop and implement procedures for the following:

(1) The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;

(2) The public to provide comments on the permittee's MS4 program plan;

(3) Responding to public comments received on the MS4 program plan ; and

(4) Maintaining documentation of public comments received on the MS4 program and associated MS4 program plan and the permittee's response.

b. No later than three months after this permit's effective date, the existing permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:

(1) The effective MS4 permit and coverage letter;

(2) The most current MS4 program plan or location where the MS4 program plan can be obtained;

(3) The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department;

(4) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained;

(5) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department;

(6) A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1);

(7) Methods for how the public can provide comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13; and

(8) Federal and state nontraditional permittees with security policies preventing a MS4 program and stormwater pollution prevention webpage from being publicly accessible may utilize an internal staff accessible webpage such as an intranet webpage to meet the requirements of Part 1 E 2 b.

c. Traditional permittees shall implement no fewer than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

d. Nontraditional permittees shall implement, promote, participate in, or coordinate on no fewer than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

Table 2
Public Involvement Opportunities

Public involvement opportunities	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoration	Stream , watershed, shoreline, beach, or park clean-up day, adopt-a-waterway program, tree plantings, and riparian buffer plantings

Public education activities	Booth at community fair, demonstration of stormwater control projects, climate change's effects on stormwater management, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, voluntary residential low impact development, clim ate change's effects on stormwater management, or other stormwater issues
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking

	program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.

e. The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.

f. The permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, groundskeeping, and maintenance duties in order for an event to qualify as a public participation event.

g. Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity solicits participation from target audiences beyond staff or contractors with stormwater, groundskeeping, and maintenance duties.

h. The MS4 program plan shall include:

(1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;

(2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and

(3) A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup or the number of participants in a hazardous waste collection event.

i. The annual report shall include the following information:

(1) A summary of any public comments on the MS4 program received and how the permittee responded;

(2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1), excluding natural flooding complaints, and how the permittee responded;

(3) A webpage address to the permittee's MS4 program and stormwater website;

(4) Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website, such as intranet, shall provide evidence of the

current internal MS4 program and stormwater pollution prevention webpage;

(5) A description of the public involvement activities implemented by the permittee, including any efforts to reach out and engage all economic and ethnic groups;

(6) A description of public education and outreach activities conducted that also included education regarding climate change;

(7) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and

(8) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.

3. Illicit discharge detection and elimination.

a. The permittee shall develop and maintain an accurate MS4 map and information table as follows:

(1) An updated map of the MS4 owned or operated by the permittee within the MS4 regulated service area no later than 24 months after the permit effective date that includes, at a minimum:

(a) MS4 outfalls discharging to surface waters, except as follows:

(i) In cases where the outfall is located outside of the MS4 permittee's legal responsibility, the permittee may elect to map the known point of discharge location closest to the actual outfall; and

(ii) In cases where the MS4 outfall discharges to receiving water channelized underground, the permittee may elect to map the point downstream at which the receiving water emerges above ground as an outfall discharge location. If there are multiple outfalls discharging to an underground channelized receiving water, the map shall identify that an outfall discharge location represents more than one outfall. This is an option a permittee may choose to use and recognizes the difficulties in accessing outfalls to underground channelized stream conveyances for purposes of mapping, screening, or monitoring;

(b) A unique identifier for each mapped item required in Part I E 3;

(c) The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;

(d) MS4 regulated service area; and

(e) Stormwater management facilities owned or operated by the permittee.

(2) The permittee shall maintain an outfall information table associated with the MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a). The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following:

(a) A unique identifier as specified on the MS4 map;

(b) The latitude and longitude of the outfall or point of discharge;

(c) The estimated regulated acreage draining to the outfall or point of discharge;

(d) The name of the receiving water;

(e) The 6th Order Hydrologic Unit Code of the receiving water;

(f) An indication as to whether the receiving water is listed as impaired in the Virginia 2022 305(b)/303(d) Water Quality Assessment Integrated Report; and

(g) The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.

(3) No later than 24 months after permit issuance, the permittee shall submit to DEQ, a format file geodatabase or two shapefiles that contain at a minimum:

(a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (2); and

(b) A polygon feature class or shapefile for the MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information:

(i) MS4 operator name;

(ii) MS4 permit number (VAR04); and

(iii) MS4 service area total acreage rounded to the nearest hundredth.

(4) All file geodatabase feature classes or shapefiles shall be submitted in the following data format standards:

(a) Point data in NAD83 or WGS84 decimal degrees global positional system coordinates;

(b) Data projected in Virginia Lambert Conformal Conic format;

(c) Outfall location accuracy shall be represented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy (e.g., 37.61741, -78.15279); and

(d) Metadata that shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection.

(5) No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.

(6) The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.

b. The permittee shall prohibit, through ordinance, policy, standard operating procedures,

or other legal mechanism, to the extent allowable under federal, state, or local law, regulations, or ordinances, unauthorized nonstormwater discharges into the MS4. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.

c. The permittee shall maintain, implement, and enforce illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping, to the MS4 to effectively eliminate the unauthorized discharge. Written procedures shall include:

(1) A description of the legal authorities, policies, standard operating procedures, or other legal mechanisms available to the permittee to eliminate identified sources of ongoing illicit discharges, including procedures for using legal enforcement authorities.

(2) Dry weather field screening protocols to detect, identify, and eliminate illicit discharges to the MS4. The protocol shall include:

(a) A prioritized schedule of field screening activities and rationale for prioritization determined by the permittee based on such criteria as age of the infrastructure, land use, historical illegal discharges, dumping, or cross connections;

(b) If the total number of MS4 outfalls is equal to or less than 50, a schedule to screen all outfalls annually;

(c) If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years;

(d) The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges;

(e) Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I E 3 c (2) (b) or (2) (c); however, at least 50% of the minimum annual screening events must include outfall screening;

(f) Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however once the resolution of the investigation and the date the investigation was closed has been documented, an observation point may be established for future screening events; and

(g) A checklist or mechanism to track the following information for dry weather screening events:

(i) The unique identifier for the outfall or observation point;

(ii) Time since the last precipitation event;

(iii) The estimated quantity of the last precipitation event;

(iv) Site descriptions (e.g., conveyance type and dominant watershed land uses);

(v) Observed indicators of possible illicit discharge events, such as floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth);

(vi) Whether or not a discharge was observed;

(vii) If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall; and

(viii) For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point.

(3) A timeframe upon which to conduct an investigation to identify and locate the source of any observed unauthorized nonstormwater discharge. Priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety. Discharges authorized under a separate VPDES or state permit require no further action under this permit.

(4) Methodologies to determine the source of all illicit discharges. If the permittee is unable to identify the source of an illicit discharge within six months of beginning the investigation then the permittee shall document that the source remains unidentified. If the observed discharge is intermittent, the permittee shall document that attempts to observe the discharge flowing were unsuccessful.

(5) Methodologies for conducting a follow-up investigation for illicit discharges that are continuous or that permittees expect to occur more frequently than a one-time discharge to verify that the discharge has been eliminated except as provided for in Part I E 3 c (4);

(6) A mechanism to track all illicit discharge investigations to document the following:

(a) The dates that the illicit discharge was initially observed, reported, or both;

(b) The results of the investigation, including the source, if identified;

(c) Any follow-up to the investigation;

(d) Resolution of the investigation; and

(e) The date that the investigation was closed.

d. The MS4 program plan shall include:

(1) The MS4 map and outfall information table required by Part I E 3 a. The map and outfall information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;

(2) Copies of written notifications of physical interconnections given by the permittee to

other MS4s; and

(3) The IDDE procedures described in Part I E 3 c.

e. The annual report shall include:

(1) A confirmation statement that the MS4 map and outfall information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year;

(2) The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program; and

(3) A list of illicit discharges to the MS4, including spills reaching the MS4 with information as follows:

(a) The location and source of illicit discharge;

(b) The dates that the discharge was observed, reported, or both;

(c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);

(d) How the investigation was resolved;

(e) A description of any follow-up activities; and

(f) The date the investigation was closed.

4. Construction site stormwater runoff and erosion and sediment control.

a. The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The permittee shall control construction site stormwater runoff as follows:

(1) If the traditional permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);

(2) If the traditional permittee is a town that has not adopted a VESCP, implementation of a VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44:15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840) by the surrounding county shall constitute compliance with Part I E 4 a; such town shall notify the surrounding county of erosion, sedimentation, or other construction stormwater runoff problems;

(3) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Erosion and

Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications; or

(4) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, as follows:

(a) During or immediately following initial installation of erosion and sediment controls;

(b) At least once per every two-week period;

(c) Within 48 hours following any runoff producing storm event; and

(d) At the completion of the project prior to the release of any performance bond.

(5) If the nontraditional permittee is a school board or other local government body, the permittee shall inspect those projects resulting in a land disturbance as defined in § 62.1-44.15.51 of the Code of Virginia occurring on lands owned or operated by the permittee that result in the disturbance of 10,000 square feet or greater, 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, or in accordance with more stringent thresholds established by the local government, as follows:

(a) During or immediately following initial installation of erosion and sediment controls;

(b) At least once per every two-week period;

(c) Within 48 hours following any runoff producing storm event; and

(d) At the completion of the project prior to the release of any performance bond.

b. The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections . The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.

c. Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;

d. The permittee's MS4 program plan shall include:

(1) If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for

the VESCP program;

(2) If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (2), the county ordinance citations for the VESCP program the town is subject to;

(3) If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department;

(4) A description of the legal authorities utilized to ensure compliance with Part I E 4 a for erosion and sediment control and construction site stormwater runoff control, such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

(5) For traditional permittees, written inspection procedures to ensure VESCP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60 B;

(6) For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the department in accordance with § 62.1-44.15:55 of the Code of Virginia. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following:

(a) An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to ensure continued performance of their intended function; and

(b) A list of all associated documents utilized for inspections, including checklists, department approved erosion and sediment control plans, or the most recently department approved annual standards and specifications, and any other documents utilized;

(7) Traditional permittees shall maintain written procedures for requiring VESCP compliance through corrective action or enforcement action in accordance with § 62.1-44.15:58 of the Code of Virginia;

(8) Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and

(9) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site

stormwater runoff control requirements in Part I E 4.

e. The annual report shall include the following:

(1) Total number of erosion and sediment control inspections conducted;

(2) Total number of each type of compliance action and enforcement action implemented; and

(3) For nontraditional permittees:

(a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved annual standards and specifications for erosion and sediment control; and

(b) If any land disturbing projects were conducted without department approved annual standards and specifications, a list of all land disturbing projects that occurred during the reporting period with erosion and sediment control plan approval dates for each project.

5. Post-construction stormwater management for new development and development on prior developed lands.

a. The permittee shall address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program as follows:

(1) If the traditional permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as maintain an inspection and maintenance program in accordance with Part I E 5 b and c;

(2) If the traditional permittee is a town that has not adopted a VSMP, implementation of a VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) by the surrounding county shall constitute compliance with Part I E 5 a; such town shall notify the surrounding county of erosion, sedimentation, or other post-construction stormwater runoff problems and maintain an inspection and maintenance program in accordance with Part I E 5 c and d;

(3) If the traditional permittee is a city, county, or town receiving initial permit coverage during the permit term and must obtain VSMP approval from the department, the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Part I E 5 b and c no later than 60 months after receiving permit coverage;

(4) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations

(9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and maintain an inspection and maintenance program in accordance with Part I E 5 b;

(5) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity, and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b no later than 60 months after receiving permit coverage; or

(6) If the nontraditional permittee is a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b.

b. The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee as follows:

(1) Within six months of the permit effective date, the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities. The permittee may use inspection and maintenance specifications available from the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines;

(2) Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations;

(3) The permittee shall inspect stormwater management facilities owned or operated by the permittee no less frequently than once per year. The permittee may choose to implement an alternative schedule to inspect these stormwater management facilities based on facility type and expected maintenance needs provided that the alternative schedule and rationale is included in the MS4 program plan. The alternative inspection frequency shall be no less often than once per five years; and

(4) If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).

c. For traditional permittees described in Part I E 5 a (1) , (2), or (3), the permittee shall:

(1) Implement an inspection and enforcement program for stormwater management

facilities not owned by the permittee (i.e., privately owned) that includes:

(a) An inspection frequency of no less often than once per five years for all privately owned stormwater management facilities that discharge into the MS4; and

(b) Adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a maintenance agreement, including an inspection schedule to the extent allowable under state or local law or other legal mechanism;

(2) Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner;

(3) The permittee may develop and implement a progressive compliance and enforcement strategy provided that the strategy is included in the MS4 program plan;

(4) The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114 C.

d. The MS4 program plan shall include:

(1) If the permittee implements a VSMP in accordance with Part I E 5 a (1) , (2), or (3):

(a) A copy of the VSMP approval letter issued by the department;

(b) Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and

(c) Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned stormwater management facilities;

(2) If the permittee implements a post-development stormwater runoff control program in accordance with Part I E 5 a (4):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department;

(3) A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;

(4) Written inspection and maintenance procedures and other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and

(5) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program.

e. The annual report shall include the following information:

(1) If the traditional permittee implements a VSMP in accordance with Part I E 5 a (1) , (2), or (3):

(a) The number of privately owned stormwater management facility inspections conducted; and

(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;

(2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;

(3) A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;

(4) For traditional permittees as specified in Part I E 5 a (1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);

(5) A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and

(6) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee within the MS4 service area.

a. The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee designed to meet the following objectives:

(1) Prevent illicit discharges;

(2) Ensure permittee staff or contractors properly dispose of waste materials, including landscape wastes and prevent waste materials from entering the MS4;

(3) Prevent the discharge of wastewater or wash water not authorized in accordance with

9VAC25-890-20 D 3 u, into the MS4 without authorization under a separate VPDES permit; and

(4) Minimize the pollutants in stormwater runoff.

b. The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities:

(1) Road, street, sidewalk, and parking lot maintenance and cleaning:

(a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with Part I E to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage;

(b) Procedures developed in accordance with Part I E shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus;

(2) Renovation and significant exterior maintenance activities (e.g., painting, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months after permit issuance;

(3) Discharging water pumped from construction and maintenance activities not covered by another permit covering such activities;

(4) Temporary storage of landscaping materials;

(5) Maintenance of permittee owned or operated vehicles and equipment (i.e., prevent pollutant discharges from leaking permittee vehicles and equipment);

(6) Application of materials, including pesticides and herbicides shall not exceed manufacturer's recommendations; and

(7) Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations.

c. The permittee shall require through the use of contract language, training, written procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities described in Part I E 6 b follow established good housekeeping procedures and use appropriate control measures to minimize the discharge of pollutants to the MS4.

d. The written procedures established in accordance with Part I E 6 a and b shall be utilized as part of the employee training program , and the permittee shall develop a written training plan for applicable field personnel that ensures the following:

(1) Applicable field personnel shall receive training in the prevention, recognition, and elimination of illicit discharges no less often than once per 24 months;

(2) Employees performing road, street, sidewalk, and parking lot maintenance shall receive training in good housekeeping procedures required under Part I E 6 b (1) no less often than once per 24 months;

(3) Employees working in and around facility maintenance, public works, or recreational facilities shall receive training in applicable Part I E 6 a and b good housekeeping procedures required no less often than once per 24 months;

(4) Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less often than once per 24 months;

(5) Employees whose duties include emergency spill control and response shall be trained in spill control and response. Emergency responders, such as firefighters and law-enforcement officers, trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan; and

(6) Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification.

e. The permittee shall maintain documentation of each training activity conducted by the permittee to fulfill the requirements of Part I E 6 d for a minimum of three years after training activity completion. The documentation shall include the following information:

(1) The date when applicable employees have completed the training activity;

(2) The number of employees who have completed the training activity; and

(3) The training objectives and good housekeeping procedures required under Part I E 6 a covered by training activity.

f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.

g. Within 12 months of permit coverage, the permittee shall identify any new high-priority facilities located in expanded 2020 census urban areas with a population of at least 50,000.

h. Within 36 months of permit coverage, the permittee shall implement SWPPPs for high-priority facilities meeting the conditions of Part I E 6 i and which are located in expanded 2020 census urban areas with a population of at least 50,000.

i. The permittee shall maintain and implement a site specific SWPPP for each high-priority facility as defined in 9VAC25-890-1 that does not have or require separate VPDES permit

coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt, or runoff:

(1) Areas where residuals from using, storing, or cleaning machinery or equipment remain and are exposed to stormwater;

(2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;

(3) Material handling equipment;

(4) Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);

(5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);

(6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated, or leaking storage drums, barrels, tanks, and similar containers;

(7) Waste material except waste in covered, nonleaking containers (e.g., dumpsters);

(8) Application or disposal of process wastewater (unless otherwise permitted); or

(9) Particulate matter or visible deposits of residuals from roof stacks, vents, or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

j. Each SWPPP as required in Part I E 6 g shall include the following:

(1) A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies;

(2) A description and checklist of the potential pollutants and pollutant sources;

(3) A description of all potential nonstormwater discharges;

(4) A description of all structural control measures, such as stormwater management facilities and other pollutant source controls, applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to the SWPPP), such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4;

(5) A maintenance schedule for all stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4);

(6) Site specific written procedures designed to reduce and prevent pollutant discharge that incorporate by reference applicable good housekeeping procedures required under Part I E 6 a and b;

(7) A description of the applicable training as required in Part I E 6 d (4);

(8) An inspection frequency of no less often than once per year and maintenance

requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP;

(9) A log of each unauthorized discharge, release, or spill incident reported in accordance with Part IV G including the following information:

(a) Date of incident;

(b) Material discharged, released, or spilled; and

(c) Estimated quantity discharged, released, or spilled;

(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and

(11) The point of contact for SWPPP implementation.

k. No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which an SWPPP has not been developed to determine if the facility meets any of the conditions described in Part I E 6 g. If the facility is determined to need an SWPPP, the permittee shall develop an SWPPP meeting the requirements of Part I E 6 h no later than December 31 of that same year. The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain an SWPPP in accordance with Part I E 6 g and this list shall be available upon request.

l. The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part IV G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

m. The SWPPP shall be kept at the high-priority facility and utilized as part of employee SWPPP training required in Part I E 6 d (4). The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

n. If activities change at a facility such that the facility no longer meets the definition of a high-priority facility , the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.

o. If activities change at a facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage.

p. The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than

one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.

q. Within 12 months of permit coverage, the permittee shall identify contiguous areas greater than one acre located in expanded 2020 census urban areas with population of at least 50,000 and within the permittee's MS4 service area requiring turf and landscape nutrient management plans.

r. Within 36 months of permit coverage, the permittee shall implement turf and landscape nutrient management plans on contiguous areas greater than one acre located in expanded 2020 census urban areas with a population of least 50,000 and within the permittee's MS4 service area.

s. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization.

t. Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval.

u. Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal within six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee.

v. Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

w. Nontraditional permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement.

x. The MS4 program plan shall include:

(1) A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I E 6 a and b;

(2) A list of all high-priority facilities owned or operated by the permittee required to maintain an SWPPP in accordance with Part I E 6 g that includes the facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference;

(3) A list of locations for which turf and landscape nutrient management plans are required

in accordance with Part I E 6 n and s, including the following information:

(a) The total acreage covered by each nutrient management plan;

(b) The DCR approval date and expiration date for each nutrient management plan;

(c) The location of the nutrient management plan hardcopy or electronic document being maintained;

(4) A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate; and

(5) The written training plan as required in Part I E 6 d.

y. The annual report shall include the following:

(1) A summary of any written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period;

(2) A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period;

(3) A list of any new SWPPPs developed in accordance Part I E 6 i during the reporting period;

(4) A summary of any SWPPPs modified in accordance with Part I E 6 j, 6 l, or 6 m;

(5) The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period;

(6) The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired);

(7) A list of the training activities conducted in accordance with Part I E 6 d, including the following information:

(a) The completion date for the training activity;

(b) The number of employees who completed the training activity; and

(c) The objectives and good housekeeping procedures covered by the training activity.

Part II

TMDL Special Conditions

A. Chesapeake Bay TMDL special condition.

1. The Commonwealth in its Phase I , Phase II, and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees 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 , Phase II , and Phase III WIPs to meet the Level 2 (L2) scoping run for existing developed lands as it

represents an implementation of an additional 60% of L2 as specified in the Phase I , Phase II, and Phase III WIPs. In combination with the 40% reduction of L2 that has already been achieved, a total reduction no later than October 31, 2028, of 100% of L2 shall be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

2. The following definitions apply to Part II of this state permit for the purpose of the Chesapeake Bay TMDL special condition for discharges in the Chesapeake Bay Watershed:

"Existing sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.

"New sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.

"Pollutants of concern" or "POC" means total nitrogen and total phosphorus.

"Transitional sources" means regulated land disturbing activities that are temporary in nature and discharge through the MS4.

3. Reduction requirements for permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018. No later than October 31, 2028, the permittee shall reduce the load of total nitrogen and total phosphorus from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least 100% of the Level 2 (L2) Scoping Run Reductions. The 100% reduction is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; (iii) the second phase reduction of at least 40% of the L2 Scoping Run, which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023; and (iv) the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable:

Table 3a
Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven, and Little Creek Basins

		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4	Load(lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction Required by 10/31/2028 (lbs/yr)[4]	Sum of 100% cumulative reduction (lb/yr)[5]

			within the 2010 CUA (acres)[2]				
Nitrogen	Regulated urban impervious	9.39			9%		
	Regulated urban pervious	6.99			6%		
Phosphorus	Regulated urban impervious	1.76			16%		
	Regulated urban pervious	0.5			7.25%		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column E = Column C x Column D .

[5]Column F = The sum of the subsource cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3b

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Potomac River Basin

		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction required by 10/31/2028 (lbs/yr)[4]	Sum of 100% cumulative reduction (lb/yr)[5]

			the 2010 CUA (acres)[2]				
Nitrogen	Regulated urban impervious	16.86			9%		
	Regulated urban pervious	10.07			6%		
Phosphorus	Regulated Urban Impervious	1.62			16%		
	Regulated urban pervious	0.41			7.25%		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column E = Column C x Column D .

[5]Column F = The sum of the subsource cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3c

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Rappahannock River Basin

		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction Required by 10/31/2028 (lbs/yr)[4]	Sum of 100% cumulative reduction (lb/yr)[5]

			the 2010 CUA (acres)[2]				
Nitrogen	Regulated urban impervious	9.38			9%		
	Regulated urban pervious	5.34			6%		
Phosphorus	Regulated urban impervious	1.41			16%		
	Regulated urban pervious	0.38			7.25%		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column E = Column C x Column D .

[5]Column F = The sum of the subsource cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3d

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the York River and Poquoson Coastal Basin

		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction required by 10/31/2028 (lbs/yr)[4]	Sum of 100% cumulative reduction (lb/yr)[5]

			the 2010 CUA (acres)[2]				
Nitrogen	Regulated urban impervious	7.31			9%		
	Regulated urban pervious	7.65			6%		
Phosphorus	Regulated urban impervious	1.51			16%		
	Regulated urban pervious	0.51			7.25%		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column E = Column C x Column D .

[5]Column F = The sum of the subsource cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

4. No later than October 31, 2028, the permittee shall offset 100% of the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply:

a. The activity disturbed one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent pollutant load for new sources of nitrogen meeting the requirements of this condition.

5. No later than October 31, 2028, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply:

a. The activity disturbs one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 to develop the equivalent pollutant load for grandfathered sources of nitrogen meeting the requirements of this condition.

Table 4
Ratio of Phosphorus Loading Rate to Nitrogen Loading Rates for Chesapeake Bay Basins

Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphorus Loading Rate (lbs/acre)	Nitrogen Loading Rate (lbs/acre)
James River Basin, Lynnhaven, and Little Creek Basins	1.0	5.2
Potomac River Basin	1.0	6.9
Rappahannock River Basin	1.0	6.7
York River Basin (including Poquoson Coastal Basin)	1.0	9.5

6. Reductions achieved in accordance with the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems effective July 1, 2013, and November 1, 2018, shall be applied toward the total reduction requirements to demonstrate compliance with Part II A 3, A 4, and A 5.

7. 40% of L2 reductions for total nitrogen and total phosphorus shall be maintained by the permittee during the permit term.

8. Reductions shall be achieved in each river basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered

project occurred.

9. Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.

10. Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:

a. BMPs approved by the Chesapeake Bay Program;

b. BMPs approved by the department; or

c. A trading program described in Part II A 11.

11. The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of Virginia for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, and Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:

a. The credits are generated and applied to a compliance obligation in the same calendar year;

b. The credits are generated and applied to a compliance obligation in the same tributary;

c. The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;

d. No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits; and

e. Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia.

12. Chesapeake Bay TMDL action plan requirements.

a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information:

(1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5 ;

(2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a:

(a) Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern;

(3) A preliminary schedule for implementation of the BMPs included in the Chesapeake Bay TMDL action plan; and

(4) A summary of any comments received as a result of public participation required in Part II A 14, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

b. For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018, no later than 12 months after the permit effective date, the permittee shall submit a third phase Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:

(1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.

(2) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin.

(4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL, including:

(a) The date of implementation; and

(b) The reductions achieved.

(5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:

(a)Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern;

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and

(f) A preliminary schedule for implementation of the BMPs included in the Chesapeake Bay TMDL action plan.

(6) A summary of any comments received as a result of public participation required in Part II A 13, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

13. Prior to submittal of the action plan required in Part II A 12 a and b, permittees shall provide an opportunity for public comment for no fewer than 15 days on the additional BMPs proposed in the third phase Chesapeake Bay TMDL action plan .

14. Chesapeake Bay TMDL implementation annual status report.

a. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall submit a Chesapeake Bay TMDL implementation annual status report in a method (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.

b. Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

c. The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL action plan received and how the permittee responded.

d. Each Chesapeake Bay TMDL implementation annual status report shall include the following information:

(1) A list of Chesapeake Bay TMDL action plan BMPs, not including annual practices, implemented prior to the reporting period that includes the following information for reported BMP;

(a) The number of BMPs for each BMP type;

(b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

(2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period:

(a) The BMP type and a description of the location for each BMP;

(b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.

e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired.

f. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented.

g. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen and total phosphorus.

h. Any revisions made to the Chesapeake Bay TMDL action plan.

i. A list of BMPs that are planned to be implemented during the next reporting period.

15. Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, that are located in the expanded 2020 census urban areas with a population of at least 50,000, and within the permittee's MS4 service area, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.), if the following conditions apply:

a. The activity disturbed one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent nitrogen pollutant load for new sources meeting the requirements of this condition.

16. Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from projects grandfathered in

accordance with 9VAC25-870-48 that are located in the expanded 2020 census urban areas with a population of least 50,000, and within the permittee's MS4 service area, and began construction after July 1, 2014, if the following conditions apply:

a. The activity disturbs one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 6 to develop the equivalent nitrogen pollutant load for grandfathered sources meeting the requirements of this condition.

B. Local TMDL special condition.

1. Permittees applying for initial coverage under this general permit shall develop a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee. The permittee shall develop action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable. Each local TMDL action plan shall be provided to the department no later than October 31, 2028, unless the department grants a later date.

2. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 2 a and 2 b:

a. For TMDLs approved by EPA prior to July 1, 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate or update as applicable the local TMDL action plans to meet the conditions of Part II B 4, B 6, B 7, and B 8, as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Updated action plans shall include:

(1) An evaluation of the results achieved by the previous action plan; and

(2) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation.

b. For TMDLs approved by EPA on or after July 1, 2018, and prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8, as applicable no later than 30 months after the permit effective date.

3. The permittee shall complete implementation of the TMDL action plans as determined by the schedule. TMDL action plans may be implemented in multiple phases over more than one permit cycle using the adaptive iterative approach provided adequate progress is achieved in

the implementation of BMPs designed to reduce pollutant discharges in a manner that is consistent with the assumptions and requirements of the applicable TMDL.

4. Each local TMDL action plan developed by the permittee shall include the following:

a. The TMDL project name;

b. The EPA approval date of the TMDL;

c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable;

d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants of concern means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;

e. The BMPs designed to reduce the pollutants of concern in accordance with Part II B 5, B 6, B 7, and B 8;

f. Any calculations required in accordance with Part II B 5, B 6, B 7, or B 8;

g. For action plans developed in accordance with Part II B 5, B 6, and B 8, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and

h. A schedule of anticipated actions planned for implementation during this permit term.

