



**COMMONWEALTH of VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.: VA0088617  
 Effective Date: January 16, 2024  
 Expiration Date: January 15, 2029

**AUTHORIZATION TO DISCHARGE UNDER THE  
 VIRGINIA STORMWATER MANAGEMENT PROGRAM AND THE VIRGINIA STORMWATER MANAGEMENT ACT**

Pursuant to the Clean Water Act as amended and the Virginia Stormwater Management Act and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in this state permit.

Permittee: Henrico County  
 Facility Name: Henrico County Municipal Separate Storm Sewer System  
 County Location: Henrico County is 244 square miles in area and is bordered by the James River and the City of Richmond to the south, Goochland County and Tuckahoe Creek to the west, the Chickahominy River and Hanover County to the north, and the counties of New Kent and Charles City to the east.

The owner is authorized to discharge from municipal-owned or operated storm sewer outfalls to the surface waters in the following watersheds:

Receiving Waters and Watersheds:	Stormwater from Henrico County discharges into fifteen 6 <sup>th</sup> order hydrologic units:  James River-Almond Creek (JL01) James River Proctors Creek (JL03) Fourmile Creek (JL04) Turkey Island Creek (JL05) James River-Curles Creek (JL06) Chickahominy River-Grassy Swamp Creek (JL16) Chickahominy River-Stony Run (JL17) Upham Brook (JL18)  Chickahominy River-Powwhite Creek (JL19) Chickahominy River-Higgins Swamp (JL20) White Oak Swamp (JL21) Chickahominy River-Toe Ink Swamp (JL22) Tuckahoe Creek (JM84) James River-East Branch Tuckahoe Creek (JM85) James River-Little Westham Creek (JM86)
River Basins:	James River – Lower and Middle
Sections:	1, 1o, 1p, 2, 4, 4a, 6, 9, 9a
Classes:	II, III, VII
Special Standards:	PWS, m, n, o, bb

The authorized discharge shall be in accordance with this cover page, Part I – Authorization, Effluent Limitations and Monitoring Requirements, Part II – BMP Warehouse Reporting and Part III - Conditions Applicable to All VPDES MS4 Permits, as set forth herein.

Director of Water Permitting,  
 Department of Environmental Quality

01/12/2024  
 Date

**PART I-AUTHORIZATION, EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**A. DISCHARGES AUTHORIZED UNDER THIS STATE PERMIT**

**1. Authorized Discharges**

- a) This state permit authorizes the discharge of stormwater from all existing and new municipal separate stormwater point source discharges to surface waters from the Municipal Separate Storm Sewer System (MS4) owned or operated by the Henrico County in Virginia, including Henrico County Public Schools.
- b) The following discharges, whether discharged separately or commingled with municipal stormwater, are also authorized by this state permit for discharge through the MS4:
  - 1) Non-stormwater discharges and stormwater discharges associated with industrial activity (defined at 9VAC25-31-10) that are authorized by a separate Virginia Pollutant Discharge Elimination System (VPDES) permit;
  - 2) Discharges from construction activities that are regulated under the Virginia Stormwater Management Program (VSMP) (9VAC25-870 *et seq.*) and authorized by a separate VSMP authority permit or state permit; and
  - 3) The following non-stormwater discharges unless the Department or the permittee determines the discharge to be a significant source of pollutants to surface waters:
    - (a) water line flushing, managed in a manner to avoid an instream impact;
    - (b) landscape irrigation;
    - (c) diverted stream flows;
    - (d) rising ground waters;
    - (e) uncontaminated ground water infiltration (as defined at 40 CFR Part 35.2005(20));
    - (f) uncontaminated pumped ground water;
    - (g) discharges from potable water sources managed in a manner to avoid instream impact;
    - (h) foundation drains;
    - (i) air conditioning condensation;
    - (j) irrigation water;
    - (k) springs;
    - (l) water from crawl space pumps;
    - (m) footing drains;
    - (n) lawn watering;
    - (o) individual residential car washing;
    - (p) flows from riparian habitats and wetlands;

- (q) dechlorinated freshwater swimming pool discharges managed in a manner to avoid instream impact;
  - (r) street and pavement wash waters that do not contain cleaning additives or otherwise managed in a manner to avoid instream impact;
  - (s) routine external building wash down provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge;
  - (t) discharges or flows from emergency firefighting activities; and
  - (u) discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with § 9.1-207.1 of the Code of Virginia; or
  - (v) discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners in accordance with §12.2-2114.1 of the Code of Virginia:  
or
  - (w) other activities generating discharges identified by the Department as not requiring VPDES authorization.
- 4) Materials from a spill are not authorized unless the discharge of material resulting from a spill is necessary to prevent loss of life, personal injury, or severe property damage. The permittee shall take, or require the responsible party to take, all reasonable steps to minimize or prevent any adverse effect on human health or the environment in accordance with the permittee's program under Part I.B.2.f). (Spill Prevention and Response). This state permit does not transfer liability for a spill itself from the party(ies) responsible for the spill to the permittee nor relieve the party(ies) responsible for a spill from the reporting requirements of 40 CFR Part 117 and 40 CFR Part 302. The permittee is responsible for any reporting requirement listed under Part III.G of this state permit.

## **2. Permittee Responsibilities**

This state permit establishes the specific requirements applicable to the permittee for the term of this state permit. The permittee is responsible for compliance with this state permit. The permittee shall implement and update the MS4 Program Plan (as set forth in Part I.B) to ensure compliance with this state permit. The Department has determined that implementation of the MS4 Program Plan reduces the discharge of pollutants to the maximum extent practicable. Where wasteloads have been allocated for pollutant(s) of concern in an approved Total Maximum Daily Load (TMDL), the permittee shall implement the special conditions as set forth in Part I.D of this state permit. Compliance with the requirements of this state permit shall also constitute adequate progress for this permit term towards complying with the assumptions and requirements of the applicable TMDL wasteload allocations such that the discharge does not cause or contribute to violations of the water quality standards.

The permittee shall clearly define the roles and responsibilities of each of the permittee's departments, divisions or subdivisions in maintaining permit compliance. If the permittee relies on another party to implement portions of the MS4 Program Plan, both parties must document the agreement in writing. The agreement shall be retained by the permittee with the MS4 Program Plan. Roles and responsibilities shall be updated as necessary. Where the permittee relies on another party to implement a portion of this state permit, responsibility for compliance with this state permit shall remain with the permittee.

In the event the permittee is unable to meet conditions of this state permit due to circumstances beyond the permittee's control, a written explanation of the circumstances that prevented permit compliance shall be submitted to the Department in the annual report. Circumstances beyond the permittee's control may include abnormal climatic conditions; weather conditions that make certain requirements unsafe or impracticable; or unavoidable equipment failures caused by weather conditions or other conditions beyond the reasonable

control of the permittee (operator error and failure to properly maintain equipment are not conditions beyond the control of the permittee). The failure to provide adequate program funding, staffing or equipment maintenance shall not be an acceptable explanation for failure to meet permit conditions. The Department will determine, at its sole discretion, whether the reported information will result in an enforcement action. In addition, the permittee must report noncompliance which may adversely affect surface waters or endanger public health in accordance with Part III.I.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a current list of roles and responsibilities.**
- **Each annual report shall include a list of all circumstances of non-compliance outside of the permittee's control.**

**3. Legal Authority**

The permittee shall maintain and utilize its legal authority authorized by the Commonwealth of Virginia to control discharges to and from the MS4 in the manner established by the specific requirements of this state permit. The legal authority shall enable the permittee to:

- a) Control the contribution of pollutants to the MS4;
- b) Prohibit illicit discharges to the MS4;
- c) Control the discharge of spills and the dumping or disposal of materials other than stormwater (e.g., industrial and commercial wastes, trash, used motor vehicle fluids, leaf litter, grass clippings, animal wastes, etc.) into the MS4;
- d) Require compliance with conditions in ordinances, permits, contracts, inter-jurisdictional agreements, or orders; and
- e) Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the MS4.

The permittee shall review and update its ordinances and other legal authorities such as permits, orders, contracts, and inter-jurisdictional agreements as necessary to continue providing adequate legal authority to control discharges to and from the MS4.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall provide a list of any updates to applicable ordinances, permits, orders, contracts, and/or agreements performed over the reporting year.**

**4. MS4 Program Resources**

The permittee shall submit to the Department a copy of the permittee's fiscal year's budget including its proposed capital and operation and maintenance expenditures necessary to accomplish the activities required by this state permit. The permittee shall describe its method of funding the stormwater program with the copy of the fiscal year budget.

**SPECIFIC REPORTING REQUIREMENTS:**

- **A copy of the permittee's fiscal year's budget including its proposed capital and operation and maintenance expenditures necessary to accomplish the activities required by this state permit shall be submitted with each annual report.**

**5. Permit Maintenance Fees**

Permit maintenance fees shall be paid in accordance with Part XIII of the VSMP regulations (9VAC25-870-700 *et seq.*).

