



# WILLIAM & MARY

CHARTERED 1693

Facilities Management  
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September 30, 2019

Matt Fanghella  
Commonwealth of Virginia  
Department of Environmental Quality  
5636 Southern Blvd.  
Virginia Beach, VA 23462

RE: MS4 Annual Report for William & Mary Permit #VAR040039

Dear Mr. Fanghella,

Following is the referenced annual report for your review. Please do not hesitate to contact me with any questions.

Sincerely,

Van Dobson, P.E.  
Associate Vice President for Facilities Management/Chief Facilities Officer

Copy to:

File

Glenn Telfer, P.E., Draper Aden

Gregg Shipp, P.E.

Matt Fanghella



**VPDES MUNICIPAL SEPARATE STORM SEWER  
SYSTEM (MS4) PERMIT  
VAR040039**

**ANNUAL REPORT  
PERIOD JULY 1, 2018 TO JUNE 30, 2019**

**THE COLLEGE OF WILLIAM & MARY**



**WILLIAM & MARY**

CHARTERED 1693

*September 30, 2019*

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## 1.0 SIGNED CERTIFICATION AS PER PART III K:

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.



Sep 30, 2019

Responsible Official Signature

Date

Van Dobson

Associate Vice President for Facilities Management/Chief Facilities Officer

VAR040039

College of William and Mary

Permit Number

MS4 Name

## 2.0 INTRODUCTION

The College of William and Mary (university) was originally issued an MS4 permit in 2003 by the Commonwealth of Virginia. This permit sets forth minimum requirements for the operation of the university's storm sewer system, including storm water treatment systems (BMPs), and is reissued every five years. Oversight of the permit has changed from DCR to DEQ. The permit requires an annual report to be submitted to Virginia DEQ by October 1, 2019 describing progress on meeting permit requirements during the period July 1, 2018 to June 30, 2019. The university has met all permit requirements during the reporting period.

### 3.0 ANNUAL REPORTING REQUIREMENTS - COMPLIANCE SUMMARY

In Part I section D of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

Part I Section D2

2. *The annual report shall include the following general information:*

a) *The permittee, system name, and permit number;*

**Response: Permittee & System name: College of William and Mary**

**Permit number: VAR040039**

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

**Response: July 1, 2018 to June 30, 2019**

c) *A signed certification as per Part III K;*

**Response: See Section 1 for signed certification.**

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

**Response: See Section 4 for specified annual reporting items for each MCM.**

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

**Response: The current MS4 program implementation has been effective in providing compliance with the permit requirements. No changes to the MS4 program plan are required, however the university continues to improve internal procedures. See evaluation of each MCM at the end of each MCM section.**

## 4.0 MINIMUM CONTROL MEASURES REPORTING

### 4.1 Public education and outreach

In Part I section E-1-g of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

*Part I section E-1-g*

*g. The annual report shall include the following information:*

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

**Response: The high priority water quality issues identified by the university are: Nutrient Management, Erosion Control, and Plastics Diversion.**

2. A list of the strategies used to communicate each high-priority stormwater issue.

**Response:** The permit requires two or more of the following strategies per year to communicate to the public the high-priority stormwater issues identified above: traditional written materials, alternative materials, signage, media materials, speaking engagements, curriculum materials, and training materials. Below is a summary of activities with required information:

High-Priority Water Quality Issue	Education and Outreach Activities
Nutrients Management (includes water chemistry)	Grounds Staff Training
Erosion Control	ESC Briefings with all contractors prior to start of construction
Plastics Diversion	Campus wide recycling containers with associated signage. Website with details on the recycling program (1)

(1) <https://www.wm.edu/sites/sustainability/initiatives/recycling/index.php>

**MCM Evaluation:** The MCM is effective in ensuring regulatory compliance. No changes are planned at this time.



## 4.2 Public involvement and participation

In Part I section E-2-f of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

### Part I section E-2-f

*f. The annual report shall include the following information:*

1. *A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded;*

**Response: No public input was received during the reporting cycle.**

2. *A webpage address to the permittee's MS4 program and stormwater website;*

**Response: This Annual Report, including the current MS4 Program Plan will be posted to the following link within 30 days of submittal of this Annual Report to DEQ:**

<https://www.wm.edu/offices/facilities/departments-directors/OpMaint/stormwater/index.php>

3. *A description of the public involvement activities implemented by the permittee;*

**Response: The permit requires the university to implement no less than four activities per year from two or more of the following categories: monitoring, restoration, educational events, disposal or collection events, and pollution prevention. The university implemented the following local activities:**

#### **Monitoring**

- **Weekly student sampling of water quality in three campus stormwater retention ponds Fall 2018 and Spring 2019 (3 students total)**

#### **Educational**

- **Earth Day Festival, April 20, 2019**

- **Meet the Greens Event, Hosted by W&M Sustainability, August 26, 2018**

**Disposal or Collection Events**

- **Recycle Mania Annual Tournament, March, 2019, includes electronics recycling.**
- **Hazardous Waste Pickup, for waste generated by College facilities, ongoing program, picks up daily.**
- **Recycling Program, manages collection from recycling and compost containers throughout campus, includes paper, cardboard, plastics #1-7, aluminum, steel, glass, milk & juice cartons. Dedicated locations are established for small electronics, ink cartridges, plastic bags, batteries, and light bulbs.**