5. Bacterial TMDLs.

a. Traditional permittees shall select and implement at least three of the strategies listed in Table 5 designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in Part II B 4 d.

b. Nontraditional permittees shall select at least one strategy listed in Table 5 designed to reduce the load of bacteria to the MS4 relevant to sources of bacteria applicable within the MS4 regulated service area. Selection of the strategies shall correspond to sources identified in Part II B 4 d.

Table 5 Strategies for Bacteria Reduction Stormwater Control/Management Strategy	
Source	Strategies (provided as an example and not meant to be all inclusive or limiting)

Domestic pets (dogs and cats)	Provide signage to pick up dog waste, providing pet waste bags and disposal containers. Adopt and enforce pet waste ordinances or policies, or leash laws or policies. Place dog parks away from environmentally sensitive areas. Maintain dog parks by removing disposed of pet waste bags and cleaning up other sources of bacteria. Protect riparian buffers and provide unmanicured vegetative buffers along streams to dissuade stream access.
Urban wildlife	Educate the public on how to reduce food sources accessible to urban wildlife (e.g., manage restaurant dumpsters and grease traps, residential garbage, feed

	pets indoors). Install storm drain inlet or outlet controls. Clean out storm drains to remove waste from wildlife. Implement and enforce urban trash management practices. Implement rooftop disconnection programs or site designs that minimize connections to reduce bacteria from rooftops. Implement a program for removing animal carcasses from roadways and properly disposing of the same (either through proper storage or through transport to a licensed facility).
Illicit connections or illicit discharges to the MS4	Implement an enhanced dry weather screening and illicit discharge, detection, and elimination program

	beyond the requirements of Part I E 3 to identify and remove illicit connections and identify leaking sanitary sewer lines infiltrating to the MS4 and implement repairs. Implement a program to identify potentially failing septic systems. Educate the public on how to determine whether their septic system is failing. Implement septic tank inspection and maintenance program. Implement an educational program beyond any requirements in Part I E 1 though E 6 to explain to citizens why they should not dump materials into the MS4.
Dry weather urban flows (irrigations, car washing, powerwashing, etc.)	Implement public education programs to reduce dry weather flows

	from storm sewers related to lawn and park irrigation practices, car washing, powerwashing and other nonstormwater flows. Provide irrigation controller rebates. Implement and enforce ordinances or policies related to outdoor water waste. Inspect commercial trash areas, grease traps, washdown practices, and enforce corresponding ordinances or policies.
Birds (Canadian geese, gulls, pigeons, etc.)	Identify areas with high bird populations and evaluate deterrents, population controls, habitat modifications and other measures that may reduce bird-associated bacteria loading. Prohibit feeding of birds.

Other sources	Enhance maintenance of stormwater management facilities owned or operated by the permittee. Enhance requirements for third parties to maintain stormwater management facilities. Develop BMPs for locating, transporting, and maintaining portable toilets used on permittee-owned sites. Educate third parties that use portable toilets on BMPs for use. Provide public education on appropriate recreational vehicle dumping practices.

6. Local sediment, phosphorus, and nitrogen TMDLs.

a. The permittee shall reduce the loads associated with sediment, phosphorus, or nitrogen through implementation of one or more of the following:

(1) One or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65 or other approved BMPs found on the Virginia Stormwater BMP Clearinghouse website;

(2) One or more BMPs approved by the Chesapeake Bay Program. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented; or

(3) Land disturbance thresholds lower than Virginia's regulatory requirements for erosion and sediment control and post development stormwater management.

b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented or sediment, phosphorus, or nitrogen credits acquired. BMPs implemented and nutrient and sediment credits acquired to meet the requirements of the Chesapeake Bay TMDL in Part II A may also be utilized to meet local TMDL requirements as long as the BMPs are implemented or the credits are generated in the watershed for which local water quality is impaired.

c. The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in Part II B 4 f.

d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department an update on the progress made toward achieving local TMDL action plan goals and the anticipated end dates by which the permittee will meet each wasteload allocation for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with Part II B 3.

7. Polychlorinated biphenyl (PCB) TMDLs.

a. For each PCB TMDL action plan, the permittee shall include an inventory of potentially significant sources of PCBs owned or operated by the permittee that drains to the MS4 that includes the following information:

(1) Location of the potential source;

(2) Whether or not the potential source is from current site activities or activities previously conducted at the site that have been terminated (i.e., legacy activities); and

(3) A description of any measures being implemented or to be implemented to prevent exposure to stormwater and the discharge of PCBs from the site.

b. If at any time during the term of this permit, the permittee discovers a previously unidentified significant source of PCBs within the permittee's MS4 regulated service area, the permittee shall notify DEQ in writing within 30 days of discovery.

c. As part of its annual reporting requirements, the permittee shall submit results of any action plan PCB monitoring or product testing conducted and any adaptive management strategies that have been incorporated into the updated action plan based upon monitoring or product testing results if the permittee has elected to perform monitoring or product testing or both.

8. Chloride TMDLs.

a. No later than 36 months after the permit effective date, permittees shall develop an anti-icing and deicing agent education and outreach strategy that identifies target audiences for increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and de-icing agents used for snow and ice management.

b. Anti-icing and deicing agent education and outreach strategies shall contain a schedule to implement two or more of the strategies listed in Part I E 1 d Table 1 per year to communicate to target audiences the importance of responsible anti-icing and deicing agent application, transport, and storage.

c. No later than 36 months after permit issuance, the permittee shall review good housekeeping procedures for anti-icing and deicing agent application, handling, storage, and transport activities required under Part I E 6 b (1) (a) and identify a minimum of two strategies for implementing enhanced BMPs that promote efficient management and application of anti-icing and deicing agents while maintaining public safety.

9. Prior to submittal of the action plan required in Part II B 2, the permittee shall provide an opportunity for public comment for no fewer than 15 days on the proposal to meet the local TMDL action plan requirements .

10. The MS4 program plan as required by Part I B of this permit shall incorporate each local TMDL action plan. Local TMDL action plans may be incorporated by reference into the MS4 program plan provided that the program plan includes the date of the most recent local TMDL action plan and identification of the location where a copy of the local TMDL action plan may be obtained.

11. For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.

C. Inspection and maintenance of ecosystem restoration projects used for TMDL compliance.

1. Within 36 months of permit issuance the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of ecosystem restoration projects as defined in 9VAC25-890-1 and implemented as part of a TMDL action plan developed in accordance with Part II A, B, or both. The permittee may utilize inspection and maintenance protocols developed by the Chesapeake Bay Program or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines.

2. The permittee shall inspect ecosystem restoration projects owned or operated by the permittee and implemented as part of a current TMDL action plan developed in accordance with Part II A or B no less than once every 60 months.

Part III

DEQ BMP Warehouse Reporting

A. For the purpose of Part III of this permit, "best management practice" or "BMP" means a practice that achieves quantifiable nitrogen, phosphorus, or total suspended solids reductions, including stormwater management facilities, ecosystem restoration projects, annual practices, and other practices approved by the department for reducing nitrogen, phosphorus, and total suspended solids pollutants.

B. No later than October 1 of each year the permittee shall electronically report new BMPs

implemented and inspected as applicable between July 1 and June 30 of each year using the DEQ BMP Warehouse.

1. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part III B 5 , including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830), if applicable, and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.

2. The permittee shall use the DEQ BMP Warehouse to report BMPs that were not reported in accordance with Part III B 1 or B 5 and were implemented as part of a TMDL action plan to achieve nitrogen, phosphorus, and total suspended solids reductions in accordance with Part II A or B.

3. The permittee shall use the DEQ BMP Warehouse to report any BMPs that were not reported in accordance with Part III B 1, B 2, or B 5.

4. The permittee shall use the DEQ BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I E 5 b or 5 c, or in accordance with Part II C and the most recent associated TMDL action plan.

5. Traditional permittees specified in Part I E 5 a (1) shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.

C. The following information for each new BMP reported in accordance with Part III B 1, B 2, B 3, or B 5 shall be reported to the DEQ BMP Warehouse as applicable:

1. The BMP type;

2. The BMP location as decimal degree latitude and longitude;

3. The acres treated by the BMP, including total acres and impervious acres;

4. The date the BMP was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use 06/2005;

5. The 6th Order Hydrologic Unit Code in which the BMP is located;

6. Whether the BMP is owned or operated by the permittee or privately owned;

7. Whether or not the BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;

8. If the BMP is privately owned, whether a maintenance agreement exists;

9. The date of the permittee's most recent inspection of the BMP; and

10. Any other information specific to the BMP type required by the DEQ BMP Warehouse (e.g., linear feet of stream restoration).

D. No later than October 1 of each year, the permittee shall electronically report the most recent inspection date for any existing BMP that was previously reported and re-inspected between July 1 and June 30 using the BMP Warehouse. If an existing BMP has not been previously reported, the BMP shall be reported as new in accordance with Part III B and Part III C. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

E. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

Part IV

Conditions Applicable to All State and VPDES Permits

NOTE: Discharge monitoring is not required for compliance purposes by this general permit. If the operator chooses to monitor stormwater discharges for informational or screening purposes, the operator does not need to comply with the requirements of Part IV A, B, or C.

A. Monitoring.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitoring activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this state permit. Analyses performed according to test procedures approved under 40 CFR Part 136 shall be performed by an environmental laboratory certified under regulations adopted by the Department of General Services (1VAC30-45 or 1VAC30-46).

3. The operator shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Monitoring records and reports shall include:

a. The date, exact place, and time of sampling or measurements;

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this state permit, and records of all data used to complete the registration statement for this state permit, for a period of at least three years from the date of the sample, measurement, report, or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the operator, or as requested by the department.

C. Reporting monitoring results.

1. The operator shall submit the results of the monitoring as may be performed in accordance with this state permit with the annual report unless another reporting schedule is specified elsewhere in this state permit.

2. Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved, or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included. Following notification from the department of the start date for the required electronic submission of monitoring reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the operator monitors any pollutant specifically addressed by this state permit more frequently than required by this state permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this state permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this state permit.

D. Duty to provide information. The operator shall furnish within a reasonable time, any information that the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this state permit or to determine compliance with this state permit. The department or EPA may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and Virginia Stormwater Management Act. The operator shall also furnish to the department or EPA upon request, copies of records required to be kept by this state permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress

reports on, interim and final requirements contained in any compliance schedule of this state permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized stormwater discharges. Pursuant to § 62.1-44.5 of the Code of Virginia, except in compliance with a state permit issued by the department, it shall be unlawful to cause a stormwater discharge from a MS4.

G. Reports of unauthorized discharges. Any operator of a MS4 who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, or § 62.1-44.34:19 of the Code of Virginia that occurs during a 24-hour period into or upon surface waters or who discharges or causes or allows a discharge that may reasonably be expected to enter surface waters shall notify the department of the discharge immediately (see Part IV I 4) upon discovery of the discharge, but in no case later than within 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this state permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge, including a bypass in Part IV U or an upset in Part IV V, should occur from a facility and the discharge enters or could be expected to enter surface waters, the operator shall promptly notify (see Part IV I 4), in no case later than within 24 hours, the department after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part IV I 2. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the facilities; and

4. Flooding or other acts of nature.

I. Reports of noncompliance.

1. The operator shall report any noncompliance that may adversely affect surface waters or may endanger public health.

a. A report to the department shall be provided within 24 hours from the time the operator becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under Part IV I:

(1) Any unanticipated bypass; and

(2) Any upset that causes a discharge to surface waters.

b. A written report shall be submitted within five days and shall contain:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The department may waive the written report on a case-by-case basis for reports of noncompliance under Part IV I if the report has been received within 24 hours and no adverse impact on surface waters has been reported.

2. The operator shall report all instances of noncompliance not reported under Part IV I 1 b, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part IV I 2.

3. The immediate (within 24 hours) reports required in Part IV G, H, and I shall be made to the department. Reports may be made by telephone, email , or online at https://www.deq.virginia.gov/our-programs/pollution-response/pollution-data-and-reporting . For reports outside normal working hours, the online portal shall be used. For emergencies, call the Virginia Department of Emergency Management's Emergency Operations Center (24-hours) at 1-800-468-8892.

4. Where the operator becomes aware of a failure to submit any relevant facts, or submittal of incorrect information in any report, including a registrations statement, to the department, the operator shall promptly submit such facts or correct information.

J. Notice of planned changes.

1. The operator shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The operator plans an alteration or addition to any building, structure, facility, or installation that may meet one of the criteria for determining whether a facility is a new source in 9VAC25-870-420:

b. The operator plans an alteration or addition that would significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this state permit; or

2. The operator shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with state permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this chapter, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this chapter, a principal executive officer of a public agency includes:

(1) The chief executive officer of the agency, or

(2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by state permits, including annual reports, and other information requested by the department shall be signed by a person described in Part IV K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part IV K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the operator. (A duly authorized representative may thus be either a named

individual or any individual occupying a named position.); and

c. The signed and dated written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part IV K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the MS4, a new authorization satisfying the requirements of Part IV K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part IV K 1 or K 2 shall make the following 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."

L. Duty to comply. The operator shall comply with all conditions of this state permit. Any state permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act, except that noncompliance with certain provisions of this state permit may constitute a violation of the Virginia Stormwater Management Act but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for state permit termination, revocation and reissuance, or modification; or denial of a state permit renewal application.

The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this state permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the operator wishes to continue an activity regulated by this state permit after the expiration date of this state permit, the operator shall submit a new registration statement at least 90 days before the expiration date of the existing state permit, unless permission for a later date has been granted by the department. The department shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit.

N. Effect of a state permit. This state permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this state permit shall be construed to preclude the institution of any legal action under, or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in state permit conditions on bypassing in Part IV U and

upset in Part IV V nothing in this state permit shall be construed to relieve the operator from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this state permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law or § 311 of the Clean Water Act.

Q. Proper operation and maintenance. The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the operator to achieve compliance with the conditions of this state permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by the operator only when the operation is necessary to achieve compliance with the conditions of this state permit.

R. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering surface waters and in compliance with all applicable state and federal laws and regulations.

S. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this state permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this state permit.

U. Bypass.

1. "Bypass," as defined in 9VAC25-870-10, means the intentional diversion of waste streams from any portion of a treatment facility. The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Part IV U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the operator knows in advance of the need for a bypass, the operator shall submit prior notice to the department, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in Part IV I.

3. Prohibition of bypass.

a. Except as provided in Part IV U 1, bypass is prohibited, and the department may take

enforcement action against an operator for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The operator submitted notices as required under Part IV U 2.

b. The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three conditions listed in Part IV U 3 a.

V. Upset.

1. An "upset," as defined in 9VAC25-870-10, means an exceptional incident in which there is unintentional and temporary noncompliance with technology based state permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based state permit effluent limitations if the requirements of Part IV V 4 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

3. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

4. An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the operator can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The operator submitted notice of the upset as required in Part IV I; and

d. The operator complied with any remedial measures required under Part IV S.

5. In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The operator shall allow the department , EPA, or an authorized

representative (including an authorized contractor), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this state permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this state permit;

3. Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this state permit; and

4. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the Clean Water Act and the Virginia Stormwater Management Act, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. State permit actions. State permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the operator for a state permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any state permit condition.

Y. Transfer of state permits.

1. State permits are not transferable to any person except after notice to the department. Except as provided in Part IV Y 2, a state permit may be transferred by the operator to a new operator only if the state permit has been modified or revoked and reissued, or a minor modification made, to identify the new operator and incorporate such other requirements as may be necessary under the Virginia Stormwater Management Act and the Clean Water Act.

2. As an alternative to transfers under Part IV Y 1, this state permit may be automatically transferred to a new operator if:

a. The current operator notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;

b. The notice includes a written agreement between the existing and new operators containing a specific date for transfer of state permit responsibility, coverage, and liability between them; and

c. The department does not notify the existing operator and the proposed new operator of its intent to modify or revoke and reissue the state permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV Y 2 b.

Z. Severability. The provisions of this state permit are severable, and if any provision of this state permit or the application of any provision of this state permit to any circumstance is held invalid,

the application of such provision to other circumstances, and the remainder of this state permit, shall not be affected thereby.

Statutory Authority

§62.1-44.15:28 of the Code of Virginia.

Historical Notes

Former 4VAC50-60-1240, derived from Virginia Register Volume 21, Issue 3, eff. January 29, 2005; amended, Virginia Register Volume 24, Issue 20, eff. July 9, 2008; Volume 29, Issue 4, eff. November 21, 2012; Volume 29, Issue 17, eff. July 1, 2013; amended and renumbered, Virginia Register Volume 30, Issue 2, eff. October 23, 2013; amended, Virginia Register Volume 35, Issue 2, eff. November 1, 2018; Volume 40, Issue 3, eff. November 1, 2023; Volume 40, Issue 4, eff. October 9, 2023.

Appendix B

Current Permit Registration Statement

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY GENERAL PERMIT REGISTRATION STATEMENT FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (VAR04)

Section I. General Information

A. Owner/Operator Information:

Name of Owner Applying for Permit Coverage: Fort Monroe Authority (FMA)		
Mailing Address: 20 Ingalls Road		
City: Fort Monroe	State: VA	Zip Code: 23651
Phone Number: (757) 637-7778		

B. Responsible Official: (Please note that for municipality, state, federal, and other public agencies, the responsible official is defined in 9 VAC25-870-370 A.3 as either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency)

Name: G. Glenn Oder		
Title: Executive Director		
Mailing Address: 20 Ingalls Road		
City: Fort Monore	State: VA	Zip Code: 23651
E-mail Address: goder@fortmonroe.org		
Phone Number: (757) 637-7778		

C. MS4 Permit Contact:

Name:	Wm. David Stroud		
Title:	Director of Heritage Assets and Environmental Manger		
Mailing Address:	20 Ingalls Road		
City:	Fort Monroe	State: VA	Zip Code: 23651
E-mail Address:	dstroud@fortmonroe.org		
Phone Number:	(757) 251-2745		

D. MS4 Maintenance Fee Contact:

Name:	Dayna Barnes		
Title:	Accounts Payables/Accounts Receivables Clerk		
Mailing Address:	20 Ingalls Road		
City:	Fort Monroe	State: VA	Zip Code: 23651
E-mail Address:	acctspayable@fortmonroe.org		
Phone Number:	(757) 251-2749		

E. Small MS4 Information:

Name:	Fort Monroe Authority		
MS4 Ownership Type: ☐ City ☐ County ☐ Incorporated Town ☐ Unincorporated Town			
☐ College or University ☐ Local School Board ☐ Military Installation			
☐ Transportation System ☐ Federal Facility ☑ State Facility			
☐ Other ( )			
Facility Address (applicable to state and federal entities only):			
Street:	20 Ingalls Road		
City:	Fort Monroe	State: VA	Zip Code: 23651
Is the owner/operator taking responsibility for any Public School MS4s? ☐ Yes ☑ No (applicable to entities under the authority of a city council or a county board of supervisors only)			

F. List the Names of any Physically Interconnected MS4s to Which the Small MS4 Discharges:

N/A

Section II. Stormwater Discharge Information (attach additional sheets as necessary. Permittees may attach alternative tables or spreadsheets in lieu of completing the tables below, as long as all information required below is included)

A. Receiving Water Information: Provide a list of all surface waters receiving discharges from the MS4

Mill Creek
James River at Hampton Roads Harbor
Chesapeake Bay

B. Impaired Waters Information: List all surface waters receiving direct discharges from the MS4, that are listed in the 2022 Virginia 303(d)/305(b) Water Quality Assessment Integrated Report

Mill Creek
James River at Hampton Roads Harbor
Chesapeake Bay

Section III. Stormwater Management Program Agreements (please attach additional sheets as necessary)

Agreements: *Attach a list of all existing signed agreements between the operator and any applicable third parties where the operator has entered into an agreement in order to implement minimum control measures or portions of minimum control measures*

Description of Agreement	Permit Requirement(s) Covered by the Agreement	Third Parties Participating in Agreement
Contract for Public Works	Maintenance of Stormwater System,	Veolia North America
	monitoring, and sampling	

Section IV. Draft Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan

Attach a copy of the draft third phase Chesapeake Bay TMDL Action Plan in accordance with Section I. C. 5 of the General VPDES Permit for discharges of Stormwater from Small Municipal Separate Storm Sewer Systems effective November 1, 2023

Section V. Certification Statement and Signature

Read and sign the following certification statement below that is in accordance with 9 VAC 25-870-370 D:

"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."

Print Name: G. Glenn Oder

Title: Executive Director

Signature:

Date:

For Department of Environmental Quality Use Only

Accepted ☐ **Not Accepted** ☐

DEQ Reviewer: **Date:**

Comments:

INSTRUCTIONS FOR FORM DEQ 199-148
GENERAL PERMIT REGISTRATION STATEMENT FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (VAR04)

WHO MUST FILE THE REGISTRATION STATEMENT This registration statement must be completed and submitted by the Operator of any Small MS4 requesting coverage under the above general permit for stormwater discharges.

1. Operators are regulated if they operate a Small MS4, including but not limited to systems owned by federal, state, and local governments:
   a. The small MS4 is located in an urbanized area as determined by the latest Decennial Census by the U.S. Census Bureau. If the Small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated; or
   b. The Small MS4 is designated by the Board.
2. An MS4 may be the subject of a petition to the Board to require a permit for their stormwater discharges. If the Board determines that an MS4 needs a permit, the operator may use this registration statement to apply for coverage under the above general permit.

WHERE TO FILE THE REGISTRATION STATEMENT If this is the first time the MS4 has applied for Permit coverage, the completed registration statement (with all attachments) along with a copy of the fee form and a copy of your check sho uld be sent to the appropriate DEQ regional office**.** The original fee form, application fee (as specified by Form DEQ 199-145), and a copy of the registration statement (without attachments) should be sent to**: Virginia Department of Environmental Quality, Receipts Control, PO Box 1004, Richmond, VA 23218.** For those submitting for re-issuance the completed registration statement (with all attachments) along with the draft Chesapeake Bay TMDL action plan should be sent to the appro priate DEQ regional office**.**

COMPLETENESS
Complete all items except where indicated in order for your registration statement to be accepted. Attach separate sheets of paper, alternative tables or spreadsheets for any item in Section II of the registration statement as necessary.

Definitions
"Interconnected" means that an MS4 is connected to a second (or several) MS4(s) in such a manner that it allows for direct discharges to the second (or several) systems.

"Small MS4" means all separate storm sewers that are: (1) Owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under subsection 208 of the CWA that discharges to surface waters; and (2) Not defined as "large" or "medium" municipal storm sewer systems, or designated under 9VAC25-870-380 A 1. This term includes systems similar to separate sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

LINE BY LINE INSTRUCTIONS

SECTION I General Information
Item A. Owner/Operator Information
Provide the name, mailing address and phone number of the owner of the Small MS4.

Item B. Responsible Official
Provide the name, title, mailing address, e-mail address, and phone number for the responsible official as defined in 9VAC25-870-370 A 3.

Item C. MS4 Permit Contact
Provide the name, title, mailing address, e-mail address, and phone number for anyone designated as an MS4 Permit contact.

Item D. MS4 Maintenance Fee Contact
Provide the name, title, mailing address, e-mail address and phone number for anyone designated as an MS4 maintenance fee contact.

Item E. Small MS4 Information
Provide the name, facility address (if a state or federal MS4), and check the appropriate ownership box for the MS4. Indicate whether or not the applicant is taking responsibility for any Public School MS4s.

Item F. List the names of all regulated MS4s to which the MS4 is physically interconnected
Provide the names of all interconnected regulated MS4s.

SECTON II Stormwater Discharge Information
Item A. Receiving Water Information
List the names of all surface waters receiving a discharge from the MS4.

Item B. Impaired Waters Information
Provide the name of any surface waters receiving a direct discharge from the MS4 that is listed in the 2022 Virginia 303(d)/305(b) Water Quality Assessment Integrated Report.

Section III Stormwater Management Program Agreements
Provide a description, permit requirements covered and third parties participating for each existing agreement between the operator and any third parties.

Section IV Draft Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan
Provide a copy of the draft Chesapeake Bay TMDL Action Pl an detailing the required 60% reductions (100% cumulative)

Section V Certification Statement and Signature
State law provides for severe penalties for submitting false information on this Registration Statement. State regulations require this Registration Statement to be signed by either a

principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:

(a) The chief executive officer of the agency, or

(b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Appendix C

FMA Stormwater System Map and Outfall Table

Fort Monroe, VA MS4 Area Map

- MS4 Outfall
- Stormwater Pipe
- MS4 Area

0 2 4 8 Miles

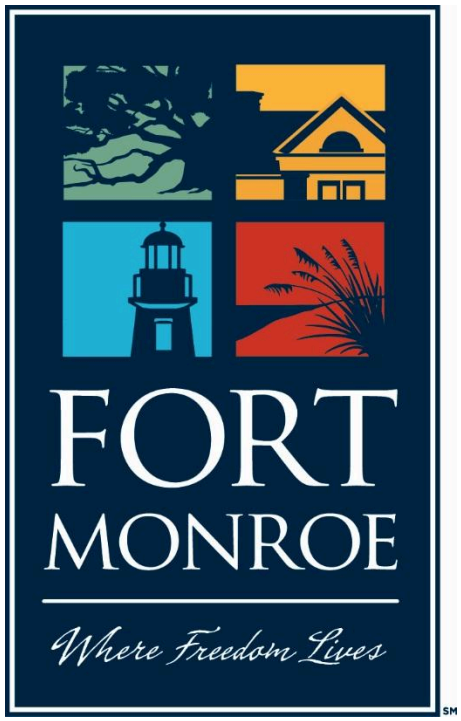
Data Sources: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Fort Monroe Authority

ASSET ID	HUC	LONGITUDE	LATITUDE	DRAINAGE AREA	RECEIVING WATER	IMPAIRED WATER	TMDL
SSOF_010	JL58	-76.30467	37.01009	32.88	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_011	JL58	-76.30917	37.00937	16.26	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_019	JL58	-76.31278	37.01096	0.96	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_028	JL58	-76.31372	37.01133	1.09	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_020	JL58	-76.31435	37.01157	1.27	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_041	CB24	-76.30619	37.00110	2.06	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_042	JL58	-76.30845	37.00093	0.57	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_043	JL58	-76.31081	37.00048	3.82	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_002	JL58	-76.31177	37.00024	0.58	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_025	JL58	-76.31467	37.00167	0.75	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_026	JL58	-76.31433	37.00292	1.01	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_006	JL58	-76.31375	37.00318	5.39	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_021	JL58	-76.31358	37.00436	0.45	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_029	JL58	-76.31401	37.00666	0.25	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_032	JL58	-76.31044	37.00343	0.31	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_044	JL58	-76.31032	37.00388	4.76	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_045	JL58	-76.31034	37.00455	1.05	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_046	JL58	-76.31043	37.00558	3.41	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_047	JL58	-76.31028	37.00590	4.50	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_003	JL58	-76.30902	37.00617	5.70	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_015	JL58	-76.30468	37.00287	4.64	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_022	JL58	-76.30571	37.00256	0.93	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_016	JL58	-76.30631	37.00227	0.76	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_007	JL58	-76.31068	37.00239	9.45	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_049	JL58	-76.31068	37.00235	0.02	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_033	JL58	-76.30982	37.00197	0.23	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_050	JL58	-76.30946	37.00180	4.03	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_030	JL58	-76.30770	37.00180	1.57	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_031	JL58	-76.30733	37.00188	0.11	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_017	JL58	-76.30680	37.00200	3.09	MILL CREEK	YES	CHESAPEAKE BAY

ASSET ID	HUC	LONGITUDE	LATITUDE	DRAINAGE AREA	RECEIVING WATER	IMPAIRED WATER	TMDL
SSOF_013	JL58	-76.31214	37.01068	12.12	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_034	JL58	-76.31520	37.01121	0.93	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_027	JL58	-76.31474	37.01045	1.16	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_014	JL58	-76.31419	37.00746	13.91	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_023	JL58	-76.31397	37.00651	0.69	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_008	JL58	-76.31389	37.00591	9.61	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_024	JL58	-76.31386	37.00582	0.47	HAMPTON ROADS BAY	YES	CHESAPEAKE BAY
SSOF_051	JL58	-76.30635	37.00264	5.00	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_055	JL58	-76.30555	37.00625	13.48	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_004	JL58	-76.30953	37.00404	23.24	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_018	JL58	-76.30832	37.00631	8.02	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_009	JL58	-76.30401	37.00425	14.15	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_056	JL58	-76.30553	37.00625	0.00	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_057	JL58	-76.30551	37.00623	0.00	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_058	JL58	-76.30482	37.00374	5.57	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_059	JL58	-76.30482	37.00374	0.04	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_060	JL58	-76.30541	37.00282	0.56	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_061	JL58	-76.30703	37.00195	0.06	MILL CREEK	YES	CHESAPEAKE BAY
SSOF_062	JL58	-76.30408	37.00418	0.10	MILL CREEK	YES	CHESAPEAKE BAY

Appendix D

Outfall Inspection Procedures



Stormwater Outfall Inspection Plan

May 4, 2015

Revised April 11, 2024

Table of Contents

1.0 ABBREVIATIONS and ACRONYMS

Abbreviation/ Acronym Term
BMP Best Management Practice
Board State Water Control Board
DEQ Virginia Department of Environmental Quality
ESC Erosion and Sediment Control
FMA Fort Monroe Authority
GIS Geographic Information System
LD Land Development
LID Low-Impact Development
MS4 Municipal Separate Storm Sewer System
SWM Stormwater Management
SWPPP Storm Water Pollution Prevention Plan
VESCL&R Virginia Erosion and Sediment Control Law and Regulations
VPDES Virginia Pollutant Discharge Elimination System
VSMP Virginia Stormwater Management Program
VSMPP Virginia Stormwater Management Program Permit for discharges from construction activities

2.0 INTRODUCTION

The Outfall Inspection and Field Screening Plan is an element of the Fort Monroe Authority (FMA) Illicit Discharge Detection and Elimination section of the MS4 Program Plan (Plan). The purpose of the Plan is to establish a comprehensive program to minimize stormwater pollution by establishing best management practices (BMPs), measurable goals, and responsible parties to achieve compliance with the minimum control measures. An illicit discharge is considered any unpermitted, non-storm water discharge that poses a risk to the receiving water. This Plan includes maintaining an outfall inventory and conducting dry weather inspections at the FMA's storm water discharge points.