**SPECIFIC REPORTING REQUIREMENTS:**

- **A statement regarding payment of the applicable MS4 permit maintenance fee shall be included with each annual report.**

**6. MS4 Program Plan**

The permittee shall maintain, implement and enforce an MS4 Program Plan accurately documenting the MS4 Program including all additions, changes and modifications. For the purposes of this state permit, the MS4 Program Plan is considered a single document, but may consist of separate documents (e.g., dry weather screening plans, wet weather monitoring plans, TMDL Action Plans, annual reports). Policies, ordinances, strategies, checklists, watershed plans and other documents may be incorporated by reference provided the latest revision date is included in the MS4 Program Plan and all documents are available upon request. Specific reference shall be made to any ordinance more stringent than the Virginia Stormwater Management Act (§62.1-44.15:24 *et seq.*) and VSMP regulations (9VAC25-870 *et seq.*), the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 *et seq.*) and Regulations (9VAC25-840 *et seq.*) and the Chesapeake Bay Preservation Act (§ 62.1-44.15:67 *et seq.*) and Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830 *et seq.*).

The permittee shall update the MS4 Program Plan annually and the most up-to-date version of the MS4 Program Plan shall be posted on the permittee's website within 30 days of updating the MS4 Program Plan.

The most recent MS4 Program Plan shall be maintained on the permittee's website and provided in at least one other location easily accessible to the public.

**SPECIFIC REPORTING REQUIREMENTS:**

- **The annual report shall include a summary of any updates to the MS4 Program Plan made during the reporting year.**

**7. MS4 Program Review and Updates**

**MS4 Program Review:** The permittee will review the current MS4 Program Plan annually, in conjunction with the preparation of the annual report required under Part I.E of this state permit.

a) **MS4 Program Updates and Modifications:**

Modifications to the MS4 Program Plan are expected throughout the life of this state permit as part of the iterative process to reduce pollutant loading and protect water quality. As such, modifications made in accordance with this state permit as a result of the iterative process do not require modification of this state permit unless the Department determines the changes meet the criteria referenced in 9VAC25-870-630 or 9VAC25-870-650.

Updates and modifications to the MS4 Program Plan may be made during the life of the permit in accordance with the following procedures:

- 1) Adding (but not eliminating or replacing) components, controls, or requirements to the MS4 Program Plan may be made by the permittee at any time. Additions shall be reported as part of the annual report.
- 2) Updates and modifications to specific standards and specifications, schedules, operating procedures, ordinances, manuals, checklists and other documents routinely evaluated and modified

are authorized under this state permit provided that the updates and modifications are performed in a manner (i) that is consistent with the conditions of this state permit, (ii) that ensure public notice and participation requirements established in this state permit are followed, and (iii) that the updates and modifications are documented in the annual report.

- 3) Replacing, or eliminating without replacement, any ineffective or infeasible strategies, policies and Best Management Practices (BMPs) specifically identified in this state permit with alternate strategies, policies and BMPs may be requested at any time. Such requests shall include the following:
  - (a) An analysis of how and/or why the BMPs, strategies, or policies are ineffective or infeasible including information on whether the BMPs, strategies, or policies are cost prohibitive;
  - (b) Expectations on the effectiveness of the replacement BMPs, strategies, or policies;
  - (c) An analysis of how the replacement BMPs are expected to achieve the goals of the BMPs to be replaced;
  - (d) A schedule for implementing the replacement BMPs, strategies and policies; and
  - (e) An analysis of how the replacement strategies and policies are expected to improve the permittee's ability to meet the goals of the strategies and policies being replaced.

Requests or notifications shall be made in writing to the Department and signed in accordance with 9VAC25-870-370 of the VSMP regulations. Modification to the MS4 Program Plan shall become effective and enforceable upon written approval from the Department. Major modifications to the MS4 Program Plan as defined in 9VAC25-870-10 may require that the permit be reopened and modified pursuant to 9VAC25-870-630.

b) ***MS4 Program Updates Requested by the Department of Environmental Quality:***

In a manner and following procedures in accordance with the Virginia Administrative Processes Act, the VSMP regulations and other applicable State laws, statutes and regulations, the Department may request changes to the MS4 Program Plan to assure compliance with the statutory requirements of the Virginia Stormwater Management Act and associated regulations and to:

- 1) Address impacts on receiving water quality caused by discharges from the MS4;
- 2) Include more stringent requirements necessary to comply with new State or Federal statutory or regulatory requirements; or
- 3) Include such other conditions necessary to comply with State or Federal statutory or regulatory requirements.

Proposed changes requested by the Department shall be made in writing and set forth the basis for and objective of the modification as well as the proposed time schedule for the permittee to develop and implement the modification. The permittee may propose alternative program modifications and/or time schedules to meet the objective of the requested modification, but any such modifications are at the discretion of the Department.

**SPECIFIC REPORTING REQUIREMENTS:**

- **All modifications and proposed modifications shall be reported in accordance with this section of the permit.**

**B. STORMWATER MANAGEMENT**

The following subparts describe the requirements for the permittee to implement in its MS4 Program during this state permit term:

## 1. Planning

No later than 12-months after the effective date of this state permit, the permittee shall submit to the Department a stormwater retrofit project summary of potential stormwater management projects to be completed during the term of the permit. Projects addressing stormwater quantity may be included if there is a water quality benefit to the project. At a minimum, the permittee shall address the following for each project in the summary: type of project or BMP, number of acres which the BMP treats, impervious and pervious acreage treated by the potential project, condition of the downstream channel, amount of total pollutant reduction, feasibility for implementation, and estimated cost of implementation. The summary shall include a prioritized list of the identified projects for consideration of implementation.

The permittee shall continue to seek public comment in development of the plans. A copy of the completed plans shall be placed on the permittee's website no later than 30 days after any updates are made.

### **SPECIFIC REPORTING REQUIREMENTS:**

- **The permittee shall provide the Department a current web link to stormwater management projects no later than 12 months after the effective date of this state permit.**

## 2. MS4 Program Implementation

### a) ***Construction Site Runoff and Post Construction Runoff from Areas of New Development and Development on Prior Developed Lands***

- 1) The permittee shall implement a local erosion and sediment control program consistent with the Virginia Erosion and Sediment Control Law § 62.1-44.15:51 of the Code of Virginia and Virginia Erosion and Sediment Control Regulations 9VAC25-840 *et seq.* and a stormwater management program consistent with the Virginia Stormwater Management Act § 62.1-44.15:24 of the Code of Virginia and Virginia Stormwater Management Program Regulations 9VAC25-870 *et seq.*
- 2) The permittee shall identify in the MS4 Program Plan all legal authorities for erosion and sediment control and stormwater management that are more stringent than those required under 9VAC25-840 *et seq.* and/or 9VAC25-870 *et seq.* that have been adopted in accordance with § 62.1-44.15:65 and/or § 62.1-44.15:33 of the Code of Virginia.

### **SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall contain the number of regulated land disturbing activities approved and the total number of acres disturbed.**
- **Each annual report shall contain the number of land disturbing activity inspections conducted and the number and type of each enforcement action taken.**
- **The initial annual report shall include the permittee's strategy to address maintenance of stormwater management controls that are designed to treat stormwater runoff solely from the individual residential lot on which they are located.**
- **The initial annual report shall include a list of all known land disturbing projects that qualify under the 'Grandfathering' provision of the VSMP regulations found at 9VAC25-870-48.**
- **Each annual report shall include a summary of actions taken by the permittee to implement Part I.B.2.a)1) and 2) of this state permit.**

b) ***Retrofitting on Prior Developed Lands***

From the list of stormwater management projects included in the analysis required in Part I.B.1, the permittee shall complete at least eight (8) projects no later than the expiration date of this state permit. Projects implemented to meet the requirements of Part I.D of this state permit (TMDL Action Plan and Implementation for the Chesapeake Bay Special Condition or TMDL Action Plans other than the Chesapeake Bay TMDL) may be used to meet the requirements of this special condition.

For retrofit projects that do not serve to meet the requirements of Part I.D, the permittee shall submit a summary of projects implemented during the reporting period with each annual report including type of land use being retrofitted, retrofit performed, completion date or anticipated completion date, total acreage retrofitted, total impervious and pervious acreage, and location by latitude and longitude (in decimal degrees).

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a status update for those projects for which implementation began during the reporting period.**

c) ***Roadways*** Streets, roads, and parking lots maintained by the permittee shall continue to be operated and maintained in a manner to minimize discharge of pollutants, including those pollutants related to deicing or sanding activities.

- 1) The permittee shall continue to implement its street cleaning program and shall either (a) develop and implement street cleaning program with metrics documenting implementation of a street cleaning program to clean the highest achievable lane miles based on current resources and historical records for approval by the department within 12 months or (b) clean a minimum of 20% of permittee owned or maintained street lane miles with curb and gutter during each reporting year reaching the equivalent of 100% of permittee owned or maintained street lane miles by the end of the permit term.
- 2) The permittee shall maintain an accurate list of permittee-maintained roads, streets, and parking lots that includes the street name, the miles of roadway not treated by BMPs, and miles of roadway treated with BMPs.
- 3) The permittee shall implement written protocols for permittee-maintained road, street, and parking lot maintenance, equipment maintenance, and material storage designed to minimize pollutant discharge.
- 4) Within 24 months of permit issuance, the permittee shall develop or review and update, if necessary, its existing procedures for snow and ice management, as well as identify opportunities to implement best management practices that promote efficient management and application of anti-icing and deicing agent applications to any permittee-maintained parking lots, roadways, and sidewalks or other paved surfaces.
- 5) Materials utilized for deicing and sanding activities shall remain covered from precipitation until application.
- 6) The permittee shall not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks or other paved surfaces.