4. *A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and*

**Response: The metric for all of the activities is the number of participants compared to the total numbers of students, staff, and faculty. Although exact numbers for each activity are unavailable, it is estimated that, collectively these activities have reached more than 90% of the university community. While the activities cannot be linked to a measurable improvement in water quality on campus, the university community is more aware of stormwater issues than in the past.**

5. *The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.*

**Response: No other MS4 permittees were involved in the listed public involvement opportunities.**

**MCM Evaluation: The MCM is effective in ensuring regulatory compliance. No changes are planned at this time.**

### 4.3 Illicit discharge detection and elimination

In Part I section E-3-e of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

#### Part I section E-3-e

*e. The annual report shall include:*

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

**Response: The MS4 map and information table are maintained in the university's GIS system. The GIS system was updated in June of 2019 to include the current MS4 map and outfall information table. This information was sent to DEQ on June 28, 2019.**

2. *The total number of outfalls screened during the reporting period as part of the dry weather screening program; and*

**Response: During the reporting period, the university screened all of its 55 outfalls. There were no signs of illicit discharges and no follow-up actions were required.**

3. *A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:*
  - a. *The source of illicit discharge;*
  - b. *The dates that the discharge was observed, reported, or both;*
  - c. *Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);*
  - d. *How the investigation was resolved;*
  - e. *A description of any follow-up activities; and*
  - f. *The date the investigation was closed.*

**Response: During the reporting period, there was one illicit discharge event where prohibited discharges reached the storm sewer system:**

### **Miller Hall Sewage Spill**

On October 23, 2018, a sewage spill occurred along the road that services Miller Hall and Lake Matoaka Art Center. The spill was discovered by university staff. The volume is estimated to be less than 50 gallons. The discharge came from a manhole located at the corner of the service road and Jamestown Road and traveled downhill, approximately 75 feet to a storm drain which empties to Lake Matoaka. There was no evidence encountered that the spill reached Lake Matoaka. The City of Williamsburg jetted the sanitary line to clear it. The amount released was unknown. ServPro responded on behalf of the university to treat and disinfect the areas impacted by the spill. This incident was reported to the Virginia Department of Environmental Quality under reference ID 156913. The investigation was closed October 24, 2018.

**MCM Evaluation: The MCM is effective in ensuring regulatory compliance. No changes are planned at this time.**

#### **4.4 Construction site stormwater runoff control**

In Part I section E-4-d of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

##### *Part I section E-4-d*

*d. The annual report shall include the following:*

*1. If the permittee implements a construction site stormwater runoff program in accordance with Part I E 4 a (3):*

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

**Response: All projects, with one exception, were conducted in accordance with the current Annual Standards and Specifications.**

*b. If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.*

**Response:** The Alumni House project failed to obtain VSMP permit coverage prior to land disturbance. The application was submitted to DEQ in a timely manner, but included the previous version of the DEQ cover sheet instead of the latest version. Once this was identified, the university took immediate action to resubmit with the required cover sheet. The university has revised the Annual Standards and Specifications and submitted them to DEQ. The university is currently reviewing the DEQ comments received September 18, 2019.

2. *Total number of inspections conducted; and*

**Response:** During construction, over 50 inspections were conducted by the university's ESC Inspector after every significant rain event and at least every two weeks.

3. *The total number and type of enforcement actions implemented and the type of enforcement actions.*

**Response:** As the university is the contract holder for all of the land disturbance activities on campus and the ESC inspector represents the university, any deficiencies in ESC measures or practices are resolved immediately. There were no enforcement actions taken during the reporting period.

**MCM Evaluation:** The MCM has been effective in providing compliance with the regulatory requirements. The Annual Standards and Specifications are currently being revised to provide additional clarity concerning procedures within the university for obtaining VSMP permits in a timely manner.

#### **4.5 Post-construction stormwater management for new development and development on prior developed lands**

In Part I section E-5-i of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

##### Part I section E-5-i

*i. The annual report shall include the following information:*

1. *If the permittee implements a Virginia Stormwater Management Program in accordance with Part I E 5 a (1) and (2):*

- a. *The number of privately owned stormwater management facility inspections conducted; and*

**Response: N/A, all stormwater management facilities are owned by the university.**

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

**Response: N/A, all stormwater management facilities are owned by the university.**

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

**Response: Twenty-three (23) inspections were performed on stormwater management facilities owned and operated by the university during the reporting period.**

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

**Response: Sediment was removed from several stormwater management facilities. Modifications to three facilities (Crim Dell BMP, Wildflower Refuge BMP and Health Center BMP), including sediment removal, were completed as part of the program to provide compliance with the Chesapeake Bay TMDL.**