3.0 OUTFALL INVENTORY

The inventory of outfalls at Fort Monroe are identified and maintained in the FMA GIS system. The data maintained in the GIS system will include the outfall identification number and basin designation. The inspection records of each basin shall be maintained at the FMA office and will be catalogued under the supervision of the FMA Environmental Coordinator.

3.1 Outfall Inspection Frequency All outfalls will be inspected annually. The Outfall Inspection Form (Attachment A) includes common indicators of illicit discharges in Section 3 and 4. Section 5 identifies the outfall characterization based on those indicators. A characterization of "Potential" is selected with the presence of two or more indicators. A characterization of "Suspect" is selected with one or more indicators with a severity of 3. An "Obvious" characterization is selected when an illicit discharge is determined to exist. Should an "Obvious" illicit discharge be observed the outfall will be reinspected within 45 days. If no signs of illicit discharge are present at that time the inspection will terminate. If illicit discharges are still occurring, corrective action will be taken up to and potentially including enforcement actions. Additional inspections of the outfall in question will continue during this time as needed for investigative and monitoring purposes.

4.0 OUTFALL INSPECTION PREPARATION

Outfall inspectors will prepare for the outfall inspections by gathering location information about the outfalls and appropriate permissions.

4.1 Outfall Locations The most up to date list and map of outfalls will be compiled by the GIS technician and provided to the inspectors. The inspectors will compare the outfall mapping to other available Fort Monroe mapping to ensure accuracy and familiarity of the locations.

4.2 Select Inspection Date Inspectors will conduct inspections on dates and times that meet the following criteria:

- Dry Weather: No rain for greater than 24 hours and less than 0.1" of rainfall in the previous 72 hours.
- Low Tide: Inspections will be done within 90 minutes of low tide using the National Oceanographic and Atmospheric (NOAA) tide prediction tables.

By conducting inspections during dry weather, inspectors will be able to quickly identify any flows from the outfalls as potential illicit discharges. However, this may not be possible at many of the outfalls at Fort Monroe which are tidally influenced and continually remain at least partially submerged. Therefore, the inspector will attempt inspections during low tide in order to make better observations about potential flows. However, if the outfall remains at least partially submerged, the inspector will move inland along the drain line to other storm drain structures in order to detect dry weather flows. As applicable, the inspector will observe two storm drain structures upstream from the outfall. If tidal waters are present in the upstream structures as well, then it will be noted on the Outfall Inspection Form that dry weather discharges could not be observed. However, the discharge of pollutants in submerged outfalls may be noted in the form of sheen, odor, color, debris, and water clarity.

4.3 Equipment Requirements Table 2 below lists the required and optional equipment required to adequately inspect the outfall structures:

Table 2: Field Equipment List

Required	Optional
Outfall Inspection Forms	GPS Unit
Outfall Maps	Insect Repellent
Pens / Pencil / Clipboard	Shovel / Bush hook
Appropriate PPE (safety vest, steel toe shoes, etc.)	
Cell Phone with Camera (fully charged)	
Flashlight with batteries	
Measuring Tape (min 20' long)	
Knife	
Manhole hook and Magnetic Manhole Lid Lifter	
First Aid Kit	
Sample Containers	
Thermometer / Temperature gauge	
Digital Camera	

4.4 Safety Safety precautions should always be used while locating and inspecting outfalls. Inspectors should plan for and be aware of vehicular traffic during field investigations. Field personnel must wear safety vests at all times during the field investigations. Safety cones will be used to alert oncoming traffic of a stopped inspection vehicle. Additionally, inspectors are prohibited from entering the water to inspect submerged or partially submerged outfalls.

5.0 CONDUCTING OUTFALL INSPECTIONS

5.1 Outfall Observations Once an inspector has located an outfall, they will begin to document observations either on the Outfall Inspection Form or within their field notebook. First, the Outfall ID for the outfall should be written down and a photo taken of the number so that the inspector will be able to identify which photos correspond to each outfall when back in the office. Then, the inspector will begin to take photos of the outfall and surrounding area.

The inspector will make observations about the condition of the outfall, such as size, shape, and structural damage in order to ensure that the FMA GIS inventory and maps are correct and also that they are observing the correct outfall.

Then, the inspector will observe any obvious flows from the outfall. If there is no discharge or flow from the outfall and if there are no signs of previous illicit discharge (odors, discoloration, or stressed or dead vegetation, vegetation showing signs of excessive growth) then the inspector shall note this and move on to the next outfall.

If the outfall is submerged, the inspector will verify that the water is tidally related and observe the water for any odors, discoloration, or stressed or unusually vigorous vegetation, which are possible signs of illicit discharge.

The inspector will document all observations and note a flow rate for non-submerged "flowing" outfalls. The inspector may also consider obtaining a sample of the flow, if necessary. Then, if flow is present, the inspector will commence a search for the source.

5.2 SOURCE IDENTIFICATION Once a possible illicit discharge has been identified at an outfall, the inspectors will proceed upstream along the storm drain line. They will observe the surrounding area and each subsequent storm drain structure (e.g. manhole, inlet) until the source may be identified. Common types of illicit discharges are identified in the table below.

Table 3: Common Types of Illicit Discharge

Observations	Potential Pollutant	Potential Sources
● Brown, gray or reddish color ● Turbid ● Soil accumulation	Sediment	● Construction activities ● Aggregate/soil stockpiles
● Gray or milky color ● Basic pH (11+) ● Stressed vegetation or wildlife	Concrete waste	● Construction activities
● Rainbow sheen ● Petroleum odor	Petroleum products	● Fueling operations ● Leaking vehicles ● Maintenance operations ● Broken or overflowing oil water separator
● Rainbow sheen ● Rancid odor	Grease	● Broken grease trap ● Improper kitchen disposal
● Bubbles or soapy appearance	Detergents	● Vehicle washing ● Broken or overflowing oil water separator ● Improper disposal of dishwasher waste ● Uncontained hand or laundry washwater
● Excessive vegetation	Nutrients	● Construction activities

● Algae		● Fertilizer use
● Brown or Black color ● Foul Odor ● Flotables such as toilet paper, ● Excessive vegetation	Sewage	● Improper sewage disposal ● Leaking sewage vac truck

In the event that the inspectors are prevented from inspecting an outfall by a tenant or other third party that information should be noted on the Outfall Inspection Form and relayed to the FMA. The FMA may then pursue other measures to compel entry.

The following types of discharges are identified in the MS4 Plan as permitted and will therefore not be listed as illicit discharges:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground water
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges
- Street wash water
- Discharges or flows from firefighting activities
- De minimis flows, as identified in writing by the Department of Environmental Quality, as not being a significant source of pollutants to state waters and not requiring a VPDES permit.

6.0 DOCUMENTATION

All outfall inspections will be properly documented on the Outfall Inspection Form (Attachment A) either in the field or upon return to the office using field notes. Inspection photographs will also be included with the final version of the Outfall Inspection Forms. This information will be used to identify areas of Fort Monroe that have a higher risk of illicit discharge. Additionally, the data will be communicated in the annual report to the Department of Environmental Quality and will be maintained in the FMA files.

6.1 Outfall Inspection Form The Outfall Inspection Form (Attachment A) is divided into six sections to provide information on background data, outfall description, physical indicators for flowing or submerged outfalls, physical indicators for both flowing and non-flowing outfalls, overall outfall characterization, and non-illicit discharge concerns.

6.1.1 Section 1 Background Data Section 1 of the form includes fields to fill in the names of the field inspectors, the date, and the time of the inspection. The outfall ID field and basin number should be filled in according to the FMA maps. The receiving water field should include the name of the body of water in which the outfall is discharging (e.g. Mill Creek, James River, Chesapeake Bay or FM Moat). The temperature at the time of inspection should be noted as well as the general weather conditions and tide level. Additionally, the rainfall amounts for the past 24 and 72 hours should be noted to allow differentiation between storm water flows and illicit discharge.

Photographs should be taken to demonstrate the condition of the outfall and archived with the inspection form. The land use should be documented in the area draining through the outfall. Significant industrial activities should be noted as well as specific tenants, if known.

6.1.2 Section 2 Outfall Description The basic characteristics of the outfall will be noted in Section 2 of the inspection form. The inspector must first determine the material of the pipe. Reinforced concrete pipe (RCP), polyvinyl chloride pipe (PVC), corrugated metal pipe (CMP), high density polyethylene pipe (HPDE), and steel are common pipe materials. These pipes may come in differing shapes including circular, elliptical, and box. Additionally, several outfalls may be found in the same outfall location; two pipes are considered a double and three pipes are considered a triple outfall. The dimensions of the pipe should be noted in inches on the form; the diameter of round and elliptical pipes should be noted and the length and width of box drain openings should be noted. Additionally, the inspector should identify whether the outfall is submerged with water or partially filled with sediment or marine growth. If a flow is present from the outfall, describe the flow rate.

6.1.3 Section 3 Physical Indicators for Flowing or Submerged Outfalls This section of the outfall inspection form records data about four sensory indicators associated with flowing or submerged outfalls, including odor, color, turbidity, and floatables. Sensory receptors employed by the inspector include sight and smell and are useful in detecting obvious discharges. The inspector must rate the indicator on a scale of 1 to 3 to determine the severity. This information can be helpful in determining the source of the discharge (Table 3).

When detecting an odor, the inspector should make an effort to ensure that the observed smell is from the outfall and not surrounding activities. The inspectors should be familiar with the odor of common illicit discharges such as sewage and petroleum products prior to conducting the inspection. An odor is ranked with a severity of 1 if the smell is faint or the crew cannot agree on its presence or

origin. A score of two indicates a moderate odor within the pipe. An odor is ranked with a severity of 3 if the odor is observed a considerable distance from the outfall.

The color of the discharge should be assessed visually; this is best accomplished by filling a clear sample bottle with the discharge and observing it in the light. The inspectors should also look downstream of the plume of color associated with the outfall. This method should also be used to evaluate the turbidity of the water; which is defined as the measure of how easily light can penetrate through the sample bottle.

The last sensory indicator is the presence of any floatable materials in the discharge or surrounding waters. Common examples of floatables include sewage, sheen, and suds; trash and debris are not considered illicit discharges, but should be noted. If sewage is noted as a floatable, it should automatically be assigned a severity score of three. Petroleum sheens may be caused by both synthetic and natural processes; therefore, it is important to note that synthetic sheens are generally thick or have a swirl formation. Suds are rated based on their foaminess and staying power. A severity score of three is designated for thick foam that travels many feet before breaking up. Suds that break up quickly reflect water turbulence or wave action and are not considered an illicit discharge.

6.1.4 Section 4 Physical Indicators for Both Flowing and Non-Flowing Outfalls Section 4 of the Outfall Inspection Form examines physical indicators found at both flowing and non-flowing outfalls that can reveal the impact of past discharges. These physical indicators include outfall damage, outfall deposits or stains, abnormal vegetation growth, poor pool or surrounding water quality, and benthic growth on pipe surfaces. These physical indicators are not ranked according to their severity because they are often subtle, difficult to interpret, and could be caused by other sources. However, these physical indicators provide information about the history of discharges from the outfall and may be beneficial when determining the outfall's priority.

6.1.5 Section 5 Overall Outfall Characterization This section of the inspection form allows the inspector to draw conclusions about the observations they have made at the outfall. The first conclusion must be made to determine whether there is an illicit discharge present at the outfall. There are four categories the inspector can use to respond to this question. The first category is "unlikely," and is marked when the physical indicators point toward natural disturbance in the water such as a suds from wave action. The second category is "potential," and is marked when the inspector identifies two or more physical indicators of illicit

discharge. The third category is “suspect,” and is marked when the inspector identified one or more indicators with a severity of 3. The final category is “obvious,” and is marked when the inspector is certain that there is an illicit discharge and that it is not a permitted discharge as listed in the MS4 VPDES permit. The information gathered to this point will allow the inspector to determine the outfall priority.

6.1.6 Section 6 Non-Illicit Discharge Concerns Section 6 of the Outfall Inspection Form is used to note any unusual conditions near the outfall such as dumping, pipe failure, bank erosion or maintenance needs. While these conditions are not directly related to illicit discharge detection, the information will be beneficial to ensure that the drainage system remains operational.

In the General Comments portion of this section, the inspector should identify all upstream drain ID numbers that were inspected associated with the particular outfall and any observations for each of those drainage structures.

7.0 TRAINING

Inspector training is required to ensure that all personnel responsible for conducting outfall inspections are aware of the process and safety precautions required during the inspections.

7.1 Pre-Inspection Meeting An experienced inspector will hold a pre-inspection meeting with all parties involved in the upcoming outfall inspections. The meeting will include a review of this document, a discussion of the inspection schedule, safety procedures, outfall locations, and previous outfall inspection information where available. Inspectors must be familiar with the FMA’s definition of illicit discharge and procedures for tracking the source of an illicit discharge. Training attendance will be documented on a sign-in sheet and provided to the FMA for record keeping.

APPENDIX A:

STORM DRAIN OUTFALL INSPECTION FORM

Appendix E

Annual Standards and Specifications

Annual Standards and Specifications

for

Erosion & Sediment Control

and

Stormwater Management

Prepared by:

Kimley»Horn

Revised: February 15, 2023

This document is submitted in accordance with 9VAC25-870-170 that requires submission to DEQ, on an annual basis, standards and specifications consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq., as amended), the General Permit for Discharges of Stormwater for Construction Activity, and the Erosion and Sediment Control Regulations. This document describes how land-disturbance activity shall be conducted on lands managed by the Fort Monroe Authority.

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Fort Monroe Authority Annual Standards and Specifications Plan
Certification Statement

I certify under penalty of law that all documents and all attachments related to the submission and updating of the Fort Monroe Authority's Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management have been prepared under my direction or supervision in 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 a fine and imprisonment for knowing violations.

_____ _____

Mr. David Stroud
Manager, Engineering Services

Date

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APPENDICES

ACRONYMS

AS&S	Annual Standards and Specifications
BMP	Best Management Practice
CWA	Clean Water Act
DEQ	Virginia Department of Environmental Quality
DPOR	Department of Professional and Occupational Regulation
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
FMA	Fort Monroe Authority
HUC	Hydrologic Unit Code
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VAR10	General Permit for Discharges of Stormwater from Construction Activity
VESCH	Virginia Erosion and Sediment Control Handbook
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program

DEFINITIONS

The words and terms used in these Standards & Specifications shall have the meanings defined in the regulations listed in Section 1.0 unless the context clearly indicates otherwise. The following definitions apply to these Standards & Specifications:

"Applicant" means person or persons providing submissions to the Fort Monroe Authority to engage in a regulated land-disturbing activity (e.g. Fort Monroe Authority AS&S Project Manager or designee).

"Contractor" means operator as defined in these Standards & Specifications.

"Licensed professional" means a professional registered in the Commonwealth of Virginia pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia. For purposes of these Standards and Specifications a licensed professional is one that is certified by DPOR as an Architect, Professional Engineer, Land Surveyor, or Landscape Architect.

"Operator" means contractor of a regulated activity. In the context the Standards & Specifications, operator means any person associated with a construction project that meets either of the following two criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site.

"*Permittee*" means the operator to whom the General Permit for Discharges of Stormwater from Construction Activity (VAR10) is issued.

"Primary Contractor for land disturbance" is the company or individual responsible for implementation of the approved ESC Plan, SWM Plan, and conditions of the General Permit for Discharges of Stormwater from Construction Activity, when applicable.

"Standards & Specifications" means the Fort Monroe Authority's Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management.

"Stormwater Management Facility" means a control measure that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow. For purposes of water quality, a stormwater management facility means approved practices as described on the Virginia Stormwater BMP Clearinghouse Website.

*"*Fort Monroe Authority *AS&S Inspector"* means the individual performing inspections in accordance with Section 4.2.1 of these standards and specifications.

*"*Fort Monroe Authority *AS&S for ESC"* includes the information described in the standards and specifications regarding ESC.

*"*Fort Monroe Authority *AS&S for SWM"* includes the information described in the standards and specifications regarding SWM.

*"*Fort Monroe Authority *AS&S Project Manager"* means the individual managing the land disturbance activity for the Fort Monroe Authority.

1.0 OVERVIEW

Fort Monroe Authority (FMA) is required per §62.1-44.15:31 of the Virginia Stormwater Management Act to submit standards and specifications for approval by the Virginia Department of Environmental Quality (DEQ) to describe how Fort Monroe Authority land disturbance activities shall be conducted. In response, Fort Monroe Authority has adopted the Fort Monroe Authority Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management (Fort Monroe Authority AS&S) that guide regulated land disturbance activities undertaken by Fort Monroe Authority throughout the Commonwealth of Virginia. The Fort Monroe Authority AS&S incorporate, by reference, the following laws and attendant regulations:

- Virginia Stormwater Management (SWM) Act (§62.1-44. 15:24 et. seq.) and Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870);
- VPDES General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);
- Virginia Erosion and Sediment Control (ESC) Law (§62.1-44.15:51 et. seq.) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);
- Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850); and, where applicable,
- Chesapeake Bay Preservation Act (§62.1-44.15:67 et. seq.) and Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830).

The Fort Monroe Authority AS&S are submitted annually to DEQ for their review and approval based on consistency with the law and regulations listed above. The Fort Monroe Authority AS&S shall apply to all applicable land disturbance activities, as described in Section 2.

Administration and enforcement of the Fort Monroe Authority AS&S will be performed by Fort Monroe Authority as described herein. Fort Monroe Authority shall ensure responsible staff and their representatives obtain the necessary certifications through DEQ in accordance with the Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). Certifications will be dependent on the individual's role in implementing the Fort Monroe Authority AS&S and may include Program Administrator, Plan Reviewer, and/or Inspector.

The Fort Monroe Authority AS&S have been framed to guide a land disturbance project through planning, plan approval and construction to ensure consistency with the regulatory requirements referenced in Section 1.0. The Fort Monroe Authority AS&S include five distinct sections:

- **Applicability** – Procedures to determine if a land disturbance project is subject to the Fort Monroe Authority AS&S as described in Section 2;
- **Application Process** – Procedures for applicable land disturbance activities prior to commencement of land disturbance as discussed in Section 3;
- **Implementation through Construction** – Procedures necessary during construction through the completion of a project as discussed in Section 4; and

- **Post-Construction and Reporting** – Fort Monroe Authority responsibilities and procedures to ensure long-term care and maintenance of stormwater management facilities as discussed in Section 5.
- **DEQ Oversight** – Fort Monroe Authority discretionary reporting requirements and DEQ enforcement, complaints and inspections, and fees as described in Section 6.

2.0 APPLICABILITY

A land disturbance activity may be subject to ESC Law and Regulations or SWM Law and Regulations, or both. Applicability may vary depending on the location and type of activity. Section 2 includes the following:

- Section 2.1 provides information for determining if a proposed project is subject to the Fort Monroe Authority AS&S for ESC.
- Section 2.2 provides information for determining if a proposed project is subject to the Fort Monroe Authority AS&S for SWM.

2.1 Erosion & Sediment Control

The Fort Monroe Authority AS&S for ESC are applicable on Fort Monroe Authority projects where a land disturbance activity is equal to or greater than

- 10,000 square feet; or
- 2,500 square feet if the project is within the Chesapeake Bay Preservation Act (CBPA) locally designated Resource Protection Area (RPA) or Resource Management Area (RMA).

For the purpose of applicability to the Fort Monroe Authority AS&S for ESC, a land disturbance activity is defined as:

> ***ESC Land Disturbance Activity*** – means any manmade change to the land surface that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.

Exemptions to the applicability of the Fort Monroe Authority AS&S for ESC that are potentially relevant to Fort Monroe Authority include (§62.1-44.15:51):

- Minor land-disturbing activities such as home gardens and individual home landscaping, repairs, and maintenance work
- Installation, maintenance, or repair of underground public utility lines when such activity occurs on, and is confined within, an existing hard surfaced road, street or sidewalk;
- Installation of fence, signposts, telephone and electric poles, and other posts or poles;
- Shoreline erosion control projects on tidal waters when all of the land-disturbing activities are within the regulatory authority of and approved by local wetlands

boards, the Marine Resources Commission, or the United States Army Corps of Engineers; however, any associated land that is disturbed outside of this exempted area shall remain subject to this article and the regulations adopted pursuant thereto;

- Land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, the VESMP authority shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements of subsection A is required within 30 days of commencing the land-disturbing activity;
- Installation, maintenance, or repair of any individual service connection

2.2 Stormwater Management

The Fort Monroe Authority AS&S for SWM are applicable where a land disturbance activity is equal to or greater than:

- 1-acre; or,
- 2,500 square feet if the project is within a CBPA.

For the purposes of applicability to the Fort Monroe Authority AS&S for SWM, a land disturbance activity is defined as:

> ***SWM Land Disturbance Activity*** – means a man-made change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation.

Exemptions to the applicability of the Fort Monroe Authority AS&S for SWM that are potentially relevant to Fort Monroe Authority include (§62.1-44.15:34.C):

- Projects that discharge to a sanitary sewer or a combined sewer system;
- Activities under a state or federal reclamation program to return an abandoned property to an agricultural or open land use;
- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving of an existing road with a compacted or impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance; and
- Land-disturbing activities in response to an emergency where the related work requires immediate response to avoid imminent endangerment to human health or the environment. In such situations, the DEQ shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements described in Section 3.2 are required to be achieved within 30 days of commencing the land- disturbing activity.

Routine maintenance activities that Fort Monroe Authority undertakes on an ongoing basis include:

- Water and sewer line maintenance;
- Roadway and sidewalk repair, paving, and maintenance; and,
- Emergency work to protect life, limb, or property, and emergency repairs; however, the land area disturbed shall be shaped and stabilized in accordance with the requirements of the Fort Monroe Authority AS&S.

When requesting a "SWM Plan Waiver" the following information shall be submitted to DEQ:

- For projects requesting waiver of Stormwater Plan, DEQ requires information to be submitted that reasonably demonstrates that the project will not significantly change the predevelopment runoff characteristics of the land surface after the completion of construction and final stabilization. Information submitted to DEQ may include:

    - Pre- and post-construction drainage areas and land cover conditions.
    - Limits of disturbance
    - Methodology for the restoration of land cover conditions to predevelopment conditions.
    - ESC Plan excluding 9VAC25-840-40.19.m. & n.

- If DEQ determines that the project meets the criteria for granting a waiver, then DEQ will waive the requirement for the preparation and implementation of a stormwater management plan. This waiver allows the recipient to exclude the following regulatory sections:

    - SWM Quality – 9VAC25-870-63 and -65
    - SWM Quantity – 9VAC25-870-66
    - ESC MS-19 – 9VAC25-840-40.19.m. & n.

3.0 APPLICATION PROCESS

Section 3 describes the development process once a land disturbance activity has been identified to be subject to the Fort Monroe Authority AS&S. The section discusses the responsibilities of Fort Monroe Authority, the Fort Monroe Authority AS&S Project Manager, and the primary contractor of the land disturbance prior to commencement of land disturbance.

Depending on the applicability determination made using the guidance in Section 2, a land disturbance activity may be subject to:

- Only the ESC submission requirements and technical criteria described in Section 3.1; or
- The ESC and SWM submission requirements and technical criteria described in Sections 3.1 and 3.2; or
- A SWM submission and ESC submission (if land disturbance threshold is met or exceeded) if a project includes a SWM facility as described in Section 3.2.3.

All submissions are to be provided by the designer to Fort Monroe Authority and require Fort Monroe Authority approval. For regulated land disturbance activities equal to or greater than an acre, a General Permit for Discharges of Stormwater from Construction Activities, issued by DEQ, is also required prior to the commencement of land disturbance.

3.1 Erosion & Sediment Control Plan Review & Approval

Land disturbance activity subject to the Fort Monroe Authority AS&S for ESC requires a Fort Monroe Authority approved ESC Plan. The required submittals, as listed in Section 3.1.2, will be reviewed for consistency with the technical criteria described in Section 3.1.1 by an individual certified in ESC plan review in accordance with the ESC Certification Regulations (9VAC25-850).

Acknowledgement from Fort Monroe Authority of a complete submittal will be provided with form LD-01, provided in Appendix A. The date of acceptance of a submittal is the date that Fort Monroe Authority acknowledges in writing that all the submission materials described in Section 3.1.2 have been provided for review. The review will result in an approval or communication providing the reasons the ESC Plan could not be approved within 45 days of the acceptance of the submittal. Plan approvals will be documented by the ESC Plan Reviewer by stamping the plan set and transmitting a written letter recommending Plan approval to the Fort Monroe Authority ESC Program Administrator who has the ultimate responsibility and authority to issue ESC Plan approval.

3.1.1 ESC Minimum Standards

The ESC Plan shall be consistent with the requirements of the Virginia ESC Regulations (9VAC25-840), the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH), the Fort Monroe Authority erosion and sediment control standard details (provided in Appendix B) and specifically address each applicable Minimum Standard described in 9VAC25-840-40.

Erosion and sediment control plans shall incorporate the nutrient management standards of Erosion and Sediment Control Technical Bulletin 4 (http://www.deq.virginia.gov/Portals/0/DEQ/Water/Publications/ESCTechnicalBulletin4.pdf) unless inappropriate for site-specific conditions or contrary to other regulatory or permitting requirements. Fort Monroe Authority projects will attempt to restore the vegetative community to that which was present prior to the performance of the regulated land disturbance activity. In areas where a native community existed prior to the work, temporary and permanent vegetative stabilization will incorporate the guidance contained in the Department of Environmental Quality publication: *Frequently Asked Questions (FAQ) Native Vs. Invasive Plant Species for Erosion and Sediment Control (*https://www.deq.virginia.gov/home/showpublisheddocument/2466/637439013814400000).