**SPECIFIC REPORTING REQUIREMENTS:**

- **The permittee shall include a description of the permittee's street cleaning program including the total number of miles, the number of miles cleaned each year and the total cleaned cumulatively since permit issuance in each annual report.**



- **The permittee shall include an updated version of the written protocols identified in Part I.B.2.c)2) if any changes are made during the reporting year.**
- d) ***Pesticide, Herbicide, and Fertilizer Application*** The permittee shall continue to control the discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied to permittee rights of way, parks, and other permittee property, as follows:
- 1) The permittee shall implement and maintain current turf and landscape nutrient management plans that have been developed by a certified 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. Nutrient management plans shall be submitted to the Department of Conservation and Recreation (DCR) for approval no later than 30 days prior to plan expiration. No nutrient management plans maintained by the permittee shall be considered expired while DCR is reviewing the plan for approval:
    - (a) The permittee shall maintain a list of all permittee lands where nutrients are applied to a contiguous area of more than one acre (including latitude and longitude).
    - (b) The permittee shall track and annually report the following:
      - (1) The total acreage of permittee lands upon which nutrients are applied and controlled using general County guidelines or standard operating procedures;
      - (2) The acreage of permittee lands where turf and landscape nutrient management plans are required (including any new lands added in the reporting year); and
      - (3) The acreage of permittee lands covered by current turf and landscape nutrient management plans.
  - 2) The permittee shall continue to employ good housekeeping/pollution prevention measures in the application, storage, transport and disposal of pesticides, herbicides and fertilizers.
  - 3) The permittee may regulate the use, application, or storage of fertilizers pursuant to §3.2-3602 of the Code of Virginia.
  - 4) The permittee shall track the acreage of permittee lands managed under Integrated Pest Management Plans.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include the three elements under Part I.B.2.d)1)(b) above and a list of properties identified under Part I.B.2.d)1)(a) including the approval date of the most recent nutrient management plan.**
  - **Each annual report shall include the number of acres managed under Integrated Pest Management Plans.**
- e) ***Illicit Discharges and Improper Disposal*** Discharges to the MS4 not authorized by this state permit shall be effectively prohibited.
- 1) In accordance with Part I.A.1.b), certain non-stormwater discharges to the MS4 need not be addressed as illicit discharges or improper disposal. The MS4 Program Plan shall identify any non-stormwater discharges listed under Part I.A.1.b), where the permittee has imposed any conditions on the discharges to the MS4. The permittee shall prohibit, on a case-by-case basis, any individual non-stormwater discharge (or class of non-stormwater discharges) otherwise allowed under this paragraph that is determined to be contributing significant amounts of pollutants to the MS4.

- 2) The permittee shall continue implementing a sanitary sewer inspection program to minimize the exfiltration from the sanitary system to the MS4. The permittee shall inspect a minimum of 300,000 linear feet of sanitary sewer annually.
- 3) The permittee shall continue to implement a program to reduce the discharge of floatables (e.g., litter and other human-generated solid refuse).
- 4) The permittee shall prohibit the dumping or disposal of used motor vehicle fluids, household hazardous wastes, sanitary sewage, grass clippings, leaf litter, and animal wastes into the MS4. The permittee shall ensure the implementation of programs to collect used motor vehicle fluids (such as oil and antifreeze) for recycling, reuse, or proper disposal and to collect household hazardous waste materials (including paint, solvents, pesticides, herbicides, and other hazardous materials) for recycling, reuse, or proper disposal. Such programs shall be readily available to all private residents and shall be publicized and promoted on a regular basis not less than twice per year.
- 5) The permittee shall continue to implement a program to locate and eliminate illicit discharges and improper disposal into the MS4. This program shall include dry weather screening activities to locate portions of the MS4 with suspected illicit discharges and improper disposal, as described in Part I.B.2.I)(1) of this state permit.
- 6) The permittee shall require the elimination of illicit discharges and improper disposal practices within 30-days of discovery. Where elimination of an illicit discharge within 30-days is not possible, the permittee shall require an expeditious schedule for removal of the discharge. In the interim, the permittee shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a list of illicit discharges identified, the source, a description of follow-up activities and whether the illicit discharge has been eliminated.**
  - **Each annual report shall include the amount of linear feet of sanitary sewer inspected during the reporting year.**
- f) ***Spill Prevention and Response*** The permittee shall continue to implement a program that coordinates with the Fire Department and other permittee operated departments to prevent, contain, and respond to spills that may discharge into the MS4. The spill response program may include a combination of spill response actions by the permittee (and/or another public or private entity), and legal requirements for private entities within the permittee's jurisdiction.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a list of spills, the source (identified to the best of the permittee's ability), and a description of follow-up activities taken.**
- g) ***Industrial & High Risk Runoff*** The permittee shall implement a program to identify and control pollutants in stormwater discharges to the MS4 from industrial and high risk runoff facilities (e.g., municipal landfills; other treatment, storage, or disposal facilities for municipal waste; hazardous waste treatment, storage, disposal and recovery facilities; facilities that are subject to EPCRA Title III, Section 313). Facilities with individual industrial VPDES stormwater permits or coverage under the industrial stormwater general permit may be included in the program at the discretion of the permittee.
- 1) The permittee shall maintain, and update as necessary, a list of all known industrial and high-risk dischargers to the MS4.

- 2) The permittee shall maintain a list of any industrial and/or commercial stormwater discharges not permitted by the Department that it determines have the potential to contribute a significant pollutant loading to the MS4. This list may be individual discharges or categories of discharges.
  - a) The list shall include, but shall not be limited to, major automotive facilities such as repair shops, body shops, auto detailers, tire repair shops and service stations.
  - b) Visual inspections of exposed areas and points of connections to the MS4 or outfalls at these facilities shall be conducted, in accordance with the schedule outlined in the MS4 Program Plan, to identify potential sources of pollutants that could enter the MS4 and surface waters.
  - c) The permittee shall require control measures as necessary and/or appropriate for stormwater discharges from these dischargers to the MS4.
- 3) The permittee may conduct monitoring, or may require the facility to conduct monitoring, of any stormwater discharges it believes may be a source of significant pollutant loadings to the MS4.
- 4) The permittee shall coordinate with the Department to report any non-VPDES permitted industrial or commercial facility from which the permittee has evidence that a significant pollutant load is entering the MS4 system. Inspections of facilities for which the permittee has evidence of significant pollutant loading may be carried out in conjunction with other permittee programs.
- 5) The permittee shall refer to the Department of Environmental Quality, Piedmont Regional Office, for Department compliance review under the Virginia State Water Control Law any industrial or commercial facility, if the permittee becomes aware of a violation of any industrial stormwater management requirement contained in an individual or general VPDES permit issued to the facility by the Department.

**SPECIFIC REPORTING REQUIREMENTS:**

- **The annual report shall include a list of all known industrial and high risk dischargers including any non-VPDES regulated industrial and commercial stormwater dischargers determined by the permittee as having the potential to contribute a significant pollutant load and that discharge to the MS4 system, a schedule of inspections and procedures for inspecting points of connection or outfalls, whichever occurs first, to the permittee's MS4.**
  - **Each annual report shall include a report on implementation of the inspection schedule and include a list of the facilities and/or facility outfalls or points of connection to the permittee's MS4 inspected during the reporting period.**
  - **Each annual report shall include a list of referrals to the Department including a document detailing any coordination activities with the Department.**
- h) ***Stormwater Infrastructure Management*** The permittee shall continue to maintain and implement programs to maintain the permittee's stormwater infrastructure and to update the accuracy and inventory of the storm sewer system.
  - 1) For stormwater management (SWM) facilities and infrastructure maintained by the permittee including residential properties where SWM facilities, BMP and Storm Drainage Systems qualify for permittee maintenance (excluding apartments and mobile home parks), the following conditions apply:
    - (a) The permittee shall provide for adequate long-term operation and maintenance of SWM facilities owned or operated by the permittee in accordance with written inspection and maintenance procedures included in the MS4 Program Plan.
    - (b) The permittee shall inspect annually all SWM facilities owned or operated by the permittee. The

permittee may choose to implement an alternative schedule to inspect these SWM facilities based on a risk assessment that includes facility type and expected maintenance needs provided that the alternative schedule is included in the MS4 Program Plan in accordance with plan modifications as listed in Part I.A.7.a) of this state permit.