4. *A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; and*

**Response: Confirmed**

5. *A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted.*

**Response: Confirmed. The required information was sent to Matt Fanghella of DEQ on 6/28/19.**

**MCM Evaluation: The MCM is effective in ensuring regulatory compliance. No changes are planned at this time.**

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

In Part I section E-6-q of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

Part I section E-6-q

*q. The annual report shall include the following:*

1. *A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period;*

**Response: No changes or modification were done to operational procedures during the reporting period.**

2. *A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period;*

**Response: N/A. The university does not have any facilities that meet the permit criteria for high-priority facilities.**

3. *A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in accordance with Part I E 6 h during the reporting period;*

**Response: N/A. The university does not have any facilities that meet the permit criteria for high-priority facilities.**

4. *A summary of any new turf and landscape nutrient management plans developed that includes:*

- a. Location and the total acreage of each land area; and*
- b. The date of the approved nutrient management plan; and*

**Response: There were no new turf and landscape nutrient management plans required to be developed during the reporting period.**



5. A list of the training events conducted in accordance with Part I E 6 m, including the following information:

- a. The date of the training event;
- b. The number of employees who attended the training event; and
- c. The objective of the training event.

**Response: Below is a summary of training activities with required information:**

<b>Training Event</b>	<b>Date</b>	<b>Number of Employees</b>	<b>Training Event Objective</b>
Mid-Atlantic Horticulture Short Course	1/15/19 – 1/17/19	1	Nutrient Management License Update
Mid-Atlantic Horticulture Short Course	1/15/19 – 1/17/19	12	Pesticide Recertification
BMP Plantings	4/1/19	5	Plants used in stormwater BMPs and how to maintain them
Monthly Crew Meetings	monthly	All grounds crew	good housekeeping and illicit discharge prevention and response training

**MCM Evaluation: The MCM is effective in ensuring regulatory compliance. No changes are planned at this time.**

## 5.0 CHESAPEAKE BAY TMDL STATUS REPORT

In Part II section A-13 of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

*Part II section A-13*

13. For each reporting period, the corresponding annual report shall include the following information:

- a) *A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year;*

**Response: The following BMPs were implemented to provide Chesapeake Bay TMDL compliance, which will be registered in the DEQ BMP Warehouse by 10/1/2019:**

Stormwater BMP	Type	Date Completed	Removal Achieved (lbs/yr)		
			N	P	TSS
South Sunken Garden	Bioretention	1/3/2019	6.67	0.78	204.59
Crim Dell	Retrofit	8/1/2018	88.38	6.24	5,061.15
Health Center Crystal Stream	Manufactured	10/1/2017*	51.99	3.59	3,696.23
Health Center BMP	Retrofit	10/1/2017*	129.13	8.56	3,472.40
Wildflower Refuge BMP	Retrofit	12/1/2017*	171.92	9.99	1,233.65
Totals			448.08	29.17	13,668.01

**\*\* – Completed previous to this reporting period**

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

**Response: Credits were not acquired during the reporting period**

c) *The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids; and*

**Response: All required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids have been met for the current permit:**

	Removal Achieved (lbs/yr)		
	N	P	TSS
Cumulative Required Removal through Second Permit Cycle	95.47	12.7	10,918.67
1 <sup>st</sup> Cycle Removals	15.80	3.20	1,730.40
2 <sup>nd</sup> Cycle Removals	448.08	29.17	13,668.01
Total Cumulative Removals to Date	463.88	32.37	15,398.41

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

**Response: There are no BMP's planned to be implemented during the next reporting period for compliance with the Chesapeake Bay TMDL.**

## **6.0 LOCAL TMDL STATUS REPORT**

In Part II section B-9 of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

### *Part II section B-9*

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

### **Powhatan/Mill Creek TMDL**

**In compliance with the Powhatan/Mill Creek TMDL, the university is continuing existing efforts documented in the TMDL Action Plan. Ongoing observations of the Dillard Complex indicate that measures have been successful in preventing the deposition of pet waste.**

**Monitoring is not required and no monitoring is currently being conducted as part of TMDL compliance.**

## 7.0 CONDITIONS APPLICABLE TO ALL STATE AND VPDES PERMITS

### 7.1 Reporting Monitoring Results

In Part III section C-1 of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

#### Part III section C-1

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

**Response: N/A, no monitoring took place during the reporting period.**

### 7.2 Reporting of noncompliance

In Part III section I-3 of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

#### Part III section I-3

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

*NOTE: The reports required in Part III G, H, and I shall be made to the department. Reports may be made by telephone, email, or fax. For reports outside normal working hours, leaving a recorded message shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone service at 1-800-468-8892.*

**Response: There are no instances of noncompliance to report.**

### **7.3 Signatory requirements**

In Part III section K-2 of the MS4 permit, the permit lists specific items to be addressed in the Annual Report. The following are the items listed in the permit in italic typeface followed by responses in bold typeface:

#### Part III section K-2

*2. Reports and other information. All reports required by state permits, including annual reports, and other information requested by the board or 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 signed and dated written authorization is submitted to the department.*

**Response: See Section 1 of this report.**