3.1.2 ESC Submittal

The following shall be submitted by the Applicant for review to Fort Monroe Authority

when land disturbance activity is subject to the Fort Monroe Authority AS&S for ESC. Each item shall be provided to Fort Monroe Authority as hardcopy or electronically in PDF format.

- **Fort Monroe Authority Land Disturbance Application Form** – This form shall be completed and provided with all submittals. A copy of the form is provided in Appendix A.
- **Completed Fort Monroe Authority ESC Plan Preparer / Plan Review Checklist** – The Fort Monroe Authority ESC Plan Checklist in Appendix C is provided to assist the ESC Plan preparer and reviewer with ensuring compliance to the technical criteria and the Fort Monroe Authority AS&S for ESC. Each applicable item on the checklist shall be addressed in the ESC Plan or ESC Narrative. Written reference on the checklist to the location (plans or narrative) as to where an item has been addressed is recommended to assist with plan development and review.
- **ESC Plan** – The ESC plan shall be developed to demonstrate compliance to the technical criteria described in Section 3.1.1.
- **ESC Plan Narrative** – The ESC Plan Narrative shall incorporate supporting information necessary to demonstrate compliance to the technical criteria described in Section 3.1.1.

Resubmissions to address Fort Monroe Authority comments shall include a cover letter from the project designer that explicitly responds to each comment from the review. Each response shall describe how the comment was addressed with reference to the locations of the changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

3.1.3 ESC Plan Variances

A project designer may request a variance from the ESC Minimum Standards through the Fort Monroe Authority. A variance request shall be provided in writing and may be considered prior to plan approval or during construction under the following conditions:

- The applicant requests, in writing, a variance with explanation of the reasons for requesting the variance. Reasons must be specific to restrictive site conditions and the variance shall be the minimum necessary to mitigate for the site restriction.
- The request shall include alternative measures to address potential downstream transport of sediment that could result from the granting of the variance.
- The request shall describe how the alternative measure(s) meets the intent of the Minimum Standard (9VAC25-840-40) for which the variance is sought.
- A variance will not be granted in any case where the granting of the variance could cause damage to downstream property. It is the responsibility of the applicant to demonstrate in the request that downstream properties will be protected from erosion, sedimentation and flooding.
- Specific variances which are allowed by Fort Monroe Authority shall be documented on the ESC Plan.

Requests for variances will be considered by the Fort Monroe Authority, and if deemed appropriate, the Fort Monroe Authority will submit the request to DEQ for consideration of approval. All variances must be approved by DEQ Central Office.

DEQ will consider variance and exemption requests freestanding of this annual standard and specification and on a site-specific basis.

Fort Monroe Authority may (at DEQ's discretion) be required to produce documentation to demonstrate the applicability of variance requests. The following information may be required for the review of variance request:

- Introduction
- Project Description
- Minimum Standards Variance Requests
- Existing Conditions and Adjacent Areas
- Soil Characterization
- Critical and Sensitive Areas (Karst, wetlands, etc.)
- Mitigation Measures Considered
- Additional ESC Measures Proposed
- Permanent Stabilization
- Vegetative Restoration
- Maintenance Plan
- Self-Inspection, Reporting and DEQ-Certified Personnel

3.1.4 ESC Measure Deviations

The use of the VESCH and Fort Monroe Authority E&SC Standard Notes and Details, along with accompanying technical documents and guidance, is strongly preferred. Deviations from the control measures contained in the VESCH and Fort Monroe Authority E&SC Standard Notes and Details may be allowed on a case by case basis. Fort Monroe Authority reserves the right to disallow the use of proprietary ESC measures based on findings that demonstrate poor performance related to sedimentation control or maintenance.

Sufficient detail shall be provided on the ESC Plan for consideration to be given to proprietary measures and shall include any necessary computations, installation instructions, and inspection and maintenance instructions. Installation and maintenance shall be per the manufacturer's recommendations. Non-VESCH control measures may be included in the project plans but their use may be further reviewed and approved by the applicable DEQ Regional Office on a project-specific basis.

The following non-VESCH control measures may be implemented (at Fort Monroe Authority discretion) by projects subject to the Fort Monroe Authority AS&S for ESC:

- Straw or synthetic material filter socks (wattles) are the preferred perimeter control measures as they do not require trenching for installation..

- Manufactured inlet protection devices
    - Gutterbuddy
    - Guttergator
    - Grategator
    - Siltsack
    - Other manufactured inlet protection devices may be reviewed for use
- Flocculants may be used, provided that deployment and capture of materials is performed according to material requirements.

Should non-VESCH control measures fail to effectively control soil erosion, sediment deposition, and non-agricultural runoff, then VESCH control measures shall be utilized.

3.2 Stormwater Management Plan Review & Approval

Land disturbance activity subject to the Fort Monroe Authority AS&S for SWM requires an approved SWM Plan. The required submittals, as listed in Section 3.2.4, will be reviewed by Fort Monroe Authority for consistency with the technical criteria described in Section 3.2.1 by an individual certified in SWM plan review in accordance with the SWM Certification Regulations (9VAC25-850).

The date of acceptance of a submittal is the date that Fort Monroe Authority acknowledges in writing that all submission materials described in Section 3.2.4 have been provided for review. Acknowledgement from Fort Monroe Authority of a complete submittal will be provided with form LD-01 provided in Appendix A. The review will result in Fort Monroe Authority issuing either an approval to the design professional or a letter providing the reasons the SWM Plan could not be approved within 60 days of the acceptance of the submittal. Plan approval will be documented by the SWM Plan Reviewer by stamping the plan set and transmitting a written letter recommending SWM plan approval to the Fort Monroe Authority SWM Program Administrator Program who has the ultimate responsibility and authority to issue SWM Plan approval.

3.2.1 SWM Technical Criteria

The SWM Plan shall be consistent with Part II A and Part II B of the VSMP Regulations. Design standards and specifications shall be consistent with the Virginia Stormwater BMP Clearinghouse Website, the latest edition of the Virginia Stormwater Management Handbook (as applicable), and the supplemental criteria in Sections 3.2.2 and 3.2.3.

Where a project is subject to Part IIB of the technical criteria and the project stormwater quality calculations include project area intended to be considered open space for the purposes of Virginia Runoff Reduction Method (VRRM) spreadsheet compliance, the area shall either:

- Be restored to a functional hydrologic state through soil restoration or the use of engineered soil media per the design specifications (these areas may be bush-hogged no more than four times per year), or;
- Be undisturbed portions of utility rights-of-way left in a natural vegetative state (these areas may be bush-hogged no more than four times per year).

In the case of purely linear projects (i.e., water line or sewer line construction), stormwater management calculations need not be performed for all or portions of a project as follows:

- Water quantity and quality calculations need not be performed for disturbed areas that will be returned to predevelopment conditions with no improvements after completion of construction and final stabilization, in accordance with DEQ Guidance Memorandum 15-2003.

  Under normal operating conditions, where pre-construction conditions are non-agricultural and/or forested, post-construction permanent right-of-way (ROW) will be considered "Forest/Open Space" land cover for VRRM water quality calculations. These areas will be replanted with vegetative cover and mowed less than four times per year in accordance with the FMA Right-of-Way Maintenance Plan. As such, the ROW phosphorous loading will always be less than the 0.41 pounds per acre per year maximum for new development (9VAC25-870-63), as shown in the table below.

Total Phosphorous Load Per Acre based on VRRM land cover and Hydrologic Soil Group (lb TP/ac/yr)*

Cover Type	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.05	0.07	0.09	0.11

*Based on the follow default VRRM Values
Annual Rainfall for State of Virginia = 43 inches
Target Rainfall Event = 1 inch
Total Phosphorous Even Mean Concentration = 0.26 mg/l

- Water quantity channel and flood protection requirements (9VAC25-870-66) will be automatically satisfied when calculated runoff volumes and peak flows for post-construction conditions do not exceed pre-construction values and erosion is not present in pre-development conditions.
- Water quantity regulations for utility trench corridors can be satisfied via sheet flow conditions (9VAC25-870-66.D) for any Fort Monroe Authority utility installation project, provided that:
  - Pre-construction runoff conditions consist solely of sheet flow leaving the site which does not re-concentrate within 100 feet downstream, and;
  - Pre-construction sheet flow is maintained by re-establishment of existing grades. In this case, curve numbers in the post-construction condition will not increase compared to pre-construction. Therefore, sheet flow volumes will never increase, there will be no downstream impacts, and "no further quantity controls are required" per 9VAC25-870-66.D, or;
  - If re-establishment of pre-construction grades are not

practicable, sheet flow volumes must be demonstrated to cause no erosion, sedimentation, or flooding downstream.

3.2.2 Fort Monroe Authority Supplemental Technical Criteria

For the purposes of the technical criteria for water quality described in Part II B of the VSMP Regulations, the planning area may not solely be defined as the limits of disturbance. The Construction General Permit Registration Statement distinguishes between total site area and disturbed areas. All land cover condition acreages on the Virginia Runoff Reduction Spreadsheet should be included in total site area, although some of these areas may not be disturbed. For example, forested/open space that the project is receiving credit for should be included on the total site area but by definition should not be disturbed.

3.2.3 Fort Monroe Authority Supplemental BMP Selection Criteria

The successful performance of SWM practices is dependent on a successful long-term maintenance program. Designers are encouraged to consider maintenance concerns such as accessibility, frequency of maintenance, and costs of maintenance when selecting BMPs to achieve technical criteria compliance. The maintenance requirements for SWM practices shall be clearly specified on the SWM Plan and under no circumstance shall a SWM practice be proposed that requires a maintenance contract with the manufacturer outside of the term of an initial establishment of the practice. The Fort Monroe Authority reserves the right to grant exceptions to this requirement in accordance with 3.2.5.

3.2.4 SWM Submittals

The following shall be submitted by the Applicant to the Fort Monroe Authority for review when land disturbance activity is subject to the Fort Monroe Authority AS&S for SWM. Each item shall be provided to the Fort Monroe Authority as hardcopy or electronically in pdf format.

- **Fort Monroe Authority Land Disturbance Application Form** – This form shall be provided with all submittals and include the Applicant's contact information and general information about the land disturbance activity. A copy of the form is provided in Appendix A.
- **Completed Fort Monroe Authority SWM Plan Checklist** – Fort Monroe Authority SWM Plan Checklist in Appendix D is provided to assist the SWM Plan preparer and reviewer with ensuring compliance to the technical criteria and the Fort Monroe Authority AS&S. Each applicable item on the checklist shall be addressed in the SWM Plan or SWM Narrative.
- **SWM Plan** – All final plan elements, specifications, or calculations whose preparation requires a license under Chapter 4 (§ 54.1-400 et seq.) or 22 (§ 54.1-2200 et seq.) of Title 54.1 be appropriately signed and sealed by a professional who is licensed to engage in practice in the Commonwealth. The plan shall provide all of the information described in 9VAC25-870-55 (Stormwater Management Plans) of VSMP regulations.
- **SWM Plan Narrative** – The SWM Plan Narrative is considered part of the SWM Plan and incorporates supporting information necessary to demonstrate

compliance to the technical criteria described in Section 3.2.1 and 3.2.2.

- **Completed SWM Management Handbook BMP Checklist** – As applicable, provide the BMP Design Checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition and the Virginia Stormwater BMP Clearing house. A BMP-type specific checklist shall be provided for each BMP proposed in the SWM Plan.
- **Exception Request** – Where applicable, the applicant shall provide written request that address the conditions described in Section 3.2.5.

Re-submissions to address comments provided by the Fort Monroe Authority as the result of a review shall include a cover letter from the licensed professional that explicitly responds to each comment from the previous review. Each response shall describe how the comment was addressed with reference to the locations of changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

3.2.5 SWM Plan Exceptions

An Applicant may request in writing for an exception to the SWM technical criteria and design standards and specifications through the Fort Monroe Authority. An exception may be granted provided that:

- The exception is the minimum necessary to afford relief;
- reasonable and appropriate conditions are imposed as necessary upon any exception granted so that the intent of the Virginia Stormwater Management Act and the technical criteria are preserved;
- granting the exception will not confer any special privileges that are denied in other similar circumstances; and,
- the request is not based upon conditions or circumstances that are self-imposed or self-created.

Economic hardship alone is not a sufficient reason to request an exception from the requirements of the technical criteria or design standards and specifications. The following exceptions will not be granted:

- The requirement that a land-disturbing activity obtain a state permit, when applicable.
- The use of a BMP not found on the BMP Clearinghouse.
- Requirements for phosphorus reductions.

Requests for exceptions will be considered by the Fort Monroe Authority, and if deemed appropriate, the Fort Monroe Authority will submit the request to DEQ for consideration of approval. All exceptions must be approved by the DEQ Central Office.

- DEQ will consider variance and exception requests freestanding of this Annual Standard and Specification and on a site-specific basis.

- Fort Monroe Authority may (at DEQ's discretion) be required to produce documentation to demonstrate the applicability of variance requests. The following information may be required for the review of variance requests:

    - Introduction
    - Project Description
    - Minimum Standards Variance Requests
    - Existing Conditions and Adjacent Areas
    - Soil Characterization
    - Critical and Sensitive Areas (Karst, wetlands, etc.)
    - Mitigation
    - ESC Measures
    - Permanent Stabilization
    - Vegetative Restoration
    - Maintenance
    - Critical and Sensitive Areas
    - Self-Inspection, Reporting and DEQ-Certified Personnel

3.3 Construction General Permit (VAR10)

Except as provided in Section 3.3.5, land disturbance activity that disturbs an acre or greater requires a General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880), also known as the VAR10 General Permit. The VAR10 General Permit is issued by the Virginia DEQ and coverage is required throughout the duration of the land disturbance activity. The Fort Monroe Authority or the project contractor shall obtain permit coverage as the permit operator and provide a VAR10 General Permit coverage letter from DEQ at the preconstruction meeting described in Section 3.4. Information to assist with applying for coverage under the VAR10 General Permit is available from DEQ at the following web link:

https://www.deq.virginia.gov/permits-regulations/permits/water/stormwater-construction

Mr. David Stroud, Manager of Engineering Services for Fort Monroe Authority is designated as being both the ESC and SWM Program Administrator and as having the authority to approve ESC and SWM plans and sign VAR10 Registration Statements and associated application documents on behalf of the Fort Monroe Authority.

Fort Monroe Authority or the project contractor shall submit the applicable documents to:

Courier Delivery / Physical Address:
Department of Environmental Quality
1111 East Main Street, Suite 1400
Richmond, VA 23218

U.S. Mail Address:
Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

- Cover letter indicating that the Stormwater Management (SWM) Plan has been prepared, reviewed and approved in accordance with the DEQ-approved Annual Standards and Specifications (1 copy);
- Cover letter indicating that the Erosion and Sediment Control (ESC) Plan has been prepared, reviewed and approved in accordance with the DEQ-approved Annual Standards and Specifications (1 copy);
- Completed Construction General Permit Registration Statement (original signed & dated);
- Completed DEQ AS&S Entity Information Sheet (found at https://www.deq.virginia.gov/home/showpublisheddocument/4977/637485033264000000), signed by the Fort Monroe Authority SWM Program Administrator or their designee, and;
- Completed Construction General Permit Fee Form and applicable Permitting Fee (1 copy, originals should be submitted to the DEQ address indicated on the permit fee form).

The coverage letter is required prior to the commencement of the land disturbance activity and shall be maintained in the project Stormwater Pollution Prevention Plan described in Section 3.3.1. The operator of the permit is responsible for compliance with the permit conditions. Upon commencement of land disturbance, the operator shall post conspicuously a copy of the notice of coverage letter near the main entrance of the construction activity. For linear projects, the operator shall post the notice of coverage letter at a publicly accessible location near an active part of the construction project (e.g., where a pipeline crosses a public road). The Fort Monroe Authority will provide oversight of permit compliance through site inspections as described in Section 4.2.1.

3.3.1 Stormwater Pollution Prevention Plans (SWPPP)

Prior to submission of a Construction General Permit Registration Statement to DEQ for VAR10 General Permit coverage for projects disturbing one (1) acre or greater of land, the project is required to have a Fort Monroe Authority approved ESC and/or SWM Plan, as applicable, included as part of a site-specific stormwater pollution prevention plan (SWPPP). The SWPPP shall be prepared and certified by the permittee or duly authorized representative in accordance with the requirements of 9VAC25-880. The permittee is responsible for implementation of the SWPPP and may delegate authority for certifications

(e.g. SWPPP and inspection form certifications) provided the delegation is done in accordance with Section III K of the General Permit.

Copies of SWPPPs will be made available as follows:

- At a central location for use by operators with day-to-day operational control over implementation of the SWPPP;

- Upon request, to DEQ, local government officials, EPA, or municipal separate storm sewer operator receiving discharges from the construction activity (including all amendments, modifications, and updates); and

- To the public either electronically (e.g., posted to a website) or upon request at a reasonable time and place.

3.3.2 Special Conditions for TMDL, Impaired or Exceptional Waters

Dependent on the location of a project, special conditions may be applicable if a waste load allocation has been assigned to construction activity in a DEQ approved Total Maximum Daily Load (TMDL), the site discharges to impaired waters, or the site discharges to waters designated as "Exceptional Waters" by the DEQ. DEQ will indicate in the VAR10 General Permit coverage letter if these additional requirements apply to a particular project. In the case that special conditions do apply, the permittee is responsible for incorporating the following special conditions into the E&SC plan and SWPPP:

- The impaired water(s), approved TMDL(s), and pollutant(s) of concern, when applicable, shall be identified in the SWPPP;
- Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site;
- Nutrients shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events; and,
- Inspections shall be conducted at least (i) once every four (4) business days, or (ii) at least once every five (5) business days and no later than 24 hours following a storm event of 0.25 inches of rainfall or greater (measurable storm event). In the event that a measurable storm event occurs when there are more than 24 hours between business days, the inspection shall be conducted on the next business day.

3.3.3 Off-site Land-Disturbance Activity

Offsite support facilities are defined as those facilities such as staging areas, equipment and material storage areas, unsuitable and surplus material disposal areas, borrow areas, etc., which are located outside of the project limits shown on an approved ESC and/or SWM Plan.

Offsite support facilities may be located within or outside of the Fort Monroe Authority property. In either case, it is the responsibility of the FMA Project Manager to ensure applicable plans for ESC and SWM, as required, are approved and necessary

permits are obtained for support facilities prior to the commencement of land disturbance activity. Upon contract award, the contractor shall submit any requested deviations from or additions to the limits of permitted land disturbance areas including allocated project storage, staging, and laydown areas to the Fort Monroe Authority Project Manager along with evidence that approvals have been applied for from the cognizant governmental authority.

Where these areas are not separately permitted by the contractor and locality within which they reside, the contractor shall not be allowed to utilize areas not included in the AS&S approved limits of disturbance until such time as the AS&S approval and, as applicable, project VAR10 General Permit is amended to account for the additional project areas.

Locations where excavated fill material from a project will be transported for disposal shall be provided to the Fort Monroe Authority by the contractor. The information to be provided is the latitude and longitude of the facility, facility name, address, and composition of the material to be deposited there.

3.3.4 Preconstruction Meeting

A preconstruction meeting is required for all applicable land disturbance activity subject to the Fort Monroe Authority AS&S prior to the commencement of the activity. The Fort Monroe Authority AS&S Project Manager is responsible for coordination of the meeting and shall notify the DEQ by email to StandardsandSpecs@deq.virginia.gov at least 14 business days prior to the proposed meeting time. The certified Responsible Land Disturber (RLD) as defined in 9VAC25-850-10, shall be identified on the plans at, or prior to, the preconstruction meeting. The meeting coordinator shall ensure the individuals identified in Section 1 of the Fort Monroe Authority AS&S Preconstruction Meeting Form (see Appendix E) attend the meeting and the checklist items in Section 2 of the form will be available at the meeting.

4.0 IMPLEMENTATION THROUGH CONSTRUCTION

Section 4 describes the required actions of the contractor and the Fort Monroe Authority during the implementation of a land disturbance activity subject to the Fort Monroe Authority AS&S.

4.1 Contractor/Operator Responsibilities

For land disturbance activity subject to the Fort Monroe Authority AS&S, the contractor's responsibilities prior to and during construction include, but may not be limited to:

- When applicable, obtaining the VAR10 General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880) from DEQ;
- Complying with the conditions of the VAR10 General Permit, when applicable;
- Updating and maintaining the SWPPP per the VAR10 General Permit;
- Performing self-inspections per the VAR10 (It is strongly recommended that the contractor use the inspection form in Appendix F). The permittee shall have inspections performed by "qualified personnel" as defined in 9VAC25-880.
- Complying with all reporting and recordkeeping requirements as laid out in

9VAC25-870-126.

- Adhering to the approved plans unless requested deviations to the approved plans are reviewed and approved in writing by the Fort Monroe Authority. If deviations require DEQ review and approval, the contractor shall not implement them until such approval is received and communicated to the contractor.
- Maintaining the approved plans, including documentation of FMA approval of deviations based on field conditions, and an up-to-date SWPPP (e.g. plan modifications and completed inspection forms) on the project site at all times.
- Obtaining necessary permit coverage and plan approvals for applicable off-site activities
- Providing SWM BMP certified record drawing per Section 4.1.1.
- Responding to any corrective action(s) and specified timeframes identified as the result of a Fort Monroe Authority or DEQ inspection.

Fort Monroe Authority shall maintain and retain certain records created during the implementation of the AS&S program. Records shall be kept in accordance with the following:

- Fort Monroe Authority shall maintain, either on-site or in AS&S files, a copy of the approved plan and a record of inspections for each active land disturbance activity subject to these AS&S. Project records, including approved stormwater management plans and erosion and sediment control plans, shall be kept for three years after state permit termination or project completion.
- Stormwater management facility inspection records shall be documented and retained for at least five years from the date of inspection.
- Construction record drawings shall be maintained in perpetuity or until a stormwater management facility is removed.
- All registration statements submitted in accordance with 9VAC25-870-59 shall be documented and retained for at least three years from the date of project completion or state permit termination.

4.1.1 SWM Facility Record Drawings

Certification of the construction of all stormwater management facilities shall be submitted to Fort Monroe Authority for review and approval. The certification shall be made by the design professional who developed the SWM Plan or another individual from the entity with equivalent qualifications and include:

- A completed and certified copy of the Fort Monroe Authority Stormwater Management Facility Record Drawing and Certification Form in Appendix H;
- A copy of the certifying professional's inspection log, including incremental surveys (drawings), photographs, construction logs, inspection reports, geotechnical testing reports, soil reports, certification of materials, and all other applicable information necessary to support and ensure the SWM facility has been built in accordance with the approved Plan; and,
- A record drawing (as-built) that includes:

- The long-term inspection and maintenance schedule for the SWM facility (extracted from the SWM Plan or SWM Narrative), and;
- Total drainage area being served by the stormwater practice with the total impervious and pervious area within the drainage area.

In the case that a SWM facility has not been constructed and installed in accordance with the approved SWM Plan, the individual(s) responsible for certifying the as-built shall immediately notify the Fort Monroe Authority AS&S Project Manager. Generally, there are two potential options when a facility is not constructed in accordance with the approved Plan:

- **Option 1:** Re-construct the facility in accordance with the approved Plan. It will be necessary to repeat the inspections, surveys, and documentation process such that the licensed professional shall certify the facility is constructed in accordance with the approved Plan.
- **Option 2:** Perform calculations and analysis, based on the licensed professional's surveys, data, inspections, and other applicable documentation necessary to verify the as-built conditions meet the approved Fort Monroe Authority AS&S. The licensed professional shall certify the as- built condition of the facility meets the quantitative and qualitative controls, as prescribed by the approved Fort Monroe Authority AS&S, and submit the final report as required in this section. The plans shall be revised and the revised plans reviewed and approved by the certified plan reviewer.

4.2 Fort Monroe Authority Responsibilities

The Fort Monroe Authority is responsible for ensuring implementation of the Fort Monroe Authority AS&S throughout the development process. In addition to plan review and approvals, the Fort Monroe Authority meets these responsibilities with oversight throughout the land disturbance activity that include inspections, enforcement actions, and acceptance of record drawings.

The Fort Monroe Authority currently utilizes contracted, third-party support to provide for plan review and inspection services by DEQ-certified E&SC and SWM plan review and inspection staff. The certification number for staff who provide reviews are recorded on each plan review and inspection form. In addition, Fort Monroe Authority staff have attended DEQ-led E&SC and SWM training courses and could, at a future date, receive certification and undertake some or all of these responsibilities in-house.

4.2.1 Inspections

Fort Monroe Authority will perform inspections on all projects subject to the Fort Monroe Authority AS&S. The purpose of periodic inspections is to review construction activities for:

- Compliance with the approved ESC Plan;
- Compliance with the approved SWM Plan;
- Development, updating and implementation of a pollution prevention plan;
- Development and implementation of additional control measures necessary to

address a TMDL;
- Compliance with these AS&S;
- Compliance with the VDEQ issued VAR10 Permit and project SWPPP if applicable, and;
- Where previous inspections have found deficiencies requiring contractor correction, the timely implementation of and adequacy of corrective actions.

The individual performing inspections on behalf of the Fort Monroe Authority shall be certified as an ESC and SWM Inspector, as applicable, in accordance with the ESC and SWM Certification Regulations (9VAC25-850). The Fort Monroe Authority ESC and SWM inspections are in addition to the inspection requirements described in the SWPPP, if applicable. In cases where the frequency of inspections required by the SWPPP meet or exceed the frequency requirements for ESC inspection the SWPPP inspections may be used to satisfy both inspection requirements. The applicable inspection report provided in Appendices F and G shall be completed by the inspector on each inspection and a copy provided to the appropriate individual identified on the Preconstruction Form, provided in Appendix E, within 7 business days.

Fort Monroe Authority will conduct the following inspections, at a minimum:

- After the installation of initial ESC measures per the ESC phasing in the approved ESC Plan,
- SWPPPs will be reviewed at the initiation of, and periodically throughout, construction,
- At least once in every two-week period,
- Within 48 hours following any runoff producing storm event,
- At the completion of the project, and
- In addition to the above, periodically during construction activities as deemed necessary by the contractor or Fort Monroe Authority based in part on the type of construction methods being employed at a given time, work being performed within or adjacent to sensitive areas, or both.
- If a CGP is obtained for the project, the increased inspection frequency required by the CGP will also satisfy the inspection requirements per the Fort Monroe Authority AS&S.

Periodic inspections of the installation of permanent stormwater management measures shall be performed by the Fort Monroe Authority to ensure compliance with the approved SWM Plan and VAR10 Permit and project SWPPP and to determine whether the measures required in the permit provide effective stormwater management. Fort Monroe Authority may require monitoring and the submission of reports from the person responsible for meeting the permit conditions, and shall conduct such investigations and perform such other actions as are necessary to carry out the provisions of the Fort Monroe Authority AS&S.

Inspection reports shall specify a required corrective action for each deficiency noted and a date by which the corrective action must be completed. Corrective actions

shall be completed as soon as practicable but not later than seven (7) days following the date of the inspection unless a longer timeframe is agreed upon in writing between FMA and the contractor. Subsequent inspections shall review corrective actions and verify that corrective actions have been performed or if additional corrective actions are warranted.

4.2.2 Alternative Inspection Schedule

The reduced frequency inspection schedule discussed below is only applicable to SWPPP inspections and does not apply to FMA's periodic oversight inspections. Fort Monroe Authority inspections may be conducted at a reduced frequency where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions. With these conditions and when stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, Fort Monroe Authority shall immediately resume the regular inspection frequency.

4.2.3 Enforcement

Fort Monroe Authority reserves the right to enforce the Fort Monroe Authority AS&S upon discovery of noncompliance through inspection or through public reporting. Compliance status will be conveyed in writing using the Site Inspection Compliance Notification Form included with the Fort Monroe Authority Construction Site Inspection Forms in Appendix F and G. The Site Inspection Compliance Notification Form will be completed with each inspection and may also be used if an issue of noncompliance is identified outside of an inspection. The Site Inspection Compliance Notification Form will:

- Summarize the item(s) of noncompliance identified on the inspection form,
- Provide an indication of severity of compliance status, and
- Provide a description of the necessary corrective action and a timeframe for completing the action.