- (c) The permittee shall conduct maintenance on SWM facilities owned or operated by the permittee as necessary to ensure the facilities function as designed.
  - (d) The permittee shall continue its stormwater system inspection program and shall either (a) implement a department approved risk-based prioritization inspection program for the stormwater system within 12 months or (b) inspect not less than 15% of the MS4 annually and 80% of the system during the term of the permit. The permittee shall perform maintenance as necessary based on findings during the inspection. If for any reason an inspection cannot be conducted, the permittee shall document the reason in the Annual Report.
  - (e) The permittee shall dispose of all wastes and wastewaters collected during stormwater system cleaning in accordance with local, state, and federal laws and regulations.
  - (f) The permittee shall obtain any required state or federal permit(s) necessary to complete maintenance activities.
- 2) For SWM facilities not maintained by the permittee and that discharge into the MS4, the following conditions apply:
- (a) The permittee shall continue to implement a program to ensure proper maintenance of each privately maintained SWM facility that discharges into the MS4 system. The program shall include the following elements:
    - (1) Beginning with the effective date of this state permit and in accordance with 9VAC25-870-112 B, maintenance agreements may be used but are not required for stormwater control measures that are designed to treat stormwater runoff solely from the individual residential lot on which they are located provided that the permittee has developed and implemented a strategy to address maintenance of such stormwater management controls. Should the permittee choose a strategy other than a maintenance agreement, such a strategy shall be provided in writing no later than 12 months after the effective date of this state permit and shall include an inspection schedule, homeowner outreach and education, or other methods targeted at promoting the long-term maintenance of such facilities.
    - (2) For SWM facilities that are privately maintained and for which maintenance agreements have been established between the permittee and the owner, the permittee shall inspect all privately maintained facilities no less than once per 5 years and conduct follow-up activities to ensure the required maintenance has been completed. Inspections may be conducted by the permittee or their designee as defined in 9VAC25-870-114.
    - (3) The permittee shall continue to implement a program ensuring the inspection and maintenance of SWM facilities that are privately maintained and for which maintenance agreements have not been established between the permittee and the owner.
- 3) The permittee shall update and maintain an accurate MS4 map and information table as follows:
- (a) An updated map of the MS4 owned or operated by the permittee, no later than 12 months after the permit effective date that includes, at a minimum:
    - (1) 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 points of interconnection upstream and downstream of 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 the outfall discharge location represents more than one outfall. This is an option a permittee may choose to use recognizing the difficulties in accessing outfalls to underground channelized stream conveyances for purposes of mapping, screening or monitoring.
- (2) A unique identifier for each mapped item required in Part I B.2.h)3);
  - (3) The name and location of receiving waters to which the MS4 outfall or point of interconnection discharges;
  - (4) The MS4 regulated service area;
  - (5) Pipe and open channel conveyances that are upstream of MS4 outfalls; and
  - (6) Stormwater management facilities owned or operated by the permittee.
- (b) The permittee shall update its MS4 service area map as necessary if any changes to direct drainage to VDOT's MS4 service area occur. The permittee shall maintain a map to assist with coordination of VDOT MS4 coverage areas for roadways and streets. Where practical, the permittee map shall clearly delineate gap areas that drain to VDOT MS4 areas not included as part of the Henrico MS4 service area. This information shall be maintained and kept up to date and made available when requested.
  - (c) 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.B.2.h)3)(a)(1). The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall include the following, at a minimum:
    - (1) A unique identifier as specified on the MS4 map;
    - (2) The latitude and longitude of the outfall, or point of discharge;
    - (3) The 6<sup>th</sup> Order Hydrologic Unit Code of the receiving water;
    - (4) 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
    - (5) The name of any EPA-approved TMDLs for which the permittee is assigned a wasteload allocation.
- If available, the outfall table should include the following:
- (1) The estimated regulated acreage draining to the outfall, or point of discharge: and
  - (2) The name of the receiving water.
- (d) No later than 12 months after permit issuance, the permittee shall submit to DEQ, a format file geodatabase or two shapefiles that contain at a minimum:

- (1) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I.B.2.h)3)(c); and
  - (2) A polygon feature class or shapefile for MS4 service area as required in accordance with Part I.B.2.h)3)(a)(4) with an attribute table containing the following information:
    - (i) MS4 operator name;
    - (ii) MS4 permit number, and
    - (iii) MS4 service area pervious, impervious and total acreage rounded to the nearest hundredth
- (e) All file geodatabase feature classes or shapefiles shall meet the following data format standards:
- (1) Point data collected in NAD83 or WGS84 decimal degrees global positional system coordinates;
  - (2) Data projected in Virginia Lambert Conformal Conic format;
  - (3) 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
  - (4) Metadata shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection.
- (f) 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.
- (g) The permittee shall provide written notification to any downstream adjacent MS4 of any new physical interconnection from the permittee-owned system to another regulated MS4 established or discovered after the effective date of this permit.

#### **SPECIFIC REPORTING REQUIREMENTS:**

- **The permittee shall submit with the initial annual report the written inspection and maintenance procedures.**
- **Each annual report shall include a list of activities including inspections, maintenance, and repair of stormwater infrastructure operated by the permittee as required in Part I.B.2.h)1), including the type and number of stormwater structures inspected and maintained; the total number of stormwater structures owned or operated by the permittee; the total linear feet of storm sewer system owned and/or operated by the permittee; and the linear feet of storm sewer system inspected.**
- **Each annual report shall provide a summary of actions taken by the permittee to address failure of privately maintained SWM facilities owners to abide by maintenance agreements.**
- **Each annual report shall include a list of activities including inspections performed and notifications of needed maintenance and repair of stormwater facilities not operated by the permittee as required by Part I.B.2.h)2).**
- **The MS4 service area map including outfalls and information included in Part I.B.2.h)3) shall be submitted no later than 18 months after the effective date of this state permit. The information shall be submitted as an electronic file described in Part I.B.2.h)3)(e).**

- i) **County Facilities:** Facilities owned or operated by the permittee shall be operated and maintained as follows:
- 1) The permittee shall develop, implement and maintain written good housekeeping procedures designed to:
    - (a) Prevent illicit discharges;
    - (b) Ensure permittee staff or contractors properly dispose of waste materials to minimize floatables and landscape wastes entering the MS4;
    - (c) Prevent the discharge of wastewater or washwater or both into the MS4 without authorization under a separate VPDES permit; and
    - (d) Preventing pollutant discharge into the MS4 from leaking permittee-owned or operated vehicles and equipment. Leaked fluids shall be cleaned up and disposed of properly, as soon as possible but no later than 24-hours after discovery.
  - 2) The permittee shall maintain markings on all stormwater inlets located on high priority municipal facilities, as defined at Part I.F, and on permittee properties with greater than 2-acres of impervious surface.
  - 3) High Priority Municipal Facilities
    - (a) The permittee shall maintain a list of all high priority municipal facilities that do not require a separate VPDES industrial stormwater permit, as well as identify which of the facilities have a high potential of discharging pollutants. Facilities with a high potential for discharging pollutants are those facilities where 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 (except adequately maintained vehicles);
      - (4) Materials or products that would be expected to be mobilized in stormwater runoff during loading/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, non-leaking 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.
    - (b) The permittee shall develop and/or update and implement individual stormwater pollution

prevention plans for each high-priority municipal facility identified under Part I.B.2.i)3)(a) no later than 36-months after the effective date of this state permit. Stormwater pollution prevention plans (SWPPP) shall include:

- (1) A site description that includes a site map identifying all outfalls, direction of flows, existing source controls, and receiving water bodies;
  - (2) A discussion and checklist of potential pollutants and pollutant sources;
  - (3) A discussion of all potential non-stormwater discharges;
  - (4) A maintenance schedule for all existing source controls;
  - (5) All policies and procedures implemented at the facility to ensure source reduction;
  - (6) An inspection schedule and checklist to ensure that all source reductions are continually implemented and all source controls are appropriately maintained. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP;
  - (7) Appropriate training as required in Part I.B.2.k);
  - (8) Procedures to conduct an annual comprehensive site compliance evaluation;
  - (9) Procedures to conduct dry weather screening; and
  - (10) All modifications made as the result of any release or spill.
- (c) A copy of each SWPPP shall be kept at each high-priority municipal facility and be kept updated.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a list of all high priority municipal facilities and those with a high potential to discharge pollutants as identified in Part I.B.2.i)3)(a).**
- j) **Public Education/Participation** The permittee shall continue to implement a public education program with the goal of increasing the stormwater knowledge of target audiences and changing behavior to result in pollutant reductions. The permittee may fulfill all or part of the requirements of this state permit through regional outreach programs involving two or more MS4 localities.
- 1) The permittee shall identify, schedule, implement, evaluate and modify, as necessary, public outreach activities designed to meet the following public education and outreach goals:
    - (a) Promote, publicize, and facilitate public reporting of the presence of illicit discharges or improper disposal of materials into the MS4;
    - (b) Continue to promote individual and group involvement in local water quality improvement initiatives including the promotion of local restoration and clean-up projects, programs, groups, meetings and other opportunities for public involvement;
    - (c) Develop an outreach program for public and private golf courses located within Henrico County that discharge to the permittee's MS4 to encourage implementation of integrated management practice (IMP) plans and techniques to reduce runoff of fertilizer and pesticides;
    - (d) Promote, publicize, and facilitate the proper management and disposal of used oil and household hazardous wastes;



- (e) Promote and publicize the proper disposal of pet waste and household yard waste;
  - (f) Promote and publicize the use of the permittee's litter prevention program;
  - (g) Promote and publicize methods for residential car washing that minimize water quality impacts;
  - (h) Promote and publicize the proper use, application, and disposal of pesticides, herbicides, and fertilizers by public, commercial, and private applicators and distributors;
  - (i) Encourage private property owners to implement voluntary stormwater management techniques and/or retrofits; and
  - (j) Target strategies towards local groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts.
- 2) The permittee shall post a copy of this state permit on its web page no later than 30-days after the effective date of this state permit and continue to retain a copy of the permit online for the duration of this state permit.
  - 3) The permittee shall post copies of each annual report on its website no later than 30 days after the report submittal to the Department and continue to retain copies of the annual reports online for the duration of this state permit.
  - 4) The permittee shall post the most current MS4 Program Plan on its website no later than 30 days after the effective date of this permit and maintain a current copy on the website. If the MS4 Program Plan is modified or revised, the updated plan shall be posted within 30 days of the revision(s). Copies of the most current MS4 Program Plan shall be made available for public review upon request of interested parties in compliance with all applicable open records requirements.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a list of permittee public outreach and education activities and the estimated number of individuals reached through the activities. An evaluation of program effectiveness, as outlined in the MS4 Program Plan with recommendations for future changes shall also be included.**
  - **Each annual report shall provide a summary of voluntary retrofits completed on private property used to demonstrate pollutant reduction requirements. Note that any voluntary project for which the permittee seeks to use for pollutant reduction requirements must be tracked and reported.**
  - **Each annual report shall provide a summary of voluntary stormwater management techniques encouraged on private property.**
- k) **Training** The permittee shall conduct stormwater training for permittee employees. The training requirement may be fulfilled all or in part through regional training programs involving two or more MS4 localities; provided, however, that the permittee shall remain individually liable for its failure to comply with the training requirements in this state permit. The permittee shall determine the appropriate employees to receive the following types of training based on the specific topic for which training is to be provided:
- 1) The permittee shall provide biennial training to appropriate field personnel in the recognition and reporting of illicit discharges.