Non-compliance items identified during routine and non-routine site inspections will be corrected by FMA's construction contractor within seven (7) days or as soon as practicable, unless unforeseen equipment failure or weather conditions prevent corrective actions from being completed. FMA requires contractors to maintain compliance with environmental requirements and regulations and will exercise all rights and remedies available in its contracts to compel compliance with FMA directives related to erosion and sediment control or stormwater non-compliance.

4.2.4 Modifications to Approved Plans

The Fort Monroe Authority or a contractor may modify an approved ESC or SWM plan in accordance with this section. Proposed amendments to a plan must be consistent with the requirements of the Fort Monroe Authority AS&S and all other applicable regulatory and permit requirements. The Fort Monroe Authority may reject any plan modification proposed by a contractor. All modifications to approved plans and on-site changes shall be documented on the approved plans.

Whether a modification is proposed by the Fort Monroe Authority or a contractor, an

approved plan may be modified only upon approval by a DEQ-certified Plan Reviewer employed or contracted by the Fort Monroe Authority in the following cases:

- The project's limits of disturbance will be changed;
- The modification involves the substitution of one type of control measure for an equally or more effective control measure at a specific location or for a specific duration of time;
- The modification will delete control measures from the approved plan;
- The modification would require a variance (Section 3.1.3) or deviation (Section 3.1.4) to an ESC plan or an exception to a SWM plan (Section 3.2.5); or
- Where the person responsible for carrying out the approved plan finds that because of changing circumstances, or for other reasons, the approved plan cannot be effectively carried out.

Minor revisions to plans that do not require approval by the DEQ-certified Plan Reviewer as stated above may be (i) made in the field by the contractor in consultation with a DEQ-certified Inspector employed or contracted by the Fort Monroe Authority or (ii) made at the direction of the Fort Monroe Authority. Such minor revisions must be "redlined" on a set of plans that will remain on site for the duration of the project to allow the Fort Monroe Authority to ensure compliance with the approved plan and applicable regulatory requirements. Redlined plan changes will be reviewed by the DEQ-certified Inspector before or during the next regular inspection conducted in accordance with Section 4.2.1.

In addition to the requirements above, any proposed plan modification that would require a variance or exception must submitted to DEQ for review and approval before it may be implemented in the field. The Operator also shall notify DEQ of changes that affect information on the Registration Statement, permit Fee Form, or VAR10 permit coverage. Information shall be sent to constructiongp@deq.virginia.gov.

4.2.5 Approval of SWM Facility Record Drawings

The designer will review and approve record drawing submissions described in Section 4.1.1. The designer will return an approved copy of the Fort Monroe Authority Stormwater Management Facility Record Drawing and Certification Form to the Fort Monroe Authority AS&S Project Manager or provide written comments in the case that a record drawing submission is not approved.

4.2.6 Fort Monroe Authority and DEQ Termination of Land Disturbance

The Fort Monroe Authority will provide to the permittee a completed and approved Termination of Fort Monroe Authority Land Disturbance Form (Appendix I) upon:

- The approval of the record drawing submittal described in Section 4.1.1 and 4.2.5, and;
- Verification that the area of disturbance has been stabilized to the satisfaction of the Fort Monroe Authority AS&S Project Manager and meets the requirements set forth in Minimum Standard 3.

Acceptance of the record drawing submission does not release the contractor from any post-construction warranty.

The Operator shall not terminate the VAR10 General Permit, if applicable, until receipt of a Fort Monroe Authority-approved Termination of Fort Monroe Authority Land Disturbance Form. Upon receipt of the Fort Monroe Authority approval for termination, the Operator shall submit a Notice of Termination to DEQ after one or more of the following conditions have been met:

- Necessary permanent control measures included in the SWPPP for the site are in place and functioning effectively and final stabilization has been achieved on all portions of the site for which the operator is responsible. When applicable, long-term responsibility and maintenance requirements for permanent control measures shall be recorded in the local land records prior to the submission of a notice of termination;
- Another Operator has assumed control over all areas of the site that have not been finally stabilized and obtained coverage for the on-going discharge; or,
- Coverage under an alternative VPDES or state permit has been obtained.

4.2.7 Project Tracking and Notification

Consistent with 9VAC25-840-65, the Fort Monroe Authority will maintain a list of active construction projects and submit the list electronically to DEQ at a frequency of once per 6-month period. The list will include:

- Project name (or number);
- Project location (including nearest major intersection);
- On-site project manager name and contact information;
- Project description;
- Acreage of disturbed area for project;
- Project start and finish dates; and
- Responsible Land Disturber name, contact information and RLD certification number.

Two weeks prior to initiating a regulated land disturbing activity, the Fort Monroe Authority shall provide e-notification to DEQ the following information:

- Project name (or number);
- Project location (including nearest major intersection, latitude and longitude, access point);
- On-site project manager name and contact information;
- Project description;
- Acreage of disturbed area for project;
- Project start and finish dates,
- Date, time, and location of the preconstruction meeting referenced in Section 3.3.4 (if prior notice not already provided); and

- Any variance, exceptions and/or waivers associated with this project.

Submittals to DEQ as required by this section shall be made to StandardsandSpecs@deq.virginia.gov.

5.0 POST-CONSTRUCTION

Section 5 describes provisions for the long-term responsibility for and maintenance of SWM facilities. A long-term inspection and maintenance plan is required to be identified on the SWM Plans developed by the design professional.

The following maintenance information shall be included:

- A description of the requirements for maintenance and maintenance inspections of the stormwater management facilities and a recommended schedule of maintenance inspection and maintenance;
- The identification of a person or persons who will be responsible for maintenance inspection and maintenance;
- The maintenance inspection schedule and maintenance requirements should be in accordance with the Virginia BMP Clearinghouse, the Virginia SWM Handbook, and/or the manufacturer's specifications;
- Clearly depict the types of land cover on the site (i.e. differing type of hatching for each land cover), including the acreage for each cover type. The acreage should be labeled in all of the subareas. Also provide a table that adds the land cover up by type on the sheet;
- Draw metes and bounds all the way around any conserved open space;
- Label any conserved open space as "Runoff Reduction Compliance Forest/Open Space". Ensure space so labeled complies with Virginia Runoff Reduction Method Table 1.
- Include the following note on the sheet: "the Runoff Reduction Compliance Forest/Open Space area shown here shall be maintained in a forest/open space manner until such time that an amended storm water management plan is approved by the Fort Monroe Authority."

The Fort Monroe Authority is responsible for long-term maintenance of SWM facilities. Inspections will be conducted per the prescribed inspection frequency on the approved SWM Plan, or at a minimum frequency of once per year. Maintenance will be performed per the Plan or as otherwise necessary to ensure the intended function of the facility. Facility inspections shall:

- Be performed by a certified SWM Inspector and
- Inspection and maintenance documentation shall be retained with the Fort Monroe Authority with the approved inspection and maintenance schedule.
-

6.0 DEQ OVERSIGHT

Section 6 describes DEQ's inspection, compliance, and enforcement authorities for projects carried out under the Fort Monroe Authority AS&S.

6.1 DEQ Discretionary Requirements

DEQ, at their discretion, may require the Fort Monroe Authority to submit the following:

- Inspection Reports conducted by the Fort Monroe Authority as well as complaint logs and complaint responses;
- The Fort Monroe Authority may be required to provide weekly e-reporting to DEQ's applicable regional office. These reports will include:
    - Inspection Reports;
    - Pictures;
    - Complaint logs and complaint responses; and
    - Other compliance documents.
- In addition to the internal plan review, the Fort Monroe Authority may be required to submit individual project-specific project plans to DEQ for review and approval.
- The project-specific plan DEQ approval and supporting documents may be required to be posted on FMA's website for public view.

6.2 DEQ Oversight Responsibilities

DEQ has responsibilities for the enforcement and compliance with standards and laws and may charge fees associated with these responsibilities.

6.2.1 Enforcement

In accordance with Virginia Stormwater Management (SWM) Act §62.1-44.15:27.F, the Department and the Board shall administer enforcement where applicable. Also in accordance with Virginia Erosion and Sediment Control Law §62.1-44.15:54.E, the Department and the Board, where applicable, shall provide project oversight and enforcement as necessary and comprehensive program compliance review and evaluation.

6.2.2 Complaints and Inspections

In accordance with Virginia Stormwater Management (SWM) Act §62.1-44.15:31.C, the Department shall perform random site inspections or inspections in response to a complaint to assure compliance with this article, Erosion and Sediment Control Law, and regulations adopted thereunder.

6.2.3 Fees

In accordance Virginia Erosion and Sediment Control Law §62.1-44.15:55.D, the board shall have the authority to enforce approved specifications and charge fees equal to the lower of (i) $1,000 or (ii) an amount sufficient to cover the costs associated with standard and specifications review, approval, project inspections, and compliance.

Appendix A

Land Disturbance Application Form (LD-01)

FORT MONROE AUTHORITY LAND DISTURBANCE APPLICATION FORM

Instruction: This form shall be completed and included with all plan submissions for projects involving land disturbance activities on Fort Monroe Authority owned properties. Refer to Section 2 the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM for assistance in completing the form.

Project Name: _____

Date of submittal:_____ **Date on plans:** _____

Project Abbreviation (if applicable): _____

Project Location: _____

_____

Applicant

Name: _____

Phone: _____

Email: _____

Estimated Area of Disturbance (sq. ft.): _____

Estimated Impervious Area (sq. ft.): Pre-Development:_____**, Post-Development:** _____

Estimated Dates of Disturbance:_____**to**_____**, or Duration (months):** _____

Do the FMA Annual Standards & Specifications require an approved ESC plan? ☐ **Yes** ☐ **No** ☐ **Unknown**

Do the FMA Annual Standards & Specifications require an approved SWM plan? ☐ **Yes** ☐ **No** ☐ **Unknown**

Describe the land-disturbance(s) involved with the project, including any offsite activities:

Submission Item	Applicable? (yes/no)	Included in Submission? (yes/no)
Completed Land Disturbance Application Form		
Completed ESC Plan Checklist		
ESC Plan		
ESC Narrative		
Completed SWM Plan Checklist (when applicable)		
SWM Plan (when applicable)		
SWM Plan		
SWM Narrative		

Applicant (Print): _____

Applicant Signature: _____

Information below to be completed by FORT MONROE AUTHORITY

FORT MONROE AUTHORITY has verified receipt of required submittal items as of _____, initiating the 45-day FORT MONROE AUTHORITY review period. Comments or an approval letter resulting from the review will be provided to the applicant listed above.

Date of ESC Plan Approval: _____ Date of SWM Plan Approval: _____

FMA ESC Plan Approver: _____ FMA SWM Plan Approver: _____

Printed Name: _____ Printed Name: _____

Appendix B

Fort Monroe Authority Erosion and Sediment Control Standard Details

Appendix C

Fort Monroe Authority ESC Plan Preparer/Plan Reviewer Checklist (LD-02A)

Instruction: The checklist shall be completed if an ESC Plan and Narrative is required per the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM. The completed checklist shall be provided with the ESC Plan submittal for review by Fort Monroe Authority. The This checklist is intended to only be used as a guide. The project designer is responsible for ensuring plans address the ESC laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	ESC *Narrative* Requirement
			Completed ESC Checklist provided in ESC Narrative.
			Project description including the nature and purpose of the land-disturbing activity.
			Description of the **existing site conditions**, including topography, ground cover, and drainage (include information for on-site and receiving channels).
			Description of **adjacent areas** such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.
			Description of **off-site land disturbing activities** that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the locality responsible for plan review. Include a statement that any off-site land-disturbing activity associated with the project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.
			Description of the site **soils conditions**, including hydrologic soils group, mapping unit, erodibility, permeability, surface runoff, and a brief description of depth, texture and soil structure. Mapping of soil variations should be provided in the narrative or on the plans.
			Description of **critical areas** that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, channels, etc.).
			Description of the structural and vegetative **ESC measures** that will be used to control erosion and sedimentation on the site. Controls should be consistent with the standards and specifications in Chapter 3 of the Virginia Erosion and Sediment Control Handbook (VESCH), latest edition. Variations and proprietary measures require a variance (see Section 3.1.3 of the latest edition of the Fort Monroe Authority Annual Standards and Specification for ESC and SWM). Approval from DEQ of variances shall be maintained in the narrative.
			Detailed **sequence of construction**, that includes the **phasing** of installation of ESC measures.
			Description of **permanent stabilization** for the entirety of the site, including specifications, of how the site will be stabilized after construction is completed (permanent stabilization).
			Schedule of **maintenance requirements for ESC measures** including inspections frequency, maintenance concerns, and methods for repair or prevention of need for repair (i.e. removal of sediment build-up).
			Description of **stormwater runoff considerations** that includes describing any increase in peak runoff rates and the effects on downstream erosion and flooding. The description shall include the strategy to control stormwater runoff.
			Calculations for temporary sediment basins, diversions, channels, stormwater facilities to address MS-19, etc. Where applicable. including pre- and post-development runoff calculations, drainage area maps, time of concentration paths and computations, rainfall source and documentation, weighted runoff coefficients and computations, runoff and routed hydrographs or peak computations (as applicable), adequate onsite channel (MS-19) & culvert computations, etc.

Yes	No	N/A	ESC *Plan* Requirement
			Vicinity map locating the site in relation to the surrounding area. Include any landmarks and road information that might assist in locating the site.
			Location on the ESC Plan cover sheet for identification of the **Responsible Land Disturber** (RLD).
			Existing conditions including existing contours, surface waters and other surface features, existing tree lines, grassed areas, or unique vegetation.
			Where applicable, a **demolition plan** with identification of features to be demolished and measures to address ESC for the demolition.
			Proposed conditions, including proposed contours and features.
			Delineation of the **limits of disturbance**.
			A description of any **variance** approved by DEQ described on the cover sheet of the ESC Plans.
			North arrow provided on all plan sheets.
			Legend with a complete listing of all ESC measures used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.
			Identification of any **off-site land disturbing activities** (e.g., borrow sites, disposal areas, etc.) and appropriate ESC controls.
			Identification of **critical areas** and appropriate protections.
			Inclusion of **erosion and sediment control notes** (ES-1 through ES-9) found in Table 6-1 on page VI-15 of the 1992 Virginia Erosion and Sediment Control Handbook.
			Identification of **property and easement lines**. For each adjacent property, list the deed book and page number and the property owner's name and address.
			Finished floor elevation of all buildings on site, including basements.
			The **locations of erosion and sediment control and stormwater management practices** used on the site. Use the standard symbols and abbreviations in Chapter 3 of the VESCH.
			Existing drainage patterns including dividing lines and directions of flows with the total area for each drainage area.
			A **schedule of regular inspections, maintenance, and repair** of temporary erosion and sediment control structures and permanent stormwater management facilities.
			Storm sewer profiles of all storm drains except roof drains.
			Site-specific **details for all ESC measures**. Where applicable, details shall include site-specific dimensions. Proprietary measures with an approved variance shall include site-specific details with dimensions and other information for construction per manufacturer's specifications.
			Specifications for stormwater and stormwater management structures (i.e. pipe materials, pipe bedding, stormwater structures etc.).
			Minimum Standard (MS) 1 through 19 provided on the plan with a description for each that describes how the minimum standard is addressed with the plan.
			Permanent or temporary soil stabilization shown where required on plans using standard symbols and abbreviations in Chapter 3 of the VESCH. **(MS-1, MS-3, and MS-5)**
			Stabilization and/or protection measures for soil stock piles and borrow areas. **(MS-2)**
			Detailed **sequence of construction**, that includes the phasing of installation of ESC measures with sediment trapping measures as a first step prior to upslope land disturbance. **(MS-4)**
			Drainage areas to sediment traps and sediment basins shown on plans. **(MS-6)**
			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**

Yes	No	N/A	ESC Plan Requirement (cont.)
			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**
			Measures to prevent concentrated flow from flowing down cut or fill slopes (i.e. slope drains). **(MS-8)**
			Measures to address water seeping from a slope face been addressed. **(MS-9)**
			Inlet protection provided for all operational storm drain and culvert inlets. **(MS-10)**
			Outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels prior to being made operational (see sequence of construction). **(MS-11)**
			Measures to minimize encroachment and minimize sediment transport for work in a live watercourse. **(MS-12)**
			Temporary stream crossings of non-erodible material where a live watercourse must be crossed by construction vehicles more than twice in any six-month period. **(MS-13)**
			Applicable federal, state and local regulations pertaining to working in or crossing live watercourses are addressed and summarized on the plan. **(MS-14)**
			Stabilization measures for bed and banks of live watercourse subject to disturbance. **(MS-15)**
			Measures shown on plan (i.e. Construction entrance) to minimize sediment transport onto public and otherwise paved roads. **(MS-17)**
			MS-19 satisfied for each receiving channel per 9VAC25-840-40(19)
			Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property are diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit).

Information below to be completed by FORT MONROE AUTHORITY

The Fort Monroe Authority has reviewed the above referenced site plan dated _____ for compliance with the Fort Monroe Authority Annual Standards and Specifications. Based on the review the plan:

☐ Is Approved

☐ Is Not Approved

Printed Name: _____ Date: _____

Signature: _____ ESC Plan Review Certification Number: _____

Appendix D

Fort Monroe Authority SWM Plan Preparer/Plan Reviewer Checklist

(LD-02A)

Instruction: This checklist shall be completed if a SWM Plan and Narrative is required per the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM. The completed checklist shall be provided with the SWM Plan submittal. The Plan and Narrative submitted for review by Fort Monroe Authority. This checklist is intended to only be used as a guide. The project designer is responsible for ensuring plans address the SWM laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	SWM Plan/Narrative Requirement
General Plan Information (Plan)			
			North arrow.
			Legend.
			Location and vicinity map.
			Delineation of the site area and property lines in the vicinity of the project.
			Existing and proposed contours (2' interval minimum).
			Locations of test borings.
			Earthwork specifications.
			Compaction requirements specified.
			Sequence of construction.
			Limits of clearing and grading.
			Existing and proposed features including buildings, roads, parking areas, utilities, stormwater management facilities and any other physical attributes.
			SWM Facility Certification - Plans shall list all SWM facilities and critical construction inspection timeframes (i.e., liner, underdrain and outlet pipe installation) for which SWM BMP certification is required per Section 4.2.1 of the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM.
			The following note is on the plan: "A certified construction record drawing for permanent SWM facilities shall be submitted to Fort Monroe Authority for approval per section 4.1.1 of the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM. Construction inspections and surveys, performed by a licensed professional, shall be required at each stage of installation (construction) as necessary to certify that the SWM facility has been built in accordance with the approved plan and design specifications. The Contractor shall provide a minimum of 2 business days' notice to the certifying professional to allow for critical inspections."
			BMP Inspection and maintenance plan for each permanent SWM facilities. For manufactured permanent BMPs, the construction drawings shall include manufacturer's recommendation on maintenance and inspection.
			Specifications for construction/installation of proprietary BMPs per the manufacturer's specifications
			Cross sections for stormwater conveyance channels with maximum water surface elevations for design storms (1-, 10-, and 100-year)
			Where applicable, outlet protection with dimensions at points of concentrated discharge

Yes	No	N/A	SWM Plan/Narrative Requirement
Site Information (Narrative)			
			Description of existing and proposed site conditions.
			Summary table with pre- and post-development land cover conditions (i.e. forest, managed turf, and impervious areas).
			Discussion of the stormwater management strategy to address water quantity and quality criteria.
			Information on the type and location of stormwater discharges, including information on the features to which stormwater is being discharged including surface waters or karst features if present.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit).
			A general description of the proposed stormwater management facilities and the mechanism through which the facilities will be operated and maintained after construction is complete
			Information on the proposed stormwater management facilities, including (i) the type of facilities; (ii) location, (iii) impervious and pervious acres treated; and (iv) the surface waters or karst features into which the facility will discharge
			Discussion of possible stormwater impacts on downstream properties including mapping with sufficient information on adjoining parcels to assess the impacts.
			Geotechnical report when applicable (include infiltration rates when required for a BMP).
			Boring locations: borrow area, basin pool area and embankment area (centerline principal spillway, emergency spillway, abutments).
			Boring logs with Unified Soils Classifications, soil descriptions, depth to seasonal high groundwater table, etc.
			Additional geophysical investigation and recommendations in Karst environment.
			Description of inclusion of the locality's additional technical requirements into the plan, if any, and how they were addressed to the maximum extent practicable.
Hydrologic Computations (Narrative)			
			Mapping that supports computations and includes, at a minimum the following: • Pre- and post-development development contours; • Existing streams, ponds, culverts, ditches, wetlands, other water bodies, and floodplains; • Current land use including existing structures, roads, and locations of known utilities and easements; • Limits of clearing and grading; • Proposed drainage patterns on the site; • Proposed buildings, roads, parking areas, utilities, and stormwater management facilities.
			Pre-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.
			Post-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.

Yes	No	N/A	SWM Plan/Narrative Requirement
Hydrologic Computations cont. (Narrative)			
			Rainfall precipitation frequency data recommended by the U.S. National Oceanic and Atmospheric Administration (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.
			Summary table for determination of runoff curve numbers.
			Time of concentration calculations.
			Predevelopment runoff hydrographs.
			Post-development runoff hydrographs.
Hydraulic Computations (Narrative & Plans, as indicated)			
			Routing computations for each proposed stormwater management facility for each applicable design storm provided in narrative.
			Stage-storage data used in routing computations in the narrative.
			Control structure information used in routing computations in the narrative.
			Summary table of pre- and post-development peak runoff rates for each point of discharge from the site provided in narrative.
			Maximum water surface elevations for design storms shown in sections or profiles on the plans for each stormwater management facility.
			Impoundments designed to convey the 100-year storm as demonstrated in computations in the narrative.
			Adequate freeboard is provided for impoundments as shown on the plans based on computations in the narrative.
			Hydraulic grade line computations in the narrative with indication of locations of surcharge or inadequacy.
			Storm sewer design computations in the narrative.
			Culvert calculations in the narrative.
			Gutter spread calculations in the narrative.
			Provide profiles of all storm conveyances (except roof drains) on plans. Profiles should include existing and proposed grade, structure types, pipe materials and sizes, slopes, inverts, etc.
Channel Protection (Narrative & Plans, as indicated)			
			Provide a description of each conveyance system receiving discharges of concentrated stormwater flows from the project limits. Classify each as being either a manmade conveyance, restored natural conveyance, or natural conveyance system.
			Where concentrated site stormwater runoff discharges are to a manmade system, demonstrate compliance with 9VAC25-870-66 B.1.
			Where concentrated site stormwater runoff discharges are to a restored natural conveyance, demonstrate compliance with 9VAC25-870-66 B.2.
			Where concentrated site stormwater runoff discharges are to a natural conveyance, demonstrate compliance with 9VAC25-870-66 B.3.
			Describe the limits of analysis for each discharge point as calculated in accordance with 9VAC25-870-66.B.4.

Flood Protection (Narrative & Plans, as indicated)			
Water Quality Computations (Narrative & Plans, as indicated)			
			Per 9VAC25-870-63 and -65, provide Virginia Runoff Reduction Method spreadsheet output including: Site loadings to include the drainage area and land cover conditions draining to each BMP. Required reductions Input for each BMP employed and reductions achieved by each BMP Compliance worksheet Adjusted CN worksheet, when applicable.
			Treatment volume calculations for sizing BMPs.
			Stage-storage information indicating the treatment volume required and volume provided.
			All proposed SWM design follows the Virginia BMP Clearinghouse design specifications.
			A BMP-type specific checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition, is completed and provided in the narrative for each proposed BMP.

Information below to be completed by FORT MONROE AUTHORITY

The Fort Monroe Authority has reviewed the above referenced site plan dated _____ for compliance with the Fort Monroe Authority Annual Standards and Specifications. Based on the review the plan:

☐ Is Approved

☐ Is Not Approved

Printed Name: _____ Date: _____

Signature: _____ ESC Plan Review Certification Number: _____

Appendix E

Fort Monroe Authority AS&S Preconstruction Meeting Form

(LD-03)

FORT MONROE AUTHORITY PRECONSTRUCTION MEETING VERIFICATION FORM

Instruction: This form shall be completed prior to the commencement of a land disturbance. The purpose of this form is to acknowledge responsibilities in accordance with the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM. A copy of this completed form shall be maintained by the Fort Monroe Authority Project Manager and the contractor and be readily available upon request. The following individuals are required to participate in the preconstruction meeting:

- Fort Monroe Authority Representative;
- VAR10 General Permit Operator (or Duly Authorized Representative) or primary contractor for projects where the land disturbance activity is less than 1-acre;
- For land disturbance of an acre or greater, the Certified Inspector performing self-inspections for the Operator as required by the VAR10 General Permit;
- The Responsible Land Disturber (RLD) identified on the ESC Plan;
- Representative of SWM facility design firm providing SWM facility certification, when applicable; and,
- A list of additional attendees may be attached to this form, if desired.

Section 1 – Project Information

Project Name: _____

Date: _____

Project Location/Description: _____

FMA Project Manager: _____

Primary Contractor/VAR10 General Permit Operator: _____

Responsible Land Disturber: _____

Section 2 – Checklist

Check those available:

- ☼ Coverage Letter for the General Permit for Discharges of Stormwater from Construction Activity Available, when applicable for land disturbance ≥ 1-acre
- ☼ Prepared site-specific and completed SWPPP for land disturbance of an acre or greater, when applicable for land disturbance ≥ 1-acre
- ☼ Approved ESC Plan
- ☼ Approved SWM Plan, when applicable
- ☼ Identification of Responsible Land Disturber (Recorded in SWPPP, when applicable)
- ☼ Any off-site areas associated with this project have been identified.
- ☼ Conditions of termination of land disturbance form discussed.
- ☼ Discussion of responsibilities for SWM facility certifications (e.g. coordination with the design professional certifying the facility and the critical components of the installation of the facility)

Section 3 – Acknowledgement of the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM

(To be completed by the Contractor/Operator)

I acknowledge my responsibilities to conduct the land disturbance activity in accordance with the approved Plans throughout the duration of the project, to seek approval from the Fort Monroe Authority for any significant changes to the plan, to adhere to the conditions of the VAR10 General Permit (when applicable), oversight of the maintenance of the Stormwater Pollution Prevention Plan (when applicable), and notifying the Fort Monroe Authority Project Inspector upon:

- Installation of the initial ESC measures where applicable and as identified on the ESC Plan; and
- The occurrence of significant discharge of sediment or other pollutants from the site.

Name: _____

Signature: _____

Date: _____

Appendix F

Fort Monroe Authority Construction Site Inspection Form for Land Disturbance < 1-acre (LD-04A)

LD-04A: Fort Monroe Authority Construction Site Inspection Form
(For regulated Land Disturbance < 1-acre)

General Information			
Project Name:			
Location:		Start Time:	
Date of Inspection:		End Time:	
Contact Information/Responsible Parties			
* Site Representative (see below)		Representative's Email:	
		Representative's Phone #:	
Inspector's Name(s):		Inspector Email:	
		Inspector Phone #:	
Inspectors DEQ Certification #(s):		Date of last inspection:	

* PM, Contractor, RLD or other individual with responsibility for implementation of the ESC Plan.

Inspection Type (check all that apply)

☐ After installation of initial ESC measures ☐ 2-week inspection ☐ Final Stabilization
☐ Within 48-hours after a runoff event (≥ 0.25 inches of rain over 24-hours)* ☐ Other _____

* If Inspection Type due to runoff event; provide the date of event:_____and estimated rainfall amount (inches): _____

Weather Conditions (check all that apply)

☐ Clear ☐ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Cold ☐ Cool ☐ Mild ☐ Hot ☐ Raining ☐ Post-rain event

Are discharges occurring from the site at the time of inspection or evidence of off-site sediment transport? ☐ Yes ☐ No
If yes, describe:

	Construction Inspection Checklist Items numbered are ESC Minimum Standards, 9VAC25-840-40 (See Fort Monroe Authority approved site ESC and SWM Plans as applicable)	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
-	Are deficiencies identified during previous inspections corrected?				
-	Are all land-disturbing activities within the area of disturbance identified on the approved ESC Plan?				
-	Are all erosion and sediment controls maintained, properly repaired & functional? [9VAC25-840-60]				
-	Are site ESC operations consistent with the ESC phasing plan or have modifications to the plan been appropriately approved and documented?				
1	Are temporary or permanent stabilization measures applied within allowable time frames (7 days after final grade or where dormant for more than 14 days)? [9VAC25-840-40]				
2	Are disposal/borrow areas & stockpiles (on-site and off-site) stabilized or protected with sediment trapping measures? Are off-site areas on plan or have separate Fort Monroe Authority or locality				
3	Are all temporary ESC measures that are no longer needed removed & applicable site areas permanently stabilized?				
4	Are initial ESC measures, including perimeter controls, (i.e. silt fence, sediment basins and traps, perimeter dikes) intended to trap sediment installed and functional prior to upslope land disturbance?				

LD-04A: Fort Monroe Authority Construction Site Inspection Form
(For regulated Land Disturbance < 1-acre)

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
5,7	Are earthen structures, such as dams, dikes, diversions, & cut/fill slopes, stabilized or protected with functioning sediment trapping measures?				
6	Are sediment basins/traps constructed according to the plans/specifications, functional and maintained?				
8	Are cut/fill slopes protected from concentrated runoff with channel flumes or slope drains?				
9	Are slopes with water seeps protected with adequate drainage and stabilization?				
10	Do operational storm sewer & culvert inlets have inlet protection according to the plans/specifications?				
11	Are constructed stormwater conveyance channels & ditches stabilized with the appropriate channel lining and/or outlet protection according to the plans/specifications?				
12	Is non-erodible material or cover provided for all causeways and cofferdams where work is performed in a live watercourse?				
13	Is a live watercourse crossed by construction vehicles more than twice in a 6-month period, and if so, is the temporary stream crossing used for crossing constructed of non-erodible materials?				
14	Where work is performed in a live watercourse, are applicable federal and state permits available?				
15	Where work is performed in a live watercourse, have the bed and banks been stabilized immediately and per the plan/specifications?				
16	Are underground utilities installed with less than 500’ of trench open, sediment trapping controls for excavated material, filtering of effluent from dewatering, and compaction and restabilization of backfill?				
17a	Are construction entrances properly located, installed & maintained?				
17b	Does sediment tracked onto adjacent roadways appear to be removed each day?				
18	If the site is stabilized, have ESC measures been removed and trapped sediment been stabilized or appropriately removed?				
19a	Is there evidence of downstream or other off-site sediment transport? (Provide locations & description of impacts if applicable.)				

LD-04A: Fort Monroe Authority Construction Site Inspection Form
(For regulated Land Disturbance < 1-acre)

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
19b	Are adjacent properties and waterways adequately protected from accidental land disturbance, potential pollutant discharge, erosion, flooding, & sedimentation from the project site?				
19c	Do all locations concentrated of concentrated runoff leaving the site discharge to a channel (i.e. stream, storm sewer, or ditch)?				
-	Are any ESC measures to protect SWM practices (i.e. infiltration basin, bioretention) that are shown on the plans to prevent compaction or clogging installed?				
-	Is runoff and other discharges (dewatering) that contain sediment or other pollutants being properly treated prior to discharging from the site?				
-	Are permanent stormwater measures (basins, etc.) properly installed/converted, stabilized and functional?				

NOTES (reference checklist item # and any additionally attached information such as photos):

CERTIFICATION INSTRUCTION
This Inspection Form is not complete without the completion of the certification below by the certified inspector identified on the first sheet of the inspection form.

Reports conducted by the Fort Monroe Authority or Fort Monroe Authority representative will be provided to the Site Representative by (check all that apply):
☐ Hardcopy ☐ Email ☐ Other_____within 48 hours.

CERT-1: INSPECTION CERTIFICATION STATEMENT
"I certify under penalty of law that I performed the inspection described in this form as a Certified Project Inspector for ESC and SWM per the Virginia Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). I certify that the inspection described in the form reflects site conditions to the best of my knowledge and belief and is 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 and falsifying inspections (reports)."

Inspector's Name: _____

Signature:_____ Date: _____

Appendix G

Fort Monroe Authority Construction Site Inspection Form for Land Disturbance ≥ 1-acre

LD-04B: Fort Monroe Authority Construction Site Inspection Certification Form
(For regulated Land Disturbance ≥ 1-acre)

General Information			
Project Name:			
VAR10 Permit # (where applicable)		Location:	
Date of Inspection:		Start/End Time:	
Contact Information/Responsible Parties			
* Site Representative (see below)		Representative's email and phone number:	
Inspector's Name(s):		Inspector's email and phone number:	
Inspectors DEQ Certification #(s):		Other contact information (as applicable):	

* PM, Contractor, RLD or other individual with responsibility for implementation of the ESC Plan and the SWPPP, where applicable.

Inspection Type (check all that apply)

☐ After installation of initial ESC measures
☐ Within 24-hours after a runoff event (≥ 0.25 inches of rain over 24-hours)*
☐ Contractor's self-inspection as required in SWPPP (where applicable)
☐ Periodic SWM inspection _____
☐ Final Stabilization
☐ 2-week inspection
☐ Other _____

* If within 24-hours of runoff event, provide: date of event:_____and rainfall amount (inches): _____

Weather Conditions (check all that apply)

☐ Clear ☐ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Cold ☐ Cool ☐ Mild ☐ Hot ☐ Raining ☐ Post-rain event

Are discharges occurring from the site at the time of inspection or evidence of off-site sediment transport? ☐ Yes ☐ No
If yes, describe:

	Construction Inspection Checklist (For projects under 1 acre of disturbance that do not require a Construction General Permit ONLY Section 1 of this form applies. Where disturbance is equal to or greater than an acre, all Sections apply)	***Yes***	***No***	***N/A***	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1	***Section 1 - ESC Plan Inspection: Part II(A)2***				See Fort Monroe Authority approved ESC and SWM Plans, where applicable
1a	Are deficiencies identified during previous inspections corrected?				
1b	Are all land-disturbing activities within the area of disturbance identified on the approved ESC Plan?				
1c	Are all erosion and sediment controls maintained, properly repaired and functional? [9VAC25-840-60]				
1d	Are site ESC operations consistent with the ESC phasing plan or have modifications to the plan been appropriately approved and documented?				
1e	Are temporary or permanent stabilization measures applied within allowable time frames (7 days after final grade or where dormant for more than 14 days)? [9VAC25-840-40]				
1f	Are disposal/borrow areas and stockpiles (on-site and off-site) stabilized or protected with sediment trapping measures? Are off-site areas on plan or have separate Fort Monroe Authority or locality approved ESC Plan?				

LD-04B: Fort Monroe Authority Construction Site Inspection Certification Form
(For regulated Land Disturbance ≥ 1-acre)

	Construction Inspection Checklist	*Yes*	*No*	*N/A*	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1g	Are all temporary ESC measures that are no longer needed removed and applicable site areas permanently stabilized?				
1h	Are initial ESC measures, including perimeter controls, (i.e. silt fence, sediment basins and traps, perimeter dikes) intended to trap sediment installed and functional prior to upslope land disturbance?				
1i	Are earthen structures, such as dams, dikes, diversions, and cut/fill slopes, stabilized or protected with functioning sediment trapping measures?				
1j	Are sediment basins/traps constructed according to the plans/specifications, functional and maintained?				
1k	Are cut/fill slopes protected from concentrated runoff with channel flumes or slope drains?				
1l	Are slopes with water seeps protected with adequate drainage and stabilization?				
1m	Do operational storm sewer and culvert inlets have inlet protection according to the plans/specifications?				
1n	Are constructed stormwater conveyance channels and ditches stabilized with the appropriate channel lining and/or outlet protection according to the plans/specifications?				
1o	Is non-erodible material or cover provided for all causeways and cofferdams where work is performed in a live watercourse?				
1p	Is a live watercourse crossed by construction vehicles more than twice in a 6-month period, and if so, is the temporary stream crossing used for crossing constructed of non-erodible materials?				
1q	Where work is performed in a live watercourse, are applicable federal and state permits available?				
1r	Where work is performed in a live watercourse, have the bed and banks been stabilized immediately and per the plan/specifications?				
1s	Are underground utilities installed with less than 500’ of trench open, sediment trapping controls for excavated material, filtering of effluent from dewatering, and compaction and restabilization of backfill?				
1t	Are construction entrances properly located, installed and maintained?				
1u	Does sediment tracked onto adjacent roadways appear to be removed each day?				

LD-04B: Fort Monroe Authority Construction Site Inspection Certification Form
(For regulated Land Disturbance ≥ 1-acre)

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1v	If the site is stabilized, have ESC measures been removed and trapped sediment been stabilized or appropriately removed?				
1w	Is there evidence of downstream or other off-site sediment transport? (Provide locations and description of impacts if applicable.)				
1x	Are adjacent properties and waterways adequately protected from accidental land disturbance, potential pollutant discharge, erosion, flooding, and sedimentation from the project site?				
1y	Do all locations concentrated of concentrated runoff leaving the site discharge to a channel (i.e. stream, storm sewer, or ditch)?				
1z	Are any ESC measures to protect SWM practices (i.e. infiltration basin, bioretention) that are shown on the plans to prevent compaction or clogging installed?				
1aa	Is runoff and other discharges (dewatering) that contain sediment or other pollutants being properly treated prior to discharging from the site?				
1bb	Are permanent stormwater measures (basins, etc.) properly installed/converted, stabilized and functional?				
2.	***Section 2 - Pollution Prevention Plan Inspection: Part II(A)4*** (Applicable to land disturbance 1 acre or greater)	***Yes***	***No***	***N/A***	See project-specific Stormwater Pollution Prevention Plan (SWPPP)
2a	Are functional measures in place to prevent and respond to leaks, spills and other pollutant releases including procedures for expeditiously stopping, containing, cleaning up spills and reporting?				
2b	Are functional measures in place to prevent the release of soaps, solvents, detergents, wash water from construction materials, paint clean-up and other pollutants and/or also from contact with stormwater?				
2c	Are wash waters from vehicles, equipment, construction materials and the like prevented from release and/or properly treated before leaving the site?				
2d	Is the concrete wash-out waste directed into a properly installed leak-proof container? Is the treatment mechanism properly maintained and utilized?				
2e	Are construction products, materials, and wastes being properly stored, handled, labeled? Are loose trash and debris properly contained and trash receptacles covered at the end of each day?				
2f	Are other potential pollutant-generating activities not listed above being properly managed to prevent exposure to precipitation/runoff?				
2g	Have all pollutant generating activities present on the site been identified in the Pollution Prevention Plan?				

LD-04B: Fort Monroe Authority Construction Site Inspection Certification Form
(For regulated Land Disturbance ≥ 1-acre)

3	***Section 3 - SWPPP Documentation Inspection: Part II(A)1*** (Applicable to land disturbance 1 acre or greater)	***Yes***	***No***	***N/A***	See Section 1.0 and Various Appendices in the Stormwater Pollution Prevention Plan
3a	Copy of notice of coverage letter and information for public access to the SWPPP posted near main entrance of the site?				
3b	Copy of complete SWPPP available onsite for operators and inspectors?				
3c	SWPPP is being amended, modified, updated and appropriately signed?				
3d	Are dates when major grading activities occurred properly recorded?				
3e	Are SWPPP inspections conducted by contractor at required frequency, summarized including corrective actions, appropriately signed and retained with the SWPPP?				

CERTIFICATION INSTRUCTION
This Inspection Form is not complete without the completion of the appropriate certification(s) by the individual(s) listed below.

Reports conducted by the Fort Monroe Authority or Fort Monroe Authority representative will be provided to the Operator or Duly Authorized Representative by (check all that apply): ☐ Hardcopy ☐ Email ☐ Other_____within 48 hours.

- **CERT-1 and CERT-2** certification is required with Fort Monroe Authority inspections.
- **CERT-2** certification is required by the VAR10 operator for all inspections, including self-inspections required by the VAR10.

CERT-1: INSPECTION CERTIFICATION STATEMENT
"I certify under penalty of law that I performed the inspection described in this form as a Certified Project Inspector for ESC and SWM per the Virginia Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). I certify that the inspection described in the form reflects site conditions to the best of my knowledge and belief and is true, accurate and complete. On inspection forms where no corrective action is identified, the construction activity is in compliance with the project SWPPP. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations and falsifying inspections (reports)."

Inspector's Name: _____

Signature:_____ Date: _____

CERT-2: OPERATOR (OR DULY AUTHORIZED REPRESENTATIVE) CERTIFICATION STATEMENT
"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

The inspection form shall be maintained in the project SWPPP. Corrections to incidents of noncompliance identified on this form will be corrected within 7 days or as otherwise identified per incident.

Operator (or Duly Authorized Representative) Name: _____

Signature:_____ Date: _____

Appendix H

Fort Monroe Authority SWM Facility Record Drawing and SWM Certification Form (LD-05)

Stormwater Management Facility
Record Drawing and SWM Facility Certification Form

Instruction: The purpose of the record drawing and stormwater management (SWM) facility certification process is to verify that all stormwater management facilities and associated conveyance systems have been built in accordance with the approved plan and design specifications. All required information shall be submitted to the Fort Monroe Authority for approval in accordance with Section 4.1.1 of the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM. Fort Monroe Authority approval is required prior to receiving a Fort Monroe Authority Termination of Land Disturbance that is necessary prior to the permittee's termination of a VAR10 General Permit. The following shall be submitted for each permanent post-construction stormwater management facility:

(1) A completed copy of this form

- ✓ A copy of this form shall be submitted for each permanent stormwater management facility that is recommended for acceptance. The applicant shall ensure that this form is completed in its entirety and all applicable documentation is included with the submittal.

(2) Certified Professional Inspection Log

- ✓ A copy of the applicant's inspection log shall be submitted with this form. This log should document all critical aspects of SWM facility construction to demonstrate compliance with the approved plans. For example, a bioretention facility may require a liner. Without an inspection log, there would be no assurance that it was installed post-construction since it is underground and not visible from the surface.

(3) Certified Record Drawing (As-built)

- ✓ A record drawing of the plans is required to be submitted with this form. The plans should indicate any changes that differ from the approved plans, along with any applicable computations.
- ✓ A clear means, such as a checkmark, shall be used to demonstrate that the applicant agrees with the constructed values.
- ✓ For any changes to the plans, including numeric changes, a red line shall be used to cross out the original item and the actual revision shall be entered beside the crossed out value.
- ✓ Elevations shall be to the nearest 0.1 foot.
- ✓ The storage volume of the facility, including all dimensioned structures, shall be verified with the certification.
- ✓ All submitted plan sheets shall be labeled as "Record Drawing."

Section 1 – SWM Facility General Information

Project Name:	Project Location:
BMP Location (Latitude/Longitude):	
BMP Type:	Total Drainage to BMP (Acres):
Impervious Acres draining to BMP:	Pervious Acres draining to BMP:
6th Order HUC:	Date Facility Brought Online:
Name of any impaired waters the BMP discharges to (2016 305(b)/303(d)):	

Section 2 - Contractor Information:

Company:	Contact Person:
Title:	Phone Number:
Plan Name:	Plan Date:

Section 3 - Record Drawing Certifications Statement

A professional shall provide certification (below) of the SWM Record Drawing(s) including inspections, monitoring and other efforts used for the certification of Stormwater Management facilities during construction.

Record Drawing Certification

I certify that I am a Virginia Department of Environmental Quality certified Stormwater Inspector and that to best of my knowledge, having completed site specific inspection(s), the stormwater facility referenced on this form is constructed in accordance with the approved plans and all of the information provided with this certification is complete and accurate.

Design Firm Name: _____

Mailing Address: _____

Business Phone: _____

Name of certifying individual: _____

Signature:_____ Date: _____

Section 4 - Record Drawing Approval

(This section to be completed by Fort Monroe Authority only)

Fort Monroe Authority Stormwater Compliance Manager (print):_____

Signature:_____ Date: _____

Appendix I

Fort Monroe Authority Land Disturbance Termination Form

(LD-06)

Termination of Fort Monroe Authority Land Disturbance

Instruction: This form is to be used as a request of termination of land disturbance between the Contractor/Operator and the Fort Monroe Authority. This form will **NOT** result in termination of VAR10 General Permit coverage from DEQ. The Contractor/Operator **SHALL NOT** terminate VAR10 General Permit coverage with DEQ, when applicable, until Termination of Land Disturbance Approval from Fort Monroe Authority is provided on this form.

Project Name:_____ VAR10 Permit # (where applicable): _____

Section 1– Conditions for Termination of Land Disturbance

The conditions of this section shall be met and this form shall be signed by both the Operator and the Fort Monroe Authority Project Manager prior to termination of land disturbance (check those that apply):

- ☐ No further land disturbance activities are planned.
- ☐ The project area has been stabilized in accordance with the approved plans, which includes seeding, mulching, sodding, paving, or other means.
- ☐ All temporary erosion and sediment control measures have been removed.
- ☐ All pollution prevention measures have been removed from the site and disposed of in a legal manner.
- ☐ All permanent post-construction stormwater management facilities have Fort Monroe Authority-approved record drawings.
- ☐ All trash and debris have been removed from the site.

Section 2 – Operator Certification:

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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."

Upon approval of this form, I will request termination of the VAR10 General Permit from DEQ, when applicable.

Operator/Contractor:_____ Company: _____

Signature:_____ Date: _____

Section 3 – Termination of Land Disturbance Approval

(This section to be completed by the Fort Monroe Authority Project Manager)

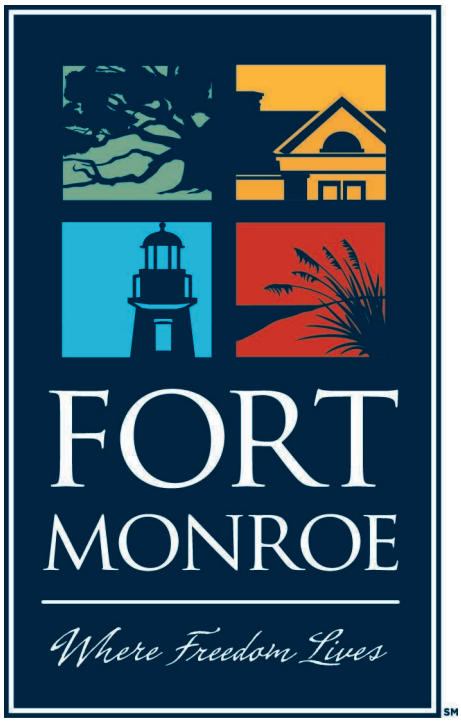
Fort Monroe Authority recognizes this request to be accurate based on the certification above and terminates the Operator/Contractor's land disturbance activity as it applies to the Fort Monroe Authority Annual Standards and Specifications for ESC and SWM.

Fort Monroe Authority Stormwater Compliance Manager (Print): _____

Signature:_____ Date: _____

Appendix F

Operations and Maintenance Procedures



MS4 STANDARD OPERATING PROCEDURES

September 2023

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1.0 MINOR BUILDING MAINTENANCE

1.1 Prep Work

Have AH Environmental perform LAMP tests. Once test results have been received OPCRES maintenance will proceed based on those results. Steps that are followed:

Wear proper PPE

Cover work area (ground, sidewalks, floors, etc.) with plastic and use of HEPA vacuum to catch loose debris.

Store for proper disposal following AH Environmental and EPA procedures and guidelines.

1.2 Painting

This section applies to the use and cleaning of water soluble paint (latex) as outlined in the Fort Monroe Material Standards and Specifications (FMMSS) memorandum. All other paints and stains will be used by a license contractor only and they will be responsible for following proper cleaning or disposal procedures.

Remove excess paint from tools back into paint can

Rinse with water all paint tools in mop sink located in maintenance shop

Excess paint will be stored in a cabinet. Empty cans will be stored for bulk disposal at a waste facility.

1.3 – Washing

Follow procedures as listed in Section One- Prep Work

No chemicals are used for exterior cleaning unless called for under strict guidance of the HPO. Most items are cleaned using clean water, pressure and “elbow grease”.

2.0 USE AND STORAGE OF HAZARDOUS MATERIALS

2.1 Use of Hazardous Materials

Hazardous materials will be used in accordance with all manufacturer’s instructions and all applicable regulations.

Examples of Hazardous Materials

- Cleaners
- Solvents
- Oils
- Fuels
- Paints

2.2 Storage of Hazardous Materials

Hazardous materials will be stored in accordance with all manufacturer's recommendations and applicable regulations. All materials will have Safety Data Sheets (SDS – formerly MSDS) sheets which will be maintained by the organization using/storing the materials. Materials will be stored indoors when possible and in all cases will be covered and kept away from Storm Drains.

2.3 Hazardous Material Spill Cleanup

Minor hazardous material cleanup will be completed by staff with appropriate training and while wearing proper PPE in accordance with EPA guidelines and at the direction of appropriate authorities. Large spills are handled by outside providers such as Petro Chem. Spill response records will be stored in an electronic database.

Examples of minor materials cleanup / disposal:

- Light bulbs are disposed in a controlled recycling box shipped to Veolia ES Technical Solutions, LLC
- Generator/Elevator/Vehicle Oil and Fuel spills are cleaned up using the appropriate spill kit. Spill kits are kept either at the specific location of generator or elevator or are stored in maintenance shops to be used where needed. Waste will be transported for disposal in accordance with all DOT and EPA regulations.

3.0 SMALL ENGINE REPAIR AND MAINTENANCE

3.1 Storage of Equipment

Where possible vehicles and equipment will be stored indoors. Indoor floor drains shall be covered or shall in other fashion not be allowed to discharge the storm drain system unless routed through a pretreatment facility such as an oil water separator.

3.2 Maintenance of Equipment

Vehicles and equipment will be maintained in proper working condition free from leaks or other discharges which could damage the environment.

Appropriate measures shall be taken during maintenance activities to prevent discharge of hazardous materials to the storm system. Drip pans and other containment shall be employed to capture discharged fluids and protect the storm system. All maintenance shall be performed indoors when possible. Disposal of waste materials shall be in accordance with all applicable regulations including SOP 2.0 Use and Storage of Hazardous Materials.

4.0 OUTSIDE EQUIPMENT STORAGE

Where possible vehicles and equipment will be stored indoors. Vehicles and Equipment that must be stored outside will not be placed in proximity to storm drains. Vehicle storage areas will be inspected regularly to ensure there is no leaking of fluids. Should leaks be found protect storm drains by creating berms or other appropriate measures and clean up spills in accordance with SOP 2.0 Use and Storage of Hazardous Materials.

5.0 VEHICLE WASHING / WASHRACK

Vehicles and equipment shall be washed at commercial facilities only. If equipment is washed on site the runoff shall be contained and/or discharged through an oil water separator.

The onsite washrack/oil water separator shall only be used for washing vehicles and equipment utilized for the public works at Fort Monroe. The wash rack shall be maintained in good working order with good housekeeping practices. Only biodegradable detergents shall be used for cleaning purposes. The oil water separator shall be inspected at least quarterly and will be cleaned by a third party company as needed to remove any accumulated oils.

6.0 DUMPSTER MAINTENANCE

Routinely inspect dumpsters for damage and unlawful dumping of hazardous materials. If damage is observed, the trash contractor will be contacted to remove the dumpster and any spilled material will be cleaned up in accordance with SOP 2.0 Use and Storage of Hazardous Materials.

7.0 STREET SWEEPING

Streets will be swept at a minimum of twice per month in order to reduce the amount of debris (trash and organics) that enters the storm system. Debris removal on sidewalks and parking lots is generally performed by tenants on an as needed basis. This will be done using equipment designed for the task that does not create undue runoff into the storm water system. All debris collected will be disposed of in accordance with all applicable regulations.

8.0 WINTER ROAD WORK

8.1 Material Storage

Salt and other deicing chemicals will be stored inside if possible. If necessary to store outdoors it shall be covered to prevent rain runoff. The storage area will be away from storm drains. Any outdoor storage areas will be constructed to prevent runoff from entering the storm system by means of berms or other physical barriers.

8.2 De-icing and Snow removal

Only as much product will be used on the roads as is necessary to accomplish the task of melting the ice and clearing unsafe road conditions. Equipment will be maintained in accordance with manufacturers recommendations and in good working order to maintain efficiency of the operation and to prevent uneven spreading. Sand will be used in conjunction with or in lieu of salt whenever practical.

9.0 FIRE HYDRANT FLUSHING

Fire hydrant flushing will only be performed when necessary for the maintenance of the water distribution system. Individual fire hydrants will only be flushed as long as necessary to accomplish the goals of the flushing plan. Water from the flushing operations will be directed to paved surfaces to prevent erosion of soil. When necessary to discharge onto grass surfaces a diffuser will be utilized.

10.0 WATERLINE TESTING

When necessary to flush and test the water lines they will only be flushed for as long as necessary to accomplish the goals of the testing procedure. Super chlorinated water will be run through a diffuser with appropriate dechlorination procedures in place.

Appendix G

Nutrient Management Plan

Ann Jennings
Secretary of Natural and Historic Resources and Chief Resilience Officer

Clyde E. Cristman
Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

January 3, 2022

David Stroud
Fort Monroe Authority
20 Ingalls Road
Fort Monroe VA 23651

Your nutrient management plan (NMP) dated 12/22/2021 located in the City of Hampton has been approved by the Virginia Department of Conservation and Recreation (DCR). The approved plan is for 46 acres. Only nutrient recommendations for applications to be made after the date of this letter are approved by this letter. Your NMP was written by a nutrient management planner certified by DCR.

This site has not been inspected by DCR and this approval is contingent upon site conditions being as stated in the NMP. Any revisions to this plan must be approved by DCR. Any change in personnel resulting in a change to the plan manager should be reported to the Certified Nutrient Management Planner who will then make DCR aware. Please note that this letter should be kept with the NMP and supporting documentation including nutrient application records. This plan expires on 12/22/2024. Please feel free to contact me with any questions or concerns regarding this approval.

Best regards,

Anita Tuttle
Urban Nutrient Management Coordinator
Division of Soil and Water Conservation
600 East Main Street, 24th Floor
Richmond VA 23219
(804) 513-5958

Nutrient Management Plan

Prepared For:

Fort Monroe Authority
David Stroud
20 Ingalls Rd.
Fort Monroe, VA 23651
757-251-2745
dstroud@FortMonroe.org

Prepared By:

Angela C. Whitehead
Soil Horizons, LLC
2 Whittakers Mill Rd.
Williamsburg, VA 23185
804-892-6678
soilmapper@yahoo.com
Certification Code: # 386

Acreage: 46

County: City of Hampton
Watershed: JL58

Plan Written: 12/22/21
Plan Expires: 12/22/24

Planner Signature

Angela C Whitehead

The purpose of this Nutrient Management Plan is to ensure minimum movement of nitrogen and phosphorus from the specified area of application to surface and groundwater where they can potentially have a detrimental effect on water quality as well as ensuring that plants have optimum soil nutrient availability for good productivity and quality. By following this soil test based plan you are helping to protect local waters and the Chesapeake Bay.

If you have questions, please contact your plan writer, local Virginia Cooperative Extension Agent, or the Department of Conservation and Recreation Nutrient Management Program.

DCR
Virginia Department of Conservation & Recreation

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The Fort Monroe Authority Department agrees to comply with all requirements set forth in the Nutrient Management Training and Certification Regulations, 4 VAC 50-85 et seq., and to follow recommendations for turf fertilization and management as described in the Virginia Nutrient Management Standards and Criteria, Revised July 2014. This includes implementing the Department of Conservation and Recreation's approved Nutrient Management Plan and maintaining fertilization records. All nutrient applications shall comply with the provisions of this Nutrient Management Plan upon receipt of the approved plan.

1. Site Description and Supporting Information

Fort Monroe's current boundaries encompass approximately 565 acres, including 110 acres of submerged lands and 85 acres of wetlands. The namesake stone fort was begun in 1818 and presently there are approximately 150 buildings, sites, structures, and objects contributing to the Fort Monroe National Historic Landmark (NHL) District. Fort Monroe served as the headquarters for the US Army Training and Doctrine Command. In 2011, Fort Monroe was deactivated as an active military base. The Fort Monroe Authority (FMA) was created to preserve, protect, and manage Fort Monroe and Old Point Comfort after the base closure. Approximately half of Fort Monroe was designated a National Monument on November 1, 2011 and is to be managed by the National Park Service (NPS). In 2013, the US Army transferred a majority of the property to the Commonwealth of Virginia.