- 2) The permittee shall provide biennial training to appropriate employees in good housekeeping and pollution prevention practices that are to be employed during road, street, and parking lot maintenance.
- 3) Within 36 months of the effective date of the permit, the permittee shall incorporate good housekeeping training strategies for each of the following activities:
  - (a) Discharging water pumped from construction and maintenance activities;
  - (b) Bulk storage of soil, compost, mulch and landscaping waste stockpiles; and
  - (c) Preventing pollutant discharge into the MS4 from leaking permittee-owned or operated vehicles and equipment. Leaked fluids shall be cleaned up and disposed of properly, as soon as possible but no later than 24 hours after discovery.
- 4) The permittee shall provide biennial training to appropriate employees in good housekeeping and pollution prevention practices that are to be employed in and around permittee maintenance and public works facilities.
- 5) The permittee shall ensure that employees, and require that contractors, who apply pesticides and herbicides are properly trained or certified per the Virginia Pesticide Control Act (§ 3.2-3900 *et seq.* of the Code of Virginia). The requirements of the Virginia Pesticide Control Act are established by the Virginia Pesticide Control Board.
- 6) The permittee shall have a program to ensure that County plan reviewers, inspectors, program administrators and construction site operators (e.g., responsible land disturber) are trained and obtain the appropriate certifications to the extent required under the Virginia Erosion and Sediment Control Law and attendant regulations.
- 7) The permittee shall have a program to ensure that the applicable county employees obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations to implement the modified stormwater management design criteria.
- 8) The permittee shall provide biennial training to applicable employees in good housekeeping and pollution prevention practices that are to be employed in and around county recreation facilities.
- 9) The appropriate emergency response employees shall have training in spill response. A summary of the training and/or certification program provided to emergency response employees shall be included in the first annual report.
- 10) Documentation shall be kept of all training events including the training date, number of employees attending the training, and the objective of the training event for a period of three years after each training event. Additionally, all events shall be listed in the annual report for the year in which the training event occurred.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a list of training events, the date and the estimated number of individuals attending each event.**
  - **The initial annual report shall include documentation of employee emergency spill response training and/or certification.**
- l) **Water Quality Screening Programs** The following screening programs shall be implemented in addition to the monitoring required by Part I.C:

- 1) Dry Weather Screening Program: The permittee shall continue ongoing efforts to detect the presence of illicit connections and unauthorized discharges to the permittee's MS4.
  - (a) The permittee shall continue to implement a program of dry weather screening in areas of concern as identified by the permittee including but not limited to: commercial car washes, car dealerships, pet kennels, restaurants, areas with a history of complaints, and areas upstream of sensitive ecosystems. The permittee shall screen at a minimum, 100 of the County's MS4 outfalls each year.
  - (b) Criteria for selection of outfalls to be screened as required by Part I.B.2.l)1)(a) above shall include but is not limited to the following:
    - (1) List of sites requiring further investigation, as previously identified;
    - (2) Age and density of development with the likelihood of illicit connections such as older residential, commercial and industrial areas;
    - (3) Outfalls representing the general land uses of Henrico County;
    - (4) Poorly maintained gas stations, service stations, and shopping centers;
    - (5) Presence of environmentally sensitive features downstream; and
    - (6) History of complaints received on illicit discharges.
  - (c) 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:
  - (d) Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I.B.2.l)1)(a), however, at least 50% of the minimum annual screening events must include outfall screening;
  - (e) 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
  - (f) The permittee's dry weather screening program shall use a checklist or mechanism to track the following information for dry weather screening events:
    - (1) The unique outfall identifier for the outfall or observation point;
    - (2) Indication a minimum of 72 hours has passed since the last precipitation event;
    - (3) Site descriptions (e.g., conveyance type and dominant watershed land uses);
    - (4) Observed indicators of possible illicit discharge events such as, floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth, etc.);
    - (5) Whether or not a discharge was observed;
    - (6) If a discharge was observed, the visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall; and

- (7) For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point.
- 2) Wet Weather Screening Program: In addition to the monitoring required in Part I.C., the permittee shall continue to investigate, and address areas within their jurisdiction that are suspected to be contributing excessive levels of pollutants to the MS4. The permittee shall maintain written procedures for a wet weather screening program which shall include standard operating procedure to be used for initial screening and follow-up purposes. The written procedures shall be incorporated as part of the MS4 Program Plan.

**SPECIFIC REPORTING REQUIREMENTS:**

- **Each annual report shall include a list of locations upon which dry weather screening was conducted, the results, and any follow-up actions including maintenance and/or repair of infrastructure or outfalls performed as a result of the dry weather screening.**
  - **Each annual report shall include a list of locations upon which wet weather screening was conducted, the results, weather conditions at the time sample was collected to include date and approximate time of most recent storm event preceding sample collection, long term trends analyses, and any follow-up actions including maintenance and/or repair of infrastructure or outfalls performed as a result of the wet weather screening.**
- m) **Infrastructure Coordination** – The permittee shall coordinate with the Virginia Department of Transportation (VDOT) regarding issues of MS4 physical-interconnectivity as described below:
- 1) Annual Coordination Meeting – The permittee shall meet annually with VDOT for purposes of overall coordination on priority issues for the permittee’s MS4 Program Plan (including operations and maintenance elements) and TMDL action planning relevant to the interconnectivity of the MS4s.
  - 2) Mapping – The permittee shall inform VDOT of the status of its mapping program, identifying any uncertainty regarding ownership or actual location of MS4 components associated with the physically-interconnected MS4s, and working to resolve such uncertainty. The permittee shall coordinate with VDOT to identify any areas within the permittee’s municipal boundaries that drain to the VDOT MS4.
  - 3) Chesapeake Bay TMDL Action Plans – The permittee shall inform VDOT of the means, methods, and schedule by which the permittee will implement the reductions required by the Chesapeake Bay TMDL Special Condition (Part I.D.1) when those means and methods may impact the physically-interconnected MS4s. The parties are encouraged to cooperate with one another where the siting or design of best management practices (BMPs) may be accelerated or otherwise improved by mutual cooperation.
  - 4) The permittee shall coordinate with VDOT to identify any areas within the permittee’s municipal boundaries that drain to the VDOT MS4 and are unaccounted for in the Chesapeake Bay TMDL Action Plan developed by VDOT or the permittee. The unaccounted areas shall be quantified (acres) in the Chesapeake Bay TMDL Action Plan submitted by the permittee.
  - 5) Other TMDL Action Plans – The permittee shall inform VDOT of TMDL Action Plans and major milestones implemented for other (i.e., non-Chesapeake Bay) TMDLs when those plans may impact the physically-interconnected MS4s. The parties are encouraged to cooperate with one another where the siting or design of BMPs may be accelerated or improved by mutual cooperation.
  - 6) Credit for TMDL Implementation – Permit specific BMP retrofit requirements shall not be double-counted in the calculation of load reductions. If the permittee undertakes the project, the permittee shall be entitled to full credit for the project, but may share credit with VDOT on mutually agreeable

terms, which shall be in writing.

- 7) Illicit Discharge Detection & Elimination – The permittee shall continue to be responsible for implementing a program for illicit discharge detection and elimination, including dry weather field screening, for the permittee's portion of the physically-interconnected MS4. As part of the annual coordination meeting, described in item (1) above, the permittee shall coordinate with VDOT on the identification of high risk industrial facilities. The permittee shall establish procedures for notifying VDOT when an illicit discharge is identified in the VDOT MS4.
- 8) Water Quality Monitoring – The permittee shall conduct water quality monitoring as required by Part I.B.2.I) and Part I.C of this state permit. The permittee shall make available to VDOT all monitoring data collected from areas where the physically-interconnected MS4 discharges to the VDOT MS4 or received flow from the VDOT MS4. The permittee and VDOT are encouraged to cooperate with one another to establish a joint monitoring network.
- 9) Annual Reports – As part of its Annual Report, the permittee shall document any coordination efforts with VDOT that occurred during the reporting year pursuant to requirements (1) through (7) above.

### C. MONITORING REQUIREMENTS

#### 1. **Biological Stream Monitoring**

The permittee shall continue to implement a biological stream monitoring program to evaluate the condition of select stream sites within Henrico County as follows:

- a) Five (5) stream sites within the County shall be selected for monitoring during the term of this permit.
- b) Monitoring shall be conducted twice per year with one sample collected between July 1<sup>st</sup> and December 31<sup>st</sup> and one sample collected between January 1<sup>st</sup> and June 30<sup>th</sup> each year at each selected stream site.
- c) The permittee shall use a biological stream monitoring approach based on the "USEPA's Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers" or other method approved by the Department, and shall include an assessment of the benthic macroinvertebrate community and habitat assessment.