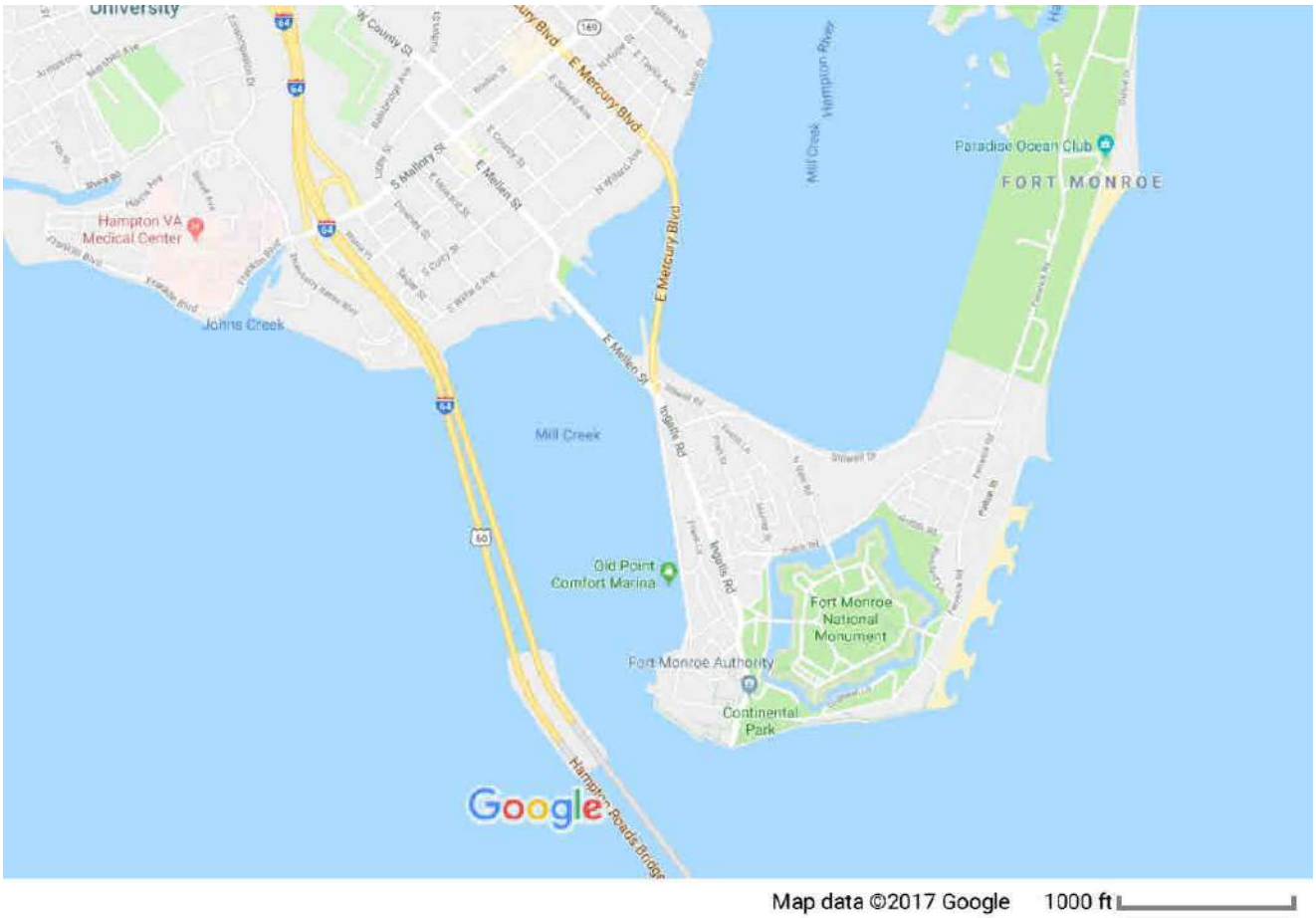
A. Management Area Description

Fort Monroe is located in Hampton, Virginia—at Old Point Comfort, the southern tip of the Virginia Peninsula. From Interstate 64 (exit 268) access to Fort Monroe is gained via E. Mellen Street or E. Mercury Boulevard. Fort Monroe is bound by the Chesapeake Bay to the east and Mill Creek/Hampton River to the west. Fort Monroe is located within the Hampton Roads/Hampton River watershed. (Site Map A)

Fort Monroe is divided into five usage zones: Historic Village, Inner Fort, North Gate, Wherry Quarter, and the Park and Recreation Area (Site Map B). A commercial lawncare company uniformly maintains 46 acres of predominately warm season turfgrass within the non-residential portions of the Historic Village (20 acres), Inner Fort (9.5 acres), North Gate (7.5 acres), and Wherry Quarter (9 acres). (Site Map C) Small areas of cool season turf are included in the management area acreage, typically occurring in shaded locations, but are managed to encourage warm season establishment and growth. The grounds are less intensively managed, receiving only one to two fertilization applications annually. Landscape beds are located throughout each zone. These landscape beds do not receive any additional nutrients aside from what is applied to the adjacent turf. The Fort Monroe grounds are less intensively managed, receiving only one annual fertilization application. Within the boundaries of Ft. Monroe, turf areas are maintained that do not receive fertilization or irrigation. The unfertilized portions of Ft. Monroe are not included in this plan. Additionally, areas owned by NPS and the Parks and Recreation zone are excluded from this plan.

Municipal water provides the primary source of irrigation water for turfgrass irrigated around Buildings 138, 83, 119, and Continental Park down to the fishing pier. All additional turgrass areas are non-irrigated.

Site Map A–Location Map



Site Map B–FMA Usage Zones

FORT MONROE
Where Freedom Lives

1 inch = 600 feet

600 300 0 600 Feet

Site Map C–Fertilizer Application Areas
Legend
Buildings with Irrigation
Areas of Nutrient Application
N
N
FORT MONROE
Where Freedom Lives
1 inch = 650 feet
Feet
0
300
600
1,200

B. Fertilization Season

The recommended nutrient management application season for nitrogen fertilizers to cool season turfgrasses begins six weeks prior to the last spring average killing frost date and ends six weeks past the first fall average killing frost date. The acceptable nitrogen fertilizer application season for non-overseeded warm season turfgrass begins no earlier than the last spring average killing frost date and ends no later than one month prior to the first fall average killing frost date. Applications of inorganic nutrient sources, liquid manure, liquid sewage sludge, or liquid industrial waste are not to occur on frozen or snow-covered ground.

	Killing Frost Dates	**Cool Season Applications**	**Warm Season Applications**
Spring	April 4	February 21	April 4
Fall	November 6	December 18	October 9

C. Environmentally Sensitive Sites

An environmentally sensitive site is any area which is particularly susceptible to nutrient loss to groundwater or surface water since it contains or drains to areas which contain sinkholes, or where at least 33% of the area in a specific management area contains one or any combination of the following features:

1. Soils with high potential for leaching based on soil texture or excessive drainage;
2. Shallow soils less than 41 inches deep likely to be located over fractured or limestone bedrock;
3. Subsurface tile drains;
4. Soils with high potential for subsurface lateral flow based on soil texture and poor drainage;
5. Floodplains as identified by soils prone to frequent flooding in county soil surveys; or
6. Lands with slopes greater than 15%

The majority of the grounds is mapped as Seabrook – Urban Land complex (20) or Urban Land (27). Soils of the Seabrook series are very deep and moderately well drained with rapidly permeable subsoils. They formed in materials weathered from sandy marine and fluvial sediments. Special attention should be given to the timing of fertilizer applications prior to heavy rainfall to avoid nutrient loss due to leaching.

2. Soil Test Summary and Results

Soil samples were taken from fertilized turf areas. Each composite sample consisted of several sub-samples from the upper four inches of soil. These sub-samples were taken in a random manner to minimize the variability that is present in the sampling area. Sub-samples were thoroughly mixed, breaking apart clumps and removing all foreign matter such as roots, stalks, rocks, etc.

Soil samples were analyzed by Waypoint Analytical. Standard soil test results provide values for pH, Calculated Cation Exchange Capacity, Phosphorous, Calcium, Magnesium, Potassium, Copper, Iron, Boron, Manganese, and Calculated Cation Saturation. The soil samples collected are valid for the life of this plan (three years) or upon a major renovation or redesign of the campus grounds, whichever occurs sooner.

A. Fort Monroe Authority Turf, 46.0 acres

Customer Name: **Fort Monroe Authority**
Testing Lab: **Waypoint Analytical**
Sample Date: **12/21/21**
Planner Name, Cert. #: **Angela C. Whitehead, #386**

Area	Soil pH	Buffer pH	Lab P (ppm)	VT P (ppm)	VT (H/M/L)	P_2O_5 Needs (lbs/1000ft^2)	Lab K (ppm)	VT K (ppm)	VT (H/M/L)	K_2O Needs (lbs/1000ft^2)
1 Wherry Qtr	6.8		36	13	M	1.5	60	43	M-	2
2 North Gate	7.0		71	29	H	0.75	79	56	M	1.5
3 Historic Village	5.8	6.79	99	42	H	0.75	42	30	L+	2
4 Inner Fort	5.6	6.83	38	14	M	1.5	67	48	M-	2

- Soil pH measured between 5.6 – 7.0. Additions of limestone are recommended at a rate of 45 lbs/1000ft^2 for Inner Fort and Historic Village turfgrass.
- Potassium levels measured between low+ to moderate levels. **Potash applications are recommended at a rate of 1.5 lbs/1000ft^2 annually.**
- Phosphorus levels measured in the moderate to high range. **Phosphorous applications are recommended at a rate of 0.75 lbs/1000ft^2 annually.**
- **Nitrogen applications may not exceed 3.5 lbs/1000ft^2 annually to all less intensively managed turf areas.**

3. Summary of Recommended Annual Nitrogen, Phosphorous, and Potassium Application

The following tables provide nutrient recommendations that allow managers flexibility in selecting fertilizer products that best fit their management program. Fertilizer products and/or analysis are not specified and doing so may constrain the manager. Monthly fertilization programs are included to demonstrate the frequency and timing of nutrient applications that comply with Virginia Nutrient Management Standards and Criteria, Revised July 2014. If Class B Biosolids or raw manure is applied, the plan must be revised to meet the conditions of the Virginia Department of Environmental Quality permit.

A. Fertilizer Recommendations Summary: Fort Monroe Authority Turf, 46.0 acres

Area	Annual Lime Needs (lbs/1000ft^2)	Annual N Needs (lbs/1000ft^2)[a]	Max. Total N Rate per application (lbs/1000ft^2)[b, c]	Annual P_2O_5 Needs (lbs/1000ft^2)	Annual K_2O Needs (lbs/1000ft^2)
Fort Monroe fertilized turf	45 (Inner Fort and Historic Village)	3.5	0.70 (min. 30 days)	0.75	1.5

[a] Cool Season: Do not apply N between December 19 and February 20 or when the ground is frozen. Warm Season: Do not apply N between October 10 and April 3 or during periods of drought.
[b] 100% Water Soluble N (WSN) Fertilizer
[c] A maximum application rate of 0.9 lb/1000 ft^2 of total N (cool season) or 1.0 lb/1,000 ft^2 of total N (warm season) may be applied using slowly available forms of N with a minimum of 30 days between applications.

B. Recommended Monthly Fertilizer Application: Fort Monroe Authority Turf, 46.0 acres

	N[a,b, c] – P_2O_5 – K_2O (lbs/1000ft^2) 2021-2024											
Area	**Feb 21-Mar**	**April**	**May**	**June**	**July**	**August**	**Sept**	**Oct**	**Nov-Dec 18**	**Annual Need[d]**		
										N[a,b]	P	K
Fort Monroe fertilized turf			0.7 – 0.75 – 0.75				0.7 – 0.0 – 0.75		45 lime Inner Fort & Historic Village	1.4	0.75	1.5

[a] See Table 4A and Section 6 for N Rate Guidelines
[b] A maximum application rate of 0.9 lb/1000 ft^2 of total N (cool season) or 1.0 lb/1,000 ft^2 of total N (warm season) may be applied using slowly available forms of N with a minimum of 30 days between applications.
[c] **Do not apply more than 0.7 pounds of water soluble nitrogen per 1000 ft^2 within a 30 day period.**
[d] N and P_2O_5 applications may not exceed the Annual Need. Additional K_2O may be made annually to increase plant vigor and relieve traffic stress on damaged turf during times of extreme use.

4. Fertilizer Application Record

Customer Information		Management Area Information
Name:	Fort Monroe Authority – David Stroud	Management Area ID:
Address:	20 Ingalls Rd.	Management Area Size:
	Fort Monroe, VA 23651	Plant Species:
		Notes:
Phone #:	757-251-2745	

Date (M/D/Y)	Supervisor/Applicator	Weather Conditions: Temp/Wind/Precip			Fertilizer Analysis	Rate	Amount Fertilizer Used	Application Equipment Used

5. Virginia Nutrient Management Standards and Criteria, Revised July 2014

VI. Turfgrass Nutrient Recommendations

Definitions

For the purposes of this section, the following definitions, as presented by the Association of American Plant Food Control Officials (AAPFCO), apply:

"Enhanced efficiency fertilizer" describes fertilizer products with characteristics that allow increased plant nutrient availability and reduce the potential of nutrient losses to the environment when compared to an appropriate reference product.

"Slow or controlled release fertilizer" means a fertilizer containing a plant nutrient in a form which delays its availability for plant uptake and use after application, or which extends its availability to the plant significantly longer than a reference "rapidly available nutrient fertilizer" such as ammonium nitrate, urea, ammonium phosphate or potassium chloride. A slow or controlled release fertilizer must contain a minimum of 15 percent slowly available forms of nitrogen.

"Water soluble nitrogen", "WSN", or "readily available nitrogen" means: Water soluble nitrogen in either ammonical, urea, or nitrate form that does not have a controlled release or slow response.

Nitrogen Application Guidelines

A nitrogen fertilization schedule weighted toward fall application is recommended and preferred for agronomic quality and persistence of cool season turfgrass; however, the acceptable window of applications is much wider than this for nutrient management. ***The nutrient management recommended application season for nitrogen fertilizers to cool season turfgrasses begins six weeks prior to the last spring average killing frost date and ends six weeks past the first fall average killing frost date.*** Applications of nitrogen during the intervening late fall and winter period should be avoided due to higher potential leaching or runoff risk, but where necessary, apply no more than 0.5 pounds per 1,000 ft^2 of water soluble nitrogen within a 30 day period. Higher application rates may be used during this late fall and winter period by using materials containing slowly available sources of nitrogen, if the water soluble nitrogen contained in the fertilizer does not exceed the recommended maximum of 0.5 pounds per 1,000 ft^2 rate. Do not apply nitrogen or phosphorus fertilizers when the ground is frozen.

The acceptable nitrogen fertilizer application season for non-overseeded warm season turfgrass begins no earlier than the last spring average killing frost date and ends no later than one month prior to the first fall average killing frost date.

Per Application Rates

Do not apply more than 0.7 pounds of water soluble nitrogen per 1,000 ft^2 within a 30 day period. For cool season grasses, do not apply more than 0.9 pounds of total nitrogen per 1,000 ft^2 within a 30-day period. For warm season grasses, do not apply more than 1.0 pounds of total nitrogen per 1,000 ft^2 within a 30-day period. Lower per application rates of water soluble nitrogen sources or use of slowly available nitrogen sources should be utilized on very permeable sandy soils, shallow soils over fractured bedrock, or areas near water wells.

Annual Application Rates for Home Lawns and Commercial Turf

Up to 3.5 pounds per 1,000 ft^2 of nitrogen may be applied annually to cool season grass species or up to 4 pounds per 1,000 ft^2 may be applied annually to warm season grass species using 100 percent water soluble nitrogen sources. Lower rates of nitrogen application may be desirable on those mature stands of grasses that require less nitrogen for long-term quality. As a result, lower application rates will probably be more suited to the fine leaf fescues (hard fescue, chewings fescue, creeping red fescue, and sheep fescue) and non-overseeded zoysiagrass. Lower rates should also be used on less intensively managed areas.

For warm season grasses, up to 0.7 lb/1,000 ft^2 of nitrogen may be applied in the Fall after perennial ryegrass overseeding is well established. An additional N application of 0.5 lb/1,000ft^2 may be made in February-March to overseeded perennial ryegrass if growth and color indicate need. Applications using WSN many not exceed 0.7 lb/1,000ft^2 within a 30 day period.

Use of Slowly Available Forms of Nitrogen
For slow or controlled release fertilizer sources, or enhanced efficiency fertilizer sources, no more than 0.9 pounds of nitrogen per 1,000 ft^2 may; be applied to cool season grasses within a 30-day period and no more than 1.0 pounds of nitrogen per 1,000 ft^2 may be applied to warm season grasses within a 30-day period.

Provided the fertilizer label guarantees that the product can be used in such a way that it will not release more than 0.7 pounds of nitrogen per 1,000 ft^2 in a 30-day period, no more than 2.5 pounds of nitrogen per 1,000 ft^2 may be applied in a single application. Additionally, total annual applications shall not exceed 80 percent of the annual nitrogen rates for cool or warm season grasses.

Nitrogen Timing
The beginning and ending dates for application of nitrogen shall be determined using guidance and frost date maps contained in the Season of Application for Nitrogen section, Figures 6-1 and 6-2 (pg 96).

If the full rate or the highest rate of the recommendation range for a monthly application is applied in a single application, then the interval of application for nitrogen shall be at least 30 days to allow turf to utilize previous nitrogen applications. If several applications are to be made for the monthly nitrogen rate, then the timing of the applications shall be at approximately even intervals, with the rate per application to be evenly divided between each application with the total nitrogen applied not to exceed the maximum monthly rate. Use of Water Insoluble Nitrogen forms of nitrogen is encouraged.

Phosphorus and Potassium Recommendations for <u>Established</u> Turf
Apply phosphorus (P_2O_5) and potassium (K_2O) fertilizers as indicated by a soil test using the following guidelines:

Soil Test (VT) Rating	P_2O_5 lb/1000 ft^2	K_2O lb/1000 ft^2
L-	3	3
L	2.5	2.5
L+	2	2
M-	2	2
M	1.5	1.5
M+	1	1
H-	1	1
H	0.75	0.75
H+	0.5	0.5
VH	0	0

Avoid the general use of high phosphorus ratio fertilizers such as 10-10-10 or 5-10-10, unless soil tests indicate phosphorus availability below the M+ level.

Recommendations for Establishment of Turf
These recommendations are for timely planted turfgrass, that is, the seed or vegetative material (sod, plugs, and /or sprigs), are planted at a time of the year when temperatures and moisture are adequate to maximize turfgrass establishment. These recommended establishment periods would be late summer to early fall for cool-season turfgrasses and late spring through mid-summer for warm-season turfgrasses.

Nitrogen Application for Establishment of Turf
At the time of establishment, apply no more than 0.9 pounds per 1,000 ft2 of total nitrogen for cool season grasses or 1.0 pounds per 1,000 ft^2 of total nitrogen for warm season grasses, using a material containing slowly available forms of nitrogen, followed by one or two applications beginning 30 days after planting, not to exceed a total of 1.8 pounds per 1,000 ft^2 total for cool season grasses and 2.0 pounds per 1,000 ft^2 for warm season grasses for the establishment period. Applications of WSN cannot exceed more than 0.7 pounds per 1,000 ft^2 within a 30-day period.

Sod Installations:
Site preparation should include a soil test, which can be done several months before the project begins in order to have time to get test results back. Phosphorus, potassium and lime applications should be based on soil test analysis to increase the likelihood of a successful installation. Shallow incorporation of material into the top 2 inches of the soil is preferred prior to sod installation, especially if lime is required.

No more than 0.7 lb of WSN/1,000 ft^2 should be applied before sod is installed. Alternatively, using a slowly available forms of nitrogen, 0.9 lb N/1000 ft^2 for cool season grasses or 1 lb of N/1000 ft^2 for warm season grasses may be applied before sod installation.

After installation apply adequate amounts of water to maintain sufficient soil moisture (i.e. to prevent visible wilt symptoms). Excessive water will limit initial root development. After roots begin to establish (as verified by lightly tugging on the sod pieces), shift irrigation strategy to a deep and infrequent program in order to encourage deep root growth. Apply approximately 1 inch of water per week (either by rainfall or irrigation), making sure that the water is being accepted by the soil profile without running off. This will insure thorough wetting of the soil profile.

After sod has completed rooting and is well established, initiate the normal nitrogen management program as described for the appropriate use shall be recommended.

Phosphorus and Potassium Recommendations for Establishment of Turf

Soil Test (VT) Rating	P_2O_5 lb/1000 ft^2	K_2O lb/1000 ft^2
L-	4	3
L	3.5	2.5
L+	3	2
M-	3	2
M	2.5	1.5
M+	2	1
H-	2	1
H	1.5	0.75
H+	1	0.5
VH	0	0

Other Turf Management Considerations for State-owned Lands

Lime Recommendations
Lime should be recommended based on a soil test to maintain soil pH within an agronomic range for turfgrass.

For new seedings where lime is recommended, incorporate the lime into the topsoil for best results.

Returning Grass Clippings
Recycling of clippings on turf should be encouraged as an effective means of recycling nitrogen, phosphorus, and potassium. Proper mowing practices that ensure no more than 1/3 of the leaf blade is removed in any cutting event will enhance turf appearance and performance when clippings are returned. Return all leaf clippings from mowing events to the turf rather than discharging them onto sidewalks or streets. Rotary mulching mowers can further enhance clipping recycling by reducing the size of clippings being returned to the turfgrass canopy.

Management of Collected Clippings
If clippings are collected they should be disposed of properly. They may be composted or spread uniformly as a thin layer over other turf areas or areas where the nutrient content of the clippings can be recycled through actively growing plants. They should not be blown onto impervious surfaces or surface waters, dumped down stormwater drains, or piled outside where rainwater will leach out the nutrients creating the potential for nutrient loss to the environment.

Use of Iron
Foliar iron supplements may be used to stimulate a greening effect on the turfgrass as an alternative to additional applications of nitrogen. These applications are most beneficial if applied in late spring through summer for cool season grasses and in late summer through fall for warm-season grasses.

Impervious Surfaces
Do not apply fertilizers containing nitrogen or phosphorus to impervious surfaces (sidewalks, streets, etc.). DO NOT use urea as an ice melting substance in cold weather. Remove any granular materials that land on impervious surfaces by sweeping and collecting, and either put the collected material back in the bag, or spread it onto the turf and/or use a leaf blower etc., to return the fertilizer back to the turfgrass canopy.

Environmentally Sensitive Areas
Avoid fertilizer applications within 15 feet of waterways. This setback is reduced to 10 feet if a drop spreader, rotary spreader with deflector or targeted spray liquid is used to apply the fertilizer. The use of fertilizers with slow release nitrogen is greatly encouraged, especially where there is any reason to suspect environmental concerns.

Recordkeeping requirements and reporting for the application of fertilizer (2VAC5-405-100)
State-owned lands subject to this regulation shall maintain records of each application of fertilizer to non-agricultural land for at least three years following the application. These records shall be available for inspection. Each record shall contain the:

1. Name, mailing address of the application site;
2. Name of the person making or supervising the application;
3. Day, month, and year of application;
4. Weather conditions at the start of the application;
5. Acreage, area, square footage, or plants treated;
6. Analysis of fertilizer applied;
7. Amount of fertilizer used, by weight or volume; and
8. Type of application equipment used.

Spreader Calibration
Spreaders and boom sprayers must be properly calibrated if they are to deliver fertilizers and pesticides to turf at correct rates. If calibration is done incorrectly, the product may be misapplied and either too much or too little of the product will reach the turf. Sprayers and spreaders should be calibrated at first use and every fourth application. Spreaders and sprayers be calibrated in several ways. Refer to the following publication for detailed instructions:

www.turfgrass.ncsu.edu/Articles/admin/2008/Calibration_of_Turfgrass_Boom_Sprayers_and_Spreaders_(AG-628).pdf

6. Soil Reports

Report Number: 21-354-0876
Account Number: 06736

Waypoint ANALYTICAL
"Every acre...Every year."™

7621 Whitepine Road, Richmond, VA 23237
Main 804-743-9401 ° Fax 804-271-6446
www.waypointanalytical.com

Send To: SOIL HORIZONS
2 Whitakers Mill
WILLIAMSBURG VA 23185

Grower: Ft Monroe Authority
20 Ingalls Rd
Ft Monroe VA 23651

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 12/20/2021 **Date Of Analysis:** 12/21/2021 **Date Of Report:** 12/21/2021

Sample ID / Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
WQ	22651	2.2 L		83	36 M			60 L	88 L	1333 VH		6.8		0.2	7.8
NG	22652	3.2 M		99	71 H			79 L	118 L	1798 VH		7.0		0.0	10.2
HV	22653	3.0 M		100	99 H			42 VL	140 H	932 M		5.8	6.79	1.4	7.3
IF	22654	2.6 M		96	38 M			67 M	117 H	455 M		5.6	6.83	1.0	4.4

Sample ID / Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO_3 N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
WQ	2.0	9.4	85.4		2.6										
NG	2.0	9.6	88.1		0.0										
HV	1.5	16.0	63.8		19.2										
IF	3.9	22.2	51.7		22.7										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: Pauric Mc Groary

Pauric Mc Groary Ph.D., CPAg

Appendix H

Rules and Regulations

Fort Monroe Authority

Rules and Regulations

Adopted by the Fort Monroe Authority Board of Trustees

on February 17, 2022

pursuant to Virginia Code § 2.2-2340(B)

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Table of Contents

Authority

The Fort Monroe Authority Board of Trustees adopts these Rules and Regulations pursuant to the power granted by Code of Virginia § 2.2-2340(B):

"*(B) The Authority shall have the power and duty:*

. . .

19. *To adopt, amend or repeal, by the Board of Trustees, or the executive committee thereof, regulations concerning the use of, access to and visitation of properties under the control of the Authority in order to protect or secure such properties and the public enjoyment thereof, with any violation of such regulations being punishable by a civil penalty of up to $100 for the first violation and up to $250 for any subsequent violation, such civil penalty to be paid to the Authority;*

20. *To provide parking and traffic rules and regulations on property owned by the Authority; and*

21. *To provide that any person who knowingly violates a regulation of the Authority may be requested by an agent or employee of the Authority to leave the property and upon the failure of such person so to do shall be guilty of a trespass as provided in (Code of Virginia) § 18.2-119."*

Definitions

Whenever used in this document, the following terms, unless otherwise therein expressly defined, shall mean and include each of the meanings herein respectively set forth.

“Authority” or “FMA” shall mean the Fort Monroe Authority, a public body corporate and political subdivision of the Commonwealth established pursuant to Code of Virginia § 2.2-2336 *et seq*.

“Beach" shall mean any beach or shoreline area designated by the FMA.

"Bicycle Path" shall mean any path maintained for bicycles, including public roadways, the sidewalk adjacent to the Seawall, and the Boardwalk.

“Boardwalk” shall mean the concrete and asphalt surfaced area formerly known as Gulick Road running alongside the Chesapeake Bay from the Finger Pier to the Paradise Ocean Club.

"Camping" shall mean the installation or use of a tent, tent trailer, travel trailer, camping trailer, pick-up camper, motor homes or any other portable device or vehicular-type structure as may be developed, marketed or used for temporary living quarters or shelter during periods of recreation, vacation, leisure time, or travel.

“City” shall mean the City of Hampton, Virginia.

“Commonwealth” shall mean the Commonwealth of Virginia.

“Dawn” shall mean the time thirty (30) minutes before the time of sunrise each day as posted by the U.S. Naval Observatory in Washington, D.C.

“Dusk” shall mean the time thirty (30) minutes after the time of sunset each day as posted by the U.S. Naval Observatory in Washington, D.C.

“Emergency” shall mean any sudden, urgent, unexpected event, occurrence, or combination of circumstances that calls for immediate action or remedy in order to protect life or to prevent significant damage to the Property.

“Exhibition” shall mean any gathering with the intention of exhibiting, showing, displaying, or vending items to the public including, but not limited to, works of art or artisans, products of farm or factories, skilled performers, or other items of general interest.

"Foot Path or Trail" shall mean any path or trail maintained for pedestrians or disabled persons including sidewalks adjacent to public roadways, the sidewalk adjacent to the Seawall, and the former Gulick Road.

“Fort Monroe” shall mean the property in Hampton, Virginia also known as Old Point Comfort and formerly occupied as a garrison for the United States Army.

“Mobile Vendor” shall mean any person or business selling or distributing goods or services on foot or from a vehicle, trailer, or cart.

"Motor Vehicle" shall mean any vehicle by which a person travels which possesses a

motor or engine of any description used for propulsion or to assist in the propulsion of the vehicle including any trailer that is or can be towed behind a Motor Vehicle.

“NPS” shall mean the National Park Service.

“NPS Property” shall mean land at Fort Monroe owned by the United States Department of Interior and managed by the NPS.

“Other Federal Property” shall mean land at Fort Monroe owned by the United States Department of Defense and managed by the U.S. Army or the U.S. Coast Guard.

"Owner" shall mean any Person owning, leasing, operating, or having the exclusive use of a vehicle, animal or any other personal property under a lease or otherwise.

"Permit" shall mean any written license or permit issued by or under the authority of the FMA, permitting the performance of a specified act or acts.

"Person" shall mean any corporation, company, association, firm, an individual, proprietorship, partnership, joint venture, joint stock company, syndicate, business trust, estate, club, committee, organization, or group of persons acting in concert.

“Property” shall mean the real property at Fort Monroe owned by the Commonwealth and managed by the FMA. Property includes but is not limited to roadways, parking lots, historical and natural areas, and other areas owned by the Commonwealth and managed by the FMA. Property shall not include any premises subject to a ground lease, lease, license or other written agreement between the FMA and third party. Property shall not include the NPS Property or Other Federal Property.

“Resident” shall mean a person named as a party to a lease agreement with the FMA for a residential housing unit at Fort Monroe, and shall include immediate family members explicitly allowed to reside in the housing unit under the terms of the lease agreement.

“Riprap” shall mean the large stones, concrete, or other solid material used in place of stone placed along the edge of the Property to protect the Property from shoreline erosion including the large stones in the offshore breakwaters.

“Tenant” shall mean an employee of a business named as a party to a lease or license agreement with the FMA.

“Seawall” shall mean the concrete barrier structure installed by the U.S. Army Corps of Engineers that extends from the Chamberlin to the Finger Pier along the southern edge of the Property.

General Provisions

Purpose

The FMA is adopting these Rules and Regulations to (i) protect the nationally significant resources at Fort Monroe, (ii) provide for public enjoyment of Fort Monroe in an appropriate manner, (iii) establish a consistent policy of rules and regulations governing the use of Fort Monroe by the public, and (iv) provide a consistent policy for enforcement for any Person failing to comply with these Rules and Regulations.

Construction

In the interpretation of these Rules and Regulations, their provisions shall be construed as follows: (i) any terms in the singular shall include the plural; (ii) any term in the masculine shall include the feminine and the neuter; (iii) any requirements or prohibition of any act shall, respectively, extend to and include the causing or procuring, directly or indirectly of such act; (iv) no provision hereof shall automatically make unlawful any act necessarily performed by any law-enforcement officer as defined by Code of Virginia § 9.1-101 or employee of the FMA in line of duty or work as such, or by any Person, his agents or employees, in the proper and necessary execution of the terms of any agreement with the FMA; (v) any act otherwise prohibited by these Rules and Regulations, provided it is not otherwise prohibited by law, shall be lawful if performed under, by virtue of and strictly within the provisions of a FMA Permit to perform the act, and only to the extent authorized by the Permit, and (vi) these Rules and Regulations are in addition to and shall supplement Commonwealth laws, rules and regulations and applicable City ordinances, which are incorporated herein and made a part hereof.

These Rules and Regulations shall be effective within and upon all Property including roadways, parking lots, historical and natural areas, and other areas owned by the Commonwealth or which are under the management or control of the FMA and shall regulate the use thereof by all Persons.

Violations

In addition to the fines and penalties established in Code of Virginia § 2.2-2340(B), failure to comply with these Rules and Regulations and/or other applicable laws and regulations, may result in revocation of Permits, forfeiture of applicable fees and/or forfeiture of deposits paid. In addition, the FMA reserves the right to recover the cost to restore, repair, or replace any damage caused by any violation of these Rules and Regulations, including but not limited to restoration of damaged natural resources and/or damaged historic fabric of any kind.

Enforcement

In enforcing these Rules and Regulations, an employee or authorized agent of the FMA may photograph, videotape, and/or request identification from any Person violating any of the restrictions for the purposes of issuing fines and penalties permitted in Code of Virginia §§ 2.2-2340(B).

Permits

A Permit to do any act shall authorize the same only insofar as it may be performed in strict accordance with the terms and conditions of the permit. Any violation by its holders or his agents or employees of any term or condition of the permit shall constitute grounds for its revocation by the FMA, or by its authorized representative, whose action therein shall be final. In case of revocation of any Permit, all moneys paid for or on account thereof shall, at the option of the FMA, be forfeited to and be retained by the FMA, and the holder of such Permit, together with his agents and employees who violated such terms and conditions, shall be jointly and severally liable to the FMA for all damages and loss suffered by it in excess of money so forfeited and retained; but neither such forfeiture and retention by the FMA of the whole or any part of such moneys nor the recovery or collection thereby of such damages, or both, shall in any manner relieve such Person from punishment for any violation of any provision of these Rules and Regulations pursuant to Code of Virginia §2.2-2340(B).

The FMA may issue a Permit for activities otherwise prohibited in these Rules and Regulations. Permit applications may be obtained by contacting the FMA office at (757) 637-7778 or by emailing info@fortmonroe.org.

Conflicts

In the event of any conflict between these Rules and Regulations and the terms of any lease, license or other written agreement between the FMA and a third party, the terms of the lease, license of other written agreement shall prevail.

Exclusions

These Rules and Regulations are not applicable on NPS Property or Other Federal Property. Use and access to NPS Property and Other Federal Property are governed by the federal law, rules, and regulations including but not limited to the Code of Federal Regulations and the Superintendent's Compendium for the Fort Monroe National Monument which can be located at: www.nps.gov/fomr/learn/management.index.htm.

Additionally, these Rules and Regulations are not applicable to premises subject to a ground lease, lease, license or other written agreement between the FMA and third party.

Rules and Regulations

Advertising

No sign, notice, or advertisement of any nature shall be erected or posted at any place on the Property, nor shall any noise be made, for the purpose of attracting attention to any exhibition of any kind.

Alcoholic Beverages

State law allows alcoholic beverage consumption only in public areas designated by Permits issued by the Virginia Alcoholic Beverage Control Authority.

No Person shall drink or possess open containers of alcohol in any public place, public street, Foot Path or Trail, Bicycle Path, or Beach.

Alms, Solicitation, and Contributions

No Person shall solicit for alms, services, or contributions for any purpose on the Property.

Amplified Sound

Musical instruments, radios, phonographs, tape players, compact disc players, loud speakers, portable sound reproduction system, bullhorns, megaphones, or any other device used for the reproduction or amplification of sound, either inside or outside of a motor vehicle, shall not be operated on the Property. This prohibition shall not apply to small personal electronic devices such as Bluetooth speakers and headphones provided the level of sound is not plainly audible within fifty (50) feet of the sound source. Plainly audible shall mean detected by a person using his/her unaided hearing facilities. Specific words or phrases need not be discernible. The detection of bass reverberations is sufficient to constitute a plainly audible sound.

The operation of a public address system is prohibited, except in connection with a public gathering or special event for which a Permit which specifically authorizes such system has been issued by the FMA.

Animals at Large

No Person shall cause or permit any animal owned by them, in their custody, or under their control on the Property, except an animal restrained by a leash not exceeding six (6) feet in length, and each such animal found at large may be seized and disposed of as provided by the law or ordinance covering disposal of stray animals on highways or public property then in effect within the City.

No animal shall be left unattended by its Owner at any time.

Animals shall not be allowed on the Beaches between May 15th and September 15th, except for service or hearing dogs identifiable in accordance with Code of Virginia § 51.5-44 or successor statute.

The Person responsible for the animal is also responsible for the immediate removal and proper disposal of animal waste.

Artifacts and Antiquities

The Property at Fort Monroe is owned by the Commonwealth of Virginia and is therefore subject to the Virginia Antiquities Act (Code of Virginia § 10.1-2300 et seq.). The Virginia Antiquities Act prohibits damage to or removal of objects of antiquity from archaeological sites on all state-controlled lands. The statute prohibits all "relic hunting" or any archeological field investigations without a Permit issued by the FMA.

Aviation

No Person shall voluntarily bring, land or cause to ascend, descend or alight within or upon the Property, any airplane, remote control model aircraft, flying machine, model rocket, balloon, paraglider, parasail, glider, hang-glider, parachute or other apparatus for aviation. "Voluntarily" in this section shall mean anything other than an Emergency landing.

Bicycle Use

No Person shall use a bicycle or similarly manually or mechanically propelled devices in any area other than on public streets and on designated Bicycle Paths on the Property.

Electric, gas, or other mechanically propelled bicycles are prohibited on the sidewalk adjacent to the Seawall and on the Boardwalk.

Cyclists must yield and give right of way to pedestrians on shared access pathways including the sidewalk adjacent to the Seawall and the Boardwalk.

Cyclists must obey all traffic signs, lights, signals, and markings when riding on public streets.

Boating

Boating is permitted only in designated areas.

Boating of any kind in a swimming area is prohibited. This prohibition shall include the landing and launching of jet skis, paddleboards, kayaks, canoes, or other similar watercraft except in the event of an Emergency.

Camping

Camping is only permitted at the Colonies RV and Travel Park. Camping is not permitted in any other area of Fort Monroe.

Camping may be permitted on a limited basis and under a Permit issued by the FMA for living history groups in conjunction with FMA-sponsored activity for interpretive and/or educational purposes and for a conservation corps or other similar group for historic preservation, natural area restoration, or trail construction community work projects.

Charges

No Person shall make use of, gain admittance to, or attempt to use or gain admittance to the facilities at Fort Monroe for the use of which a charge is made by the FMA unless the Person shall pay the charge or price established by the FMA.

Commercial Enterprises

No Person shall, anywhere on the Property, sell or offer for sale, hire, lease or let out, any object or merchandise, property, privilege, service or any other thing, or engage in any business or erect any building, booth, tent, stall or any other structure whatsoever for a commercial purpose without a Permit issued by the FMA. Additional permits or licenses may be required by the City.

Commercial Vehicles

No Person shall operate a bus, taxicab or other commercial vehicle designed or used for the transportation of passengers on the Property, except for the arranged pickup or delivery to Residents, Tenants, or visitors.

Dangerous Activities, Fireworks Prohibited

No Person shall operate on the Property any device or undertake any activity which will cause a projectile to be loosed, thrown, or propelled which could injure a person or animal or damage property. Activities and devices restricted under this provision include, but are not limited to, the hitting of golf balls or other solid or dangerous objects, and the operation of a bow and arrow, crossbow, taser, spear, slingshot, or other such device designed for high-speed missile projection.

No Person shall bring, transport, launch, or ignite fireworks, firecrackers, black powder, or any other explosive material or pyrotechnic device on the Property.

Defacing of Public Buildings or Structures

No Person shall injure, deface, damage, disturb, destroy, disfigure, or alter the appearance or location of any public buildings, improvements, fixtures, or structures including, but

not limited to, walls, fences, signs, retaining walls, driveways, walkways, sidewalks, pavement, curbs, curbstones, street lamp posts, hydrants, trees, electric light or power poles, fire alarms, drinking fountains, boats, motor vehicles, trailers, statues and sculptures, garbage receptacles, or personal property found therein.

For the purposes of this section defacing shall include, but is not limited to, writing, tagging, marring, inscribing, etching, scratching, painting, or affixing of other markings or stickers to any building or structure.

Disposal of Refuse, Garbage, Etc.

No Person shall deposit in any part of Fort Monroe any garbage, sewage, refuse, waste, cigarette or cigar butts, vegetables, foodstuffs, boxes, cans, plastics, paper, or other litter or other waste material or obnoxious material, except in containers designed for such purposes. In the event containers are full or not available, the Person or Persons possessing the material shall remove it from the Property.

No Person shall transport bulk refuse or garbage onto the Property for disposal into dumpsters provided by the FMA for its use.

The discharge or disposal of human waste shall only be accomplished in the appropriate plumbing fixture in public restroom or portable toilet facilities.

Dressing and Undressing

Dressing and undressing that creates an indecent exposure or obscene sexual display (as set forth in Code of Virginia §18.2-387 or successor statute) is prohibited at Fort Monroe unless within a building or structure where the dressing and undressing is not visible to any member of the public.

No Person shall be deemed to be in violation of the provision for breastfeeding a child in any public place or any place where others are present.

Drones

No Person shall voluntarily bring, land or cause to ascend, descend, or alight within or upon the Property, any drone or similar device without a written Permit issued by the FMA. Any Person requesting a Permit to use a drone or similar device on the Property must possess all federal, state, and local permits and/or licenses and provide proof of insurance specifically covering the operation of the drone by the Person requesting the Permit. This restriction shall not apply to a drone operated by law enforcement, fire or Emergency response personnel acting within the scope of their authority.

Feeding of Wild Animals Prohibited

No Person shall feed wild animals on the Property.

Firearms

Firearms are permitted to be carried in the open areas of the Property to the extent permitted by, and in accordance with, federal, state, and local laws.

Firearms are prohibited inside federal and state buildings on the Property. This prohibition does not apply to law enforcement officers, authorized security personnel, or military personnel, when such individuals are authorized to carry a firearm in accordance with their duties.

Fires; Grills and Grilling

No Person shall kindle, build, maintain or use a fire other than in places provided or designated for such purposes at Fort Monroe. Any fire shall be continuously under the care and direction of a competent Person from the time it is kindled until any flame and embers are extinguished.

No Person shall bring or use a grill, fire pit, fire ring, fire table, or other similar device on the Property.

No Person within the confines of Fort Monroe shall throw away or discard any lighted match, cigarette, cigar, wood, charcoal, ash, or other burning object. Any lighted match, cigarette, cigar, charcoal, ash, or other burning object must be entirely extinguished before being discarded into a trash container. Discarding extinguished material anywhere other than in a trash container is prohibited.

Fires inconsistent with the above conditions may be permitted on a limited basis and under permission from the FMA for living history groups in conjunction with FMA-sponsored activity for interpretive and/or educational purposes.

Grills supplied by the FMA in picnic or camping areas may be used provided a competent Person continuously monitors the grill from the time it is kindled until any flame or embers are completely extinguished.

Fireworks Prohibited

No Person shall bring, transport, launch, or ignite fireworks, firecrackers, black powder, or any other explosive material or pyrotechnic device on the Property.

Fishing

The taking of fish by hook and line, the taking of bait fish by cast net, and crabbing by line and net are only permitted on the Engineer's Wharf and the Finger Pier, and upon the docks of the Old Point Comfort Marina (OPCM) by Persons holding a valid slipholder license with the OPCM operator.

The hours of operation for the Engineer's Wharf and Finger Pier are Dawn to Dusk daily.

Any Persons taking fish by hook and line must have a state fishing license required by law and comply with the applicable Virginia Department of Wildlife Resources or Virginia Marine Resources Commission rules and regulations.

This is intended to be a complete list of authorized fishing activities and locations on the Property and FMA does not allow fishing in other locations or other activities requiring fishing licenses such as bow-fishing or the taking of amphibians, which is prohibited.

Flowers, Trees, Plants, Lawns, Minerals, Etc.

No Person shall remove, destroy, cut down, scar, mutilate, injure, take or gather in any manner any flower, tree, fern, shrub, lawn, or onto part thereof, or any rock, historical artifact, or mineral on or from the Property unless a Permit has been issued by the FMA for scientific collecting.

Foot Path or Trail Use

Persons shall only walk upon walking paths, walking trails, or other improved surfaces on the Property designated for walking unless participating in FMA sanctioned or permitted activities.

Walking or climbing on grass covered walls and slopes of the historic fortress in ways that damage the historic or visual integrity of the walls and slopes is prohibited.

Gatherings and Public Events

No Person shall organize, plan, host, promote, engage, or execute any public events without a Permit issued by the FMA. A "public event" shall be defined as any announced gathering of people where one or more of the following conditions apply: (1) 10 or more people are in attendance, (2) the event is advertised or promoted by any means, (3) the event is open to the public regardless of whether tickets are required, or (4) the event causes a disruption in regular daily operations or casual use of any space on the Property.

Any other event may be deemed a public event by the FMA after consultation with the appropriate stakeholders.

Geo Caching / Letter Boxing

Geocaching is prohibited throughout the Property. Letter Boxing is prohibited on the Property unless authorized by a Permit issued by the FMA.

Golf Carts, Utility Vehicles and All-Terrain Vehicles (ATVs)

The operation of golf carts, utility vehicles, and all-terrain vehicles is prohibited on the public streets, sidewalks, Foot Paths and Trails, and Bicycle Paths on the Property.

This restriction shall not apply to FMA employees and contractors; law enforcement officers, fire and Emergency response personnel acting within the scope of their authority; and City employees in the performance of their City-assigned duties.

Ground Disturbance

No Person shall perform any ground disturbing activities including digging, spading, hoeing, or any similar activity without a ground disturbance Permit issued by the FMA. For the purpose of this document, the installation of stakes of any kind and the installation of signs that penetrate into the soil shall be a prohibited ground disturbance without the issuance of a Permit.

Horseback Riding

Horseback riding is prohibited on the Property.

Hours of Operation

No Person shall be allowed on Fort Monroe between the hours of 12 a.m. and 5 a.m. unless participating in FMA sanctioned or permitted activities.

This restriction shall not apply to Residents and their guests; Tenants and their employees; FMA employees and contractors; law enforcement officers, fire and Emergency response personnel acting within the scope of their authority; and City employees in the performance of their City-assigned duties.

Hunting

No Person within the confines of Fort Monroe shall collect, hunt, pursue, trap, shoot, injure, kill or molest in any way any bird or animal without a Permit issued by the FMA. Mosquitos, ticks, and similar pests are exempted from this prohibition.

Meetings and Exhibitions

No Person shall erect any structure, stand or platform on the Property, or hold any meeting, or exhibition, perform any ceremony, or make any speech or address on the Property if it limits or impacts the ability of the general public to utilize the Property for the purposes for which it was established, may cause injury or damage to Property resources, or impairs the operation of Property facilities or delivery of services without a Permit issued by the FMA.

Memorialization

The installation of a monument, memorial, tablet, structure, or other commemorative installation on the Property without a Permit issued by the FMA is prohibited.

The scattering of human ashes from cremation is prohibited, except pursuant to the terms and conditions of a Permit issued by the FMA.

Metal Detectors Prohibited

No Person may utilize mineral or metal detectors, magnetometer, side-scan sonar, or other metal detecting device, or sub-bottom profiler on the Property at any time for any reason.

Moat Access Prohibited

No Person may enter into or upon the moat waters around the stone fortress to swim, fish, crab, boat, kayak, or perform any other activities.

Mobile Vendor; Permit Required

No Person may operate a business establishment selling or distributing goods or services on foot or from a vehicle, cart, or trailer on the Property without a Mobile Vendor Permit issued by the FMA.

Motor Vehicles; Where Prohibited

No Person shall drive or operate a Motor Vehicle within or upon a sidewalk, Foot Path or Trail, Bicycle Path, or any part of the Property not designated for, or customarily used by Motor Vehicles, except properly authorized individuals engaged in Emergency response, fire control, maintenance, or other related activities. For the purpose of this section, motorized skateboards, scooters and similar devices are considered Motor Vehicles. This prohibition shall not apply to the use of powered mobility aids such as electric wheelchairs used by Persons with disabilities.

Motor Vehicle Maintenance

No Person shall repair, clean, wax or otherwise maintain a Motor Vehicle on the Property.

In no case shall anyone discharge or cause to be discharged hazardous substances, including but not limited to, fuel, antifreeze, motor oil, soap or detergent onto the Property or into in any storm sewer or drain flowing into the moat surrounding the Inner Fort or the water surrounding Fort Monroe.

Obstructing Traffic

No Person shall cause or permit a vehicle to obstruct traffic on the Property by unnecessary stopping in a public roadway, service road, or alley, except for a reasonable time to receive or discharge passengers or to load or unload deliveries. This restriction shall not apply to FMA employees and its contractors; law enforcement officers, fire and Emergency response personnel acting within the scope of their authority; and City employees, agents, or assigns in the performance of their City-assigned duties.

Paranormal Activities

Paranormal investigations and activities are prohibited on the Property.

Parking

No Owner or driver shall cause or permit a vehicle to park anywhere in the Property outside of designated public parking spaces, except for a reasonable time on public roadways to receive or discharge passengers or to load or unload deliveries.

Motor vehicles may not be parked overnight without the express written permission of the FMA. Motor vehicles left over night in violation of this regulation may be ticketed and/or towed. This restriction on overnight parking shall not apply to Residents and their guests, Tenants, or Persons holding a valid slipholder license with the OPCM operator.

Recreational vehicles, buses, boat trailers, and other similar vehicles may only be parked in designated areas.

Picnicking

Picnicking is allowed only in designated picnic areas.

Photography and Filming

All commercial photography and filming activities on the Property are prohibited without a Permit issued by the FMA.

Non-commercial filming may require a Permit, when necessary, to protect Property resources while minimizing conflict between user groups or to ensure public safety.

In most cases, a Permit is not necessary for visitors engaging in casual, non-commercial filming or photography.

Planting or Release of Seeds or Spores

No Person shall plant any plant or release or cause to be released onto the Property any plant or fungus seeds or spores without the express written permission of the FMA.

Pollution of Waters

No Person shall bathe dogs or other animals, wash vehicles or clothing, or throw, cast, lay, drop, leave, or discharge onto the Property or into the moat surrounding the Inner Fort, the waters surrounding Fort Monroe, or any storm sewer or drain flowing into said waters, any substance, matter or thing, liquid or solid, which may or shall result in the pollution of said waters.

Possession or Release of Animals or Wildlife on the Property Prohibited

No Person shall harbor, possess, or release animals or wildlife captured or propagated elsewhere on the Property, nor shall any Person have any wild bird or wild animal in his possession within Fort Monroe.

Protection of Natural, Cultural, and Archeological Resources

Walking on, climbing, entering, ascending, descending, traversing, or damaging an archeological or cultural resource, structure, building, monument, or statue, is prohibited except in designated areas and under certain conditions established by a Permit issued by the FMA.

Riprap Off Limits

Walking on, climbing, ascending, descending, or traversing on or over the Riprap is prohibited, except in the event of an Emergency.

Seawall Off Limits

Walking on, climbing, ascending, descending, jogging, crawling, exercising, or traversing on or over the Seawall is prohibited, except in the event of an Emergency.

Skateboards and Similar Devices; Where Permitted

The riding of skateboards, roller skates, roller skis, roller blades, scooters or other similar devices is restricted to public roadways, the Boardwalk, parking lots and sidewalks including the sidewalk adjacent to the Seawall. Skateboards are prohibited on all other areas of the Property.

Persons are prohibited from riding these devices onto or off of steps, ramps, inclines, stairs, railings, benches, or any other appurtenances of buildings and structures.

The towing of Persons on skateboards, roller skates, roller skis, roller blades, scooters or other similar devices by bicycle or motor vehicle is prohibited on the Property.

Smoking

Smoking is prohibited in any building owned by the Commonwealth and managed by the FMA.

No Person shall smoke within twenty-five (25) feet of any public entrance to a building or in any structure or place where smoking is prohibited.

Smoking may be forbidden by the FMA or its authorized agent in any part of the Property by the posting of signage informing the public of the restriction.

Sports and Games; Where Permitted

No organized sports games or athletic contests shall be allowed on the Property except in such places designated therefor.

Swimming; Where Permitted

No Person shall bathe, wade or swim in any waters at Fort Monroe except at such times, and in such places, as the FMA may designate as swimming areas, and unless so covered with a bathing suit so as to prevent any indecent exposure (as set forth in Code of Virginia §18.2-387 or successor statute) of the Person.

Swimming shall be at the risk of the Person entering the water, even if a lifeguard is on duty at the time, and FMA and its officers, employees, agents and trustees shall have no liability for any death or injury resulting therefrom.

Swimming, bathing, or wading are permitted in designated swimming areas from Dawn to Dusk daily.

Winter Activities

Skiing, snowshoeing, ice skating, sledding, inner tubing, tobogganing, and similar winter sports are prohibited on or across the public roads and in parking areas open to motor vehicle traffic. Sleds or toboggans shall not be used on the sloped portions of the fortress.

The towing of Persons on skis, sled, or other similar device by motor vehicle or snowmobile is prohibited on the Property.

No Person shall go upon ice covering any body of water on the Property for any reason. This restriction shall not apply to law enforcement officers or fire and Emergency response personnel acting within the scope of their authority.

Appendix I

MS4 Training Plan

Fort Monroe Authority MS4 Permit Training Plan

1. Illicit Discharge Identification Training - Must occur not less than once per 24 months for each employee monitoring discharges			
Employee Name	**Affiliation**	**Training Date**	
Parker Campbell	Veolia	2022	
Melissa King	Veolia	2022	
Jay Eason	Veolia	2022	
Parker Campbell	Veolia	2023	
Jay Eason	Veolia	2023	
2. Pavement Maintenance Pollution Prevention Training - Must occur not less than once per 24 months			
Employee Name	**Affiliation**	**Training Date**	
Cold patch asphalt is used for pothole repairs at Fort Monroe and larger repairs are contracted with a third party - private company. Veolia employees are trained in general pollution prevention in accordance with Veolia policies.			
3. Good Housekeeping and Pollution Prevention Training - Must occur not less than once per 24 months			
Employee Name	**Affiliation**	**Training Date**	
Jorge Delgado	James River Grounds Management	2023	
David Little	James River Grounds Management	2023	
Antonio Malicott	James River Grounds Management	2023	
Michael Hunt	James River Grounds Management	2023	
Rene Davila	James River Grounds Management	2023	
Antonino Betancourt	James River Grounds Management	2023	

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Jose Garcia	James River Grounds Management	2023	
Parker Campbell	Veolia	2023	
Jay Eason	Veolia	2023	
Pamela Burcher	Veolia	2023	
Michael Woods	Veolia	2023	
Sean Fisher	Veolia	2023	
4. Pesticide and Herbicide Applicator Training and Certification			
Employee Name	**Affiliation**	**Expiration Date**	
Jorge Delgado	James River Grounds Management	6/30/2024	
Antonio Mallicott	James River Grounds Management	6/30/2024	
Antonio Ontireros	James River Grounds Management	6/30/2024	
David Litke	James River Grounds Management	6/30/2025	
Julian Scott	James River Grounds Management	6/30/2023	
5. Virginia Erosion and Sediment Control and Stormwater Management Program Training			
ESC Program Administrator	**Affiliation**	**Expiration Date**	
Gary Miller	FMA	11/30/2024	
John Hutcheson	FMA	11/30/2024	
SWM Program Administrator	**Affiliation**	**Expiration Date**	
Vacant	FMA		
ESC Plan Review	**Affiliation**	**Expiration Date**	
Gary Miller	FMA	11/30/2024	
John Hutcheson	FMA	11/30/2024	
SWM Plan Review	**Affiliation**	**Expiration Date**	

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None to date - Contract Support			
ESC Inspection	**Affiliation**	**Expiration Date**	
Gary Miller	FMA	11/30/2024	
SWM Inspection	**Affiliation**	**Expiration Date**	
None to date - Contract Support			
6. Other Certifications			
Certification Name	**Employee**	**Affiliation**	**Expiration Date**
Petroleum Tank Class A/B Operator	William Stroud	FMA	8/7/2023
Petroleum Tank Class A/B Operator	Jon Matthews	OPCRES	11/9/2022
Petroleum Tank Class A/B Operator	Rhonda Williams	OPCRES	2/3/2023
Petroleum Tank Class A/B Operator	Michael Woods	Veolia	11/7/2022
7. Emergency Response Training			
The Hampton Fire Department provides emergency response services to the Fort Monroe Authority			