#### **SPECIFIC REPORTING REQUIREMENTS:**

- **The initial annual report shall include the list of sites to be monitored during the term of the state permit and monitoring protocols.**
- **Each annual report shall include a summary of the monitoring results and analyses and an interpretation of that data with respect to long-term patterns/trends.**

#### 2. **In-Stream Monitoring**

The permittee shall continue to implement an in-stream monitoring program to evaluate the condition of select streams within Henrico County as follows:

- a) Five (5) stream sites within the County shall be selected for monitoring during the term of this permit.
- b) Monitoring shall be conducted once per two months between January 1<sup>st</sup> and December 31<sup>st</sup> at each monitoring location.
- c) Monitoring shall be performed for the following parameters:
  - 1) pH
  - 2) Dissolved Oxygen
  - 3) Temperature

- 4) Total Suspended Solids
  - 5) Ammonia as Nitrogen
  - 6) Nitrate plus Nitrite Nitrogen
  - 7) Total Kjeldahl Nitrogen
  - 8) Total Nitrogen (calculated)
  - 9) Dissolved Phosphorus
  - 10) Total Phosphorus
  - 11) *Escherichia coli*
- d) Monitoring for the parameters listed in Part I.C.2.c) shall be in accordance with Part III.A of this state permit.
- e) The permittee may replace a sampling location with a new proposed location after 15 samples are collected and analyzed. Written notification of the monitoring plan revisions shall be given to the Department in writing and shall include a statistical analysis of the monitoring results, conclusions regarding the data, the proposed new monitoring location, and the reasoning for site location choice.

**SPECIFIC REPORTING REQUIREMENTS:**

- **The initial annual report shall include the list of sites to be monitored during the term of the state permit and monitoring protocols.**
- **Each annual report shall include a summary of the monitoring results and analyses and an interpretation of that data with respect to long-term patterns/trends.**

**D. TMDL ACTION PLAN AND IMPLEMENTATION**

1. **Chesapeake Bay Special Condition**

The Commonwealth in its Phase I, Phase II and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIP) committed to a phased approach for MS4s permittees to implement necessary reductions. This state permit requires a cumulative 40% of the L2 scoping run reductions by June 30, 2026, and 100% of the L2 scoping run reductions by June 30, 2028. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

a) **Definitions The following definitions apply to Part I.D.1**

- 1) "Existing Sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.
- 2) "New Sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.
- 3) "Pollutants of concern" or "POC" means total nitrogen and total phosphorus.

b) **Reduction Requirements – Existing Development:** Following a phased approach, the permittee shall reduce the load of total nitrogen and total phosphorous from existing sources within the MS4 service area by at least 40% of the Level 2 Scoping Run reductions by June 30, 2026, and 100% of the reductions by June 30, 2028. The 40% reduction is the sum of:

- 1) the first phase of reduction of 5.0% percent of the L2 Scoping Run Reductions based on the lands located within the MS4 service area as required by June 30, 2018;
- 2) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the MS4 service area required by June 30, 2026; and
- 3) the reduction of at least 40% of the L2 Scoping Run which shall only apply to the additional lands that

were added to the MS4 service area since June 30, 2018, as required by June 30, 2026.

As part of this permit's phased approach, the permittee shall reduce the load of total nitrogen and total phosphorus from existing developed lands served by the MS4 by 100% of the Level 2 Scoping Run Reductions by June 30, 2028. The required reduction shall be calculated using Table 1a for reductions by June 30, 2026 and Table 1b for reductions by June 30, 2028 included herein.

**Table 1a**  
**Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven and Little Creek Basins**  
**Through (June 30, 2026)**

		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
<u>Pollutant</u>	<u>Subsource</u>	<u>Loading rate (lbs/ac/yr)<sup>1</sup></u>	<u>Existing developed lands as of 6/30/09 served by the MS4 within the regulated area (acres)<sup>2</sup></u>	<u>Load (lbs/yr)<sup>3</sup></u>	<u>Percentage of MS4 required Chesapeake Bay total L2 loading reduction</u>	<u>Percentage of L2 required reduction by June 30, 2026</u>	<u>40% cumulative reduction required by June 30, 2026 (lbs/yr)<sup>4</sup></u>	<u>Sum of 40% cumulative reduction (lb/yr)<sup>5</sup></u>
<u>Nitrogen</u>	<u>Regulated urban impervious</u>	9.39			9%	40%		
	<u>Regulated urban pervious</u>	6.99			6%	40%		
<u>Phosphorus</u>	<u>Regulated Urban Impervious</u>	1.76			16%	40%		
	<u>Regulated urban pervious</u>	0.5			7.25%	40%		

<sup>1</sup>Edge of stream loading rate based on the Chesapeake Bay Watershed Model 5.3.2

<sup>2</sup>To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated MS4 service area. Next, permittees will need to delineate the lands within the regulated area served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

<sup>3</sup>Column C = Column A x Column B

<sup>4</sup>Column F = Column C x Column D x Column E.

<sup>5</sup>Column G = The sum of the subsource cumulative reduction required by June 30, 2026 (lbs/yr) as calculated in Column F.



**Table 1b**  
**Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven and Little Creek Basins**  
**Through (June 30, 2028)**

		<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>
<u>Pollutant</u>	<u>Subsource</u>	<u>Loading rate (lbs/ac/yr)<sup>1</sup></u>	<u>Existing developed lands as of 6/30/09 served by the MS4 within the regulated area (acres)<sup>2</sup></u>	<u>Load (lbs/yr)<sup>3</sup></u>	<u>Percentage of MS4 required Chesapeake Bay total L2 loading reduction</u>	<u>Percentage of L2 required reduction by June 30, 2028</u>	<u>100% cumulative reduction required by June 30, 2028 (lbs/yr)<sup>4</sup></u>	<u>Sum of 100% cumulative reduction (lb/yr)<sup>5</sup></u>
<u>Nitrogen</u>	<u>Regulated urban impervious</u>	<u>9.39</u>			<u>9%</u>	<u>100%</u>		
	<u>Regulated urban pervious</u>	<u>6.99</u>			<u>6%</u>	<u>100%</u>		
<u>Phosphorus</u>	<u>Regulated Urban Impervious</u>	<u>1.76</u>			<u>16%</u>	<u>100%</u>		
	<u>Regulated urban pervious</u>	<u>0.5</u>			<u>7.25%</u>	<u>100%</u>		

<sup>1</sup>Edge of stream loading rate based on the Chesapeake Bay Watershed Model 5.3.2

<sup>2</sup>To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated MS4 service area. Next, permittees will need to delineate the lands within the regulated area served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

<sup>3</sup>Column C = Column A x Column B

<sup>4</sup>Column F = Column C x Column D

<sup>5</sup>Column G = The sum of the subsource cumulative reduction required by June 30, 2028 (lbs/yr) as calculated in Column F.

- c) **Required Reductions – New Development** No later than the expiration date of this permit (June 30, 2028), the permittee shall offset 100% of the increased loads from new sources initiating construction between July 1, 2009 and June 30, 2024 and designed in accordance with 9VAC25-870-47 and 9VAC25-870-93 *et seq.* if the following conditions apply:

- 1) The activity disturbed one acre or greater; and
- 2) The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition greater than 16% impervious cover.

The permittee shall utilize Table 2 included herein to develop the equivalent pollutant load for nitrogen for new sources meeting the requirements of this condition.

- d) **Required Reductions – Grandfathered Projects** No later than the expiration date of this permit, the permittee shall offset 100% of the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that began construction after July 1, 2014, if the following conditions apply:

- 1) The activity disturbs one acre or greater; and
- 2) 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 2 included herein to develop the equivalent pollutant load for nitrogen for grandfathered sources meeting the requirements of this condition.

<b>Table 2: Ratio of Phosphorus Loading Rate to Nitrogen Loading Rates for Chesapeake Bay Basins</b> (Based on Chesapeake Bay Program Watershed Model Phase 5.3.2)		
<u>Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)</u>	<u>Phosphorus Loading Rate (lbs/ac)</u>	<u>Nitrogen Loading Rate (lbs/ac)</u>
James River Basin	1.0	5.2

- e) Reductions achieved in accordance with the Permit for Discharges of Stormwater from Municipal Separate Storm Sewer Systems effective April 01, 2015, shall be applied toward the total reduction requirements to demonstrate compliance with Part I.D.1.b), c) and d).
- f) Reductions required under Part I.D.1 b), c) and d) shall be achieved in each river basin in which the existing development, new development and grandfathered projects are located.
- g) Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part I.D.1.b), c) and d) 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 I.D.1.b), c) and d) shall be calculated and reported to two significant digits.
- h) Reductions required in Part I.D.1.b), c) and d) shall be achieved through one or more of the following:
- 1) BMPs approved by the Chesapeake Bay Program;
  - 2) BMPs approved by the Department; or

- 3) A trading program described in Part I.D.1.i).
- i) The permittee may acquire and use total nitrogen and total phosphorous credits in accordance with §62.1-44.19:21 of the Code of Virginia for purposes of compliance with the required reductions in Table 1 contained herein, provided the use of credits has been approved by the Department. The exchange of credits is subject to the following requirements:
    - 1) The credits are generated and applied to a compliance obligation in the same calendar year;
    - 2) The credits are generated and applied to a compliance obligation in the same tributary;
    - 3) The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;
    - 4) 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;
    - 5) Total nitrogen and total phosphorous credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorous 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 pursuant to §62.1-44.19:20 of the Code of Virginia.
  - j) The permittee shall submit an updated Chesapeake Bay TMDL action plan for the cumulative 40% reductions required in Part I.D.1.b), c) and d) within 12 months of the permit effective date. The permittee shall submit an updated Chesapeake Bay TMDL action plan for the cumulative 100% reductions required in Part I.D.1.b), c) and d) by June 30, 2026. The action plans shall include the following information:
    - 1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders and inter-jurisdictional agreements, implemented or needing to be implemented, to meet the requirements of Parts I.D.1.b), c) and d) to include a review in the development of these actions;
    - 2) The load and cumulative reduction calculations for each river basin calculated in accordance with Parts I.D.1.b), c) and d);
    - 3) The total reductions achieved to date for each pollutant of concern in each river basin;
    - 4) A list of BMPs implemented to date 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 prior to the expiration date of this permit to meet the cumulative reductions calculated in Parts I.D.1.b), c) and d), including, as applicable:
      - (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 I.D.1.g) for each pollutant of concern.

- 6) An estimate of the expected cost to implement the necessary reductions during the permit cycle; and
  - 7) A summary of any comments received as a result of public participation required in Part I.D.1.k), the permittee's response, identification of any public meetings to address public concerns, and any revisions made to the Chesapeake Bay TMDL action plan as a result of public participation.
- k) Prior to submittal of the action plan required in Part I.D.1.j), the permittee shall provide an opportunity for public comment on the additional BMPs proposed to meet the reductions not previously approved by the Department in the first phase Chesapeake Bay TMDL action plan for no less than 15 days.
- l) As part of the development of the Chesapeake Bay TMDL action plan, the permittee may consider use of the following:
- 1) Implementation of BMPs on unregulated lands, provided any necessary baseline reduction is not included toward meeting the required reduction in this permit;
  - 2) Utilization of stream restoration projects, provided the credit applied to the required POC load reduction is prorated based on the ratio of regulated urban acres to total drainage acres upstream of the restored area;
  - 3) Establishment of a memorandum of understanding (MOU) with other MS4 permittees that discharge to the same or adjacent eight digit hydrologic unit within the same basin to implement BMPs collectively. The MOU shall include a mechanism for dividing the POC reductions created by BMP implementation between the cooperative MS4s; and
  - 4) Any BMPs installed after June 30, 2009 as part of a retrofit program may be applied towards meeting the required load reductions provided any necessary baseline reductions are not included.
- m) The permittee shall address any modification to the TMDL or watershed implementation plan that occurs during the term of this permit as a part of its permit reapplication as required in Part III.M of this permit.
- n) Chesapeake Bay TMDL action plan implementation. The permittee shall implement the TMDL action plan required in Part I.D.1.j) of this permit according to the schedule therein. Compliance with this requirement represents adequate progress for this permit term towards achieving TMDL wasteload allocations consistent with the assumptions and requirements of the TMDL.
- o) Specific Reporting Requirements. For each annual reporting period, the annual report shall include the following:
- 1) Any modifications to the Chesapeake Bay TMDL action plan made during the July 1 to June 30 reporting period.
  - 2) Documentation identifying which BMPs were completed within the current annual reporting period. The following information shall also be included:
    - (a) For BMPs used to meet the Chesapeake Bay TMDL requirements of Part I.D.1, the SWM facility unique identifier number, total acreage treated, total impervious and total pervious acreage treated, the pollutants of concern load reductions reported in pounds per year, the pollutant removal efficiencies and source of each efficiency, as well as proposed BMPs planned for implementation during the next reporting cycle.
    - (b) For retrofit projects used to meet the Chesapeake Bay TMDL requirements of Part I.D.1, the type of land use being retrofitted, the existing stormwater management facility type before retrofit, if applicable, retrofit type used, retrofit performed, completion date or anticipated

completion date, total acreage retrofitted, total impervious and total pervious acreage retrofitted, the SWM facility unique identifier number, and if applicable, the incremental reduction credit achieved with the retrofit (the incremental credit is defined as the difference between the existing SWM facility reduction credit and the retrofit reduction credit attained) including pre and post pollutant retrofit removal efficiencies and source of each efficiency.

- 3) A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part II and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year.
- 4) If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part I.D.1.b), c) or d), a statement that credits were acquired.
- 5) Documentation that sufficient control measures have been implemented (or documentation detailing that implementation will be complete by June 30, 2026, for the cumulative 40% reductions and June 30, 2028 for the cumulative 100% reductions) to meet the compliance targets identified in this section. If temporary credits or offsets have been purchased in order to meet the compliance targets, the list of temporary reductions utilized to meet the cumulative required reductions of L2 in this permit and a schedule of implementation to ensure permanent cumulative 40% and 100% reductions shall be provided.
- 6) 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 this section and 9VAC25-31-1020. There shall be at least three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

## 2. TMDL Action Plans other than the Chesapeake Bay TMDL

- a) The Permittee shall update, as necessary, 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 I.D.2 a 1 and 2:
  - 1) For TMDLs approved by EPA prior to April 1, 2015 and in which an individual or aggregate wasteload has been allocated to the permittee (see Attachment 3 to the Fact Sheet), the permittee shall develop and initiate or update as applicable the local TMDL action plans to meet the conditions of Part I.D.2 c, d, e, f, and g, as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Updated action plans shall include:
    - a) An evaluation of the results achieved by the previous action plan; and
    - b) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation.
  - 2) For TMDLs approved by EPA on or after April 1, 2015, and prior to the effective date of this permit, 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 I.D.2 c, d, e, f, and g, as applicable no later than 30 months after the permit effective date.
- b) 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.

c) Each local TMDL action plan developed by the permittee shall include the following:

- 1) The TMDL project name;
- 2) The EPA approval date of the TMDL;
- 3) The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable;
- 4) Identification of the potential 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;
- 5) The BMPs designed to reduce the pollutants of concern in accordance with Part I.D.2 d and e;
  - a) Any calculations required in accordance with Part I.D.2 d and e;
  - b) For action plans developed in accordance with Part I.D.2 d and e, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and
  - c) A schedule of anticipated actions planned for implementation during this permit term.

d) Bacterial TMDLs.

- 1) The permittee shall implement at least six strategies designed to reduce the load of bacteria to the MS4. Table 3 provides a list of strategies which correspond to sources identified in Part I.D.2 c 4. Additional strategies that are equivalent or better than the strategies provided in Table 3 may be used as approved by the Department.

Table 3 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.

	<p>Implement rooftop disconnection programs or site designs that minimize connections to reduce bacteria from rooftops</p> <p>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).</p>
Illicit connections or illicit discharges to the MS4	<p>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.</p> <p>Implement a program to identify potentially failing septic systems.</p> <p>Educate the public on how to determine whether their septic system is failing.</p> <p>Implement septic tank inspection and maintenance program.</p> <p>Implement an educational program beyond any requirements in Part I E 1 through E 6 to explain to citizens why they should not dump materials into the MS4.</p>
Dry weather urban flows (irrigations, <u>car washing</u> , powerwashing, etc.)	<p>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.</p> <p>Provide irrigation controller rebates.</p> <p>Implement and enforce ordinances or policies related to outdoor water waste.</p> <p>Inspect commercial trash areas, grease traps, washdown practices, and enforce corresponding ordinances or policies.</p>
Birds (Canadian geese, gulls, pigeons, etc.)	<p>Identify areas with high bird populations and evaluate deterrents, population controls, habitat modifications and other measures that may reduce bird-associated bacteria loading.</p> <p>Prohibit feeding of birds.</p>
Other sources	<p>Enhance maintenance of stormwater management facilities owned or operated by the permittee.</p> <p>Enhance requirements for third parties to maintain stormwater management facilities.</p> <p>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.</p> <p>Provide public education on appropriate recreational vehicle dumping practices.</p>

- e) Local sediment, phosphorus, and nitrogen TMDLs.
- 1) The permittee shall select and implement strategies designed to reduce the loads associated with sediment, phosphorus, or nitrogen to the permittee's MS4. The permittee may implement this requirement through one or more of the following:
    - a) 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;
    - b) 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
    - c) Land disturbance thresholds lower than Virginia's regulatory requirements for erosion and sediment control and post development stormwater management.
  - 2) 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 I.D 1 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.

- 3) The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in Part I.D.2 c 5.
- 4) 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.
- f) Prior to submittal of the action plan required in Part I.D.2 a, 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.
- g) The MS4 Program Plan as required by Part I.A.6 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.
- h) For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.

#### **E. Annual Reporting**

1. The permittee shall submit the annual report to the Department, no later than October 1<sup>st</sup>, of each year. The report shall cover the previous fiscal year from July 1<sup>st</sup> to June 30<sup>th</sup> and include the following separate sections:
  - a) Background Information:
    - 1) The permittee and permit number of the program submitting the annual report;
    - 2) Any modifications to the MS4 Program Plan as a result of the annual report including a summary of progress toward development and update of MS4 Program Plan components as required by Part I.A.6;
    - 3) The reporting dates for which the annual report is being submitted; and
    - 4) Certification as per Part III.K.
  - b) A summary of the components implemented under Part I.B and an evaluation of the effectiveness of each component. The permittee should attempt to limit any component's narrative summary to no longer than two-pages plus any necessary tables and figures;
  - c) A summary report of the monitoring programs listed under Part I.C;
  - d) A summary of the implementation of each component listed under Part I.D; and
  - e) The Specific Reporting Requirements identified in this state permit.
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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.



## F. Definitions

Definitions contained in the Virginia Stormwater Management Act, Part I (9VAC25-870-10) and Federal NPDES rules, 40 CFR Part 122, apply where a definition is not specified below. Unless otherwise specified in this state permit, additional definitions or words or phrases used in this state permit are as follows:

"Annual practice" means a nonstructural best management practice such as street or storm drain cleaning that reduces pollution for one compliance year upon implementation.

"Best management practice" or "BMP" means schedules of activities, prohibitions of practices, including both structural and nonstructural practices, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities.

"Board" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, "board" means the Department of Environmental Quality.

"Date brought online" means the date when the permittee determines that a new stormwater management facility is properly functioning to meet its designed pollutant load reduction.

"Department" or "DEQ" means the Department of Environmental Quality.

"Ecosystem restoration projects" means practices implemented to reestablish and maintain natural systems that prevent, reduce, or remediate pollutant loadings. Examples of ecosystem restoration projects include stream restoration, shoreline restoration, land-use conversion, and reforestation.

"High priority municipal facility" means facilities owned or operated by the permittee with drainage to any permitted MS4 that actively engage in one or more of the following activities: (i) composting, (ii) equipment storage, cleaning and maintenance, (iii) long-term materials storage, (iv) pesticide, herbicide, and fertilizer storage, (v) recycling (vi) anti-icing and deicing storage, handling and transfer, (vii) solid waste handling and transfer, and (viii) permittee owned or operated vehicle washing, maintenance, and salvage.

"Industrial land use" means land utilized in connection with manufacturing, processing, or raw materials storage at facilities identified under 40 CFR Part 122.26(b)(14).

"Maintenance" means maintenance on the MS4 and associated structural stormwater controls including, but not limited to, activities such as inspections of basins and ponds; repair and replacement of failed controls, mowing grass filter strips; regular removal of litter and debris from dry ponds, forebays and water quality inlets; periodic stabilization and revegetation of eroded areas; periodic removal and replacement of filter media from infiltration trenches and filtration ponds; periodic removal of trash and sediment; deep tilling of infiltration basins to maintain capacity; vacuuming or jet hosing of porous pavement or concrete grid pavements; and removal of litter and debris from wet weather conveyances.

"Permittee" means Henrico County.

"Physically interconnected" means that one MS4 is connected to a second MS4 in such a manner that it allows for direct discharges to the second system.

"Pollutants of concern" or "POC" means pollutants specifically identified in a U.S. Environmental Protection Agency approved total maximum daily load (TMDL) report as causing a water quality impairment.

"Retrofit" means the modification of existing stormwater management facilities, as defined herein, including flood control structures, through construction and/or enhancement in order to address water quality improvements. Retrofit also means the installation or implementation of source reductions to provide water quality improvements on previously developed land where no stormwater source reductions previously existed.

**PART II – DEQ BMP WAREHOUSE REPORTING**

- A. For the purpose of Part II 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. Facilities that solely provide peak flow control as required by Henrico County Code are excluded from the requirements of this section. Inspection and maintenance requirements for these facilities shall be in accordance with all applicable state and local ordinances, regulations, and statutes. In addition, ecosystem restoration projects shall be inspected and maintained in accordance with the 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.
- 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 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.
  2. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part II.B.1 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 Act regulations (9VAC25-830) if applicable and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.
  3. The permittee shall use the DEQ BMP Warehouse to report BMPs that were not reported in accordance with Part II.B.1 or 2 and were implemented as part of a TMDL action plan to achieve nitrogen, phosphorus, and total suspended solids reductions in accordance with Part I.D.1 or 2.
  4. The permittee shall use the DEQ BMP Warehouse to report any BMPs that were not reported in accordance with Part II B.1, 2, or 3.
  5. The permittee shall use the DEQ BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I.B.2.h) 1) or 2), or in accordance with Part I.D and the most recent associated TMDL action plan.
- C. The following information for each new BMP reported in accordance with Part II.B.1, 2, 3. or 4 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 I.D 1 or local TMDL action plan required in Part I.D.2, 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 II.B.1, 2, 3, or 4 and Part II.C.
- 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 III-CONDITIONS APPLICABLE TO ALL VPDES MS4 PERMITS**

### **A. MONITORING**

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored 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.
3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.
4. Samples taken as required by this state permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

### **B. RECORDS**

1. Monitoring records/reports shall include:
  - a) The date, exact place, and time of sampling or measurements;
  - b) The individual(s) who performed the sampling or measurements;
  - c) The date(s) and time(s) analyses were performed;
  - d) The individual(s) who performed the analyses;
  - e) The analytical techniques or methods used; and
  - f) The results of such analyses.
2. The permittee 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 3 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 permittee, or as requested by the Department.

### **C. REPORTING MONITORING RESULTS**

1. The permittee shall submit the results of the monitoring required by 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) or 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 this section and 9VAC25-31-1020. There shall be at least three months' notice provided between the notification from the Department and the date after which such forms and reports must be submitted electronically.
3. If the permittee 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 permittee shall furnish to the Department, 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 may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from its discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the Clean Water Act and Virginia Stormwater Management Act. The permittee shall also furnish to the Department 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 § 62.1-44.15:26 of the Code of Virginia, except in compliance with a 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 regulated 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 or 40 CFR Part 302 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 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 “bypass” or “upset”, as defined herein, should occur from a facility and the discharge enters or could be expected to enter surface waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone 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 permittee shall produce a written report and submit it to the Department within five days of discovery of the discharge in accordance with Part III.I.2. Unusual and extraordinary discharges include but are not limited to 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

The permittee shall report any noncompliance, which may adversely affect surface waters or may endanger public health.

1. A report shall be provided within 24 hours to the Department from the time the permittee becomes aware of the circumstances. The following shall be included as information, which shall be reported within 24 hours under this paragraph:
  - a) Any unanticipated bypass; and
  - b) Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
  - a) A description of the noncompliance and its cause;
  - b) 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
  - c) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Department or its designee may waive the written report on a case-by-case basis for reports of noncompliance under Part III.I if the report has been received within 24 hours and no adverse impact on surface waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Part III.I.2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III.2.

**NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the Department's Regional Office. Pollution Response Program as found at <https://www.deq.virginia.gov/our-programs/pollution-response/pollution-data-and-reporting>. Reports may be made by telephone or by fax. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of**

**Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.**

4. Whenever the permittee becomes aware of a failure to submit any relevant facts, or submitted incorrect information in any report to the Department, it shall promptly submit such facts or information.

#### **J. NOTICE OF PLANNED CHANGES**

1. The permittee 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 permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - 1) After promulgation of standards of performance under § 306 of the Clean Water Act that are applicable to such source; or
    - 2) After proposal of standards of performance in accordance with § 306 of the Clean Water Act that are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.
  - b) The permittee plans alteration or addition that would significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this state permit; or
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity, which may result in noncompliance with permit requirements.

#### **K. SIGNATORY REQUIREMENTS**

1. Permit Applications. All permit applications shall be signed as follows:
  - a) For a corporation: by a responsible corporate officer. For the purpose of this subsection, 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- 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 which 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 environmental 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 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 subsection, 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, etc. All reports required by permits, and other information requested by the Department shall be signed by a person described in Part III.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 III.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 written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part III.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III.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 Parts III.K.1 or 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 permittee shall comply with all conditions of this state permit. Any 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 permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee 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 permittee wishes to continue an activity regulated by this state permit after the expiration date of this state permit, the permittee shall submit a completed EPA Form 1 and an updated MS4 Program Plan at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

#### **N. EFFECT OF A 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 permittee 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 permit conditions on "bypassing" (Part III.U), and "upset" (Part III.V) nothing in this state permit shall be construed to relieve the permittee 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 permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law or section 311 of the Clean Water Act.

#### **Q. PROPER OPERATION AND MAINTENANCE**

The permittee 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 permittee 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 permittee 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.

#### **S. DUTY TO MITIGATE**

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this state permit, which 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 a permittee 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 9 VAC 25-870-10, means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.U.2 and U.3.
2. Notice
  - a) Anticipated Bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
  - b) Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III.I.
3. Prohibition of bypass.
  - a) Bypass is prohibited, and the Department or its designee may take enforcement action against a permittee 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 permittee submitted notices as required under Part III.U.2.
- b) The Department or its designee may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.U.3
- a.

#### **V. UPSET**

1. An upset, as defined in 9 VAC 25-870-10, constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of Part III.V.3 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.
2. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
3. A permittee 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 permittee can identify the cause(s) of the upset;
  - b) The permitted facility was at the time being properly operated;
  - c) The permittee submitted notice of the upset as required in Part III.I; and
  - d) The permittee complied with any remedial measures required under Part III.S.
4. In any enforcement preceding the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### **W. INSPECTION AND ENTRY**

The permittee shall allow the Department, EPA, or an authorized representative (including an authorized contractor acting as a representative of the administrator) upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee'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 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 assuring 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. PERMIT ACTIONS**

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

#### **Y. TRANSFER OF PERMITS**

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part III.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee 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 III.Y.1., this state permit may be automatically transferred to a new permittee if:
  - a) The current permittee notifies the Department at least two 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 permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - c) The Department does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III.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.