

# **Municipal Separate Storm Sewer System Annual Report**

Chesapeake, Norfolk, Portsmouth & Virginia Beach Campuses

Reporting Period: July 1, 2021 to June 30, 2022

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General Permit No. VAR040089

Effective Date: November 1, 2018 through October 31, 2023.

Date: October 1, 2022

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#### **Annual Report 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."

Printed Name:	Michael J. Johnson	
<b>.</b>		

Signature:

Title: Associate Vice President for Facilities Planning + Operations Date: September 30, 2022

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#### **Background and Purpose**

Tidewater Community College (TCC) owns and operates a municipal separate storm sewer system (MS4). The college's MS4 consists of features such as curb and gutter, drop inlets, ditches, and stormwater management facilities to convey, treat, and ultimately discharge stormwater runoff to surface waters. The discharge of runoff from the MS4 is regulated under the Clean Water Act, as amended and pursuant to the State Water Control Law and Regulations adopted pursuant thereto. TCC is authorized to discharge stormwater runoff from the Chesapeake, Norfolk, Portsmouth, and Virginia Beach campuses' MS4s under the Virginia Stormwater Management Program Regulations, Virginia Pollutant Discharge Elimination System Regulations (VPDES), and the Virginia State Water Control Law.

TCC is authorized to discharge stormwater in accordance with the General VPDES Permit for Discharges of Stormwater from Small MS4s (General Permit). As required by the General Permit, TCC has developed an MS4 Program Plan that describes the best management practices (BMPs) the college will implement to maintain compliance with the permit. The General Permit also requires TCC to submit an annual report to the Virginia Department of Environmental Quality (DEQ) no later than October 1<sup>st</sup> of each year that reports on program implementation from July 1<sup>st</sup> of the previous year to June 30<sup>th</sup> of the current year. Consistent with the requirements of the General Permit, this annual report is annually completed as summarized in Table 1.

Required Information	Location in Report	
Permittee, system name, and permit number	Cover Page	
Reporting period	Cover Page	
Signed Certification	Page 'i'	
Annual Reporting item(s) specified for each MCM	Provided for each BMP within the section entitled "Minimum Control Measure Annual Reporting."	
Evaluation of the program implementation, effectiveness, and necessary modifications	Provided for each BMP within the section entitled "Minimum Control Measure Annual Reporting." Concerns regarding effectiveness are in Table 2 of the following Section.	

#### Table 1. General information required for annual reporting.

# **Compliance Summary**

Reported information is consistent with the specific annual reporting required in the General Permit and the TCC MS4 Program Plan, including supplemental information described in the Program Plan to measure effectiveness of each BMP. For use in reference to this annual report, the MS4 Program Plan is provided at the TCC stormwater management <u>webpage</u>. The Program Plan may be updated or revised from time to time as part of an iterative process to reduce pollutant loadings and protect water quality to the maximum extent practicable (MEP). TCC has evaluated the effectiveness of each program BMP, as described in the Program Plan. Table 2 summarizes the evaluation to determine if any modifications to the Program Plan are necessary for the subsequent reporting year. If deemed ineffective, please see the reporting for the specific BMP for intended modifications.

<b>BMP</b> # <sup>1</sup>	Description Summary <sup>1</sup>	Effective
1A	Public Education & Outreach	$\boxtimes$ Yes / $\Box$ No
2A	Maintain dedicated webpage	$\boxtimes$ Yes / $\Box$ No
2B	Receive/respond to public reports/input	$\boxtimes$ Yes / $\Box$ No
2C	Public Participation Activities	$\boxtimes$ Yes / $\Box$ No
3A	MS4 Map and Information Table	$\boxtimes$ Yes / $\Box$ No
3B	Prohibition of non-stormwater discharges	$\boxtimes$ Yes / $\Box$ No
3C	Perform dry weather outfall screenings	$\boxtimes$ Yes / $\Box$ No
4A	Implement VCCS Stnds. & Specs for ESC & SWM	$\boxtimes$ Yes / $\Box$ No
4B	Control Non-stormwater discharges (construction)	$\boxtimes$ Yes / $\Box$ No
5A	Implement VCCS Stnds. & Specs for ESC & SWM	$\boxtimes$ Yes / $\Box$ No
5B	Conduct annual SWM Facility Inspections	$\boxtimes$ Yes / $\Box$ No
5C	Update SWM Facility Spreadsheet	$\boxtimes$ Yes / $\Box$ No
5D	Report to DEQ Construction Stormwater Database	$\boxtimes$ Yes / $\Box$ No
6A	Implement Good Housekeeping Procedures	$\boxtimes$ Yes / $\Box$ No
6B	Conduct annual campus-wide SWPPP Evaluation	$\boxtimes$ Yes / $\Box$ No
6C	Maintain Current Nutrient Management Plan	$\boxtimes$ Yes / $\Box$ No
6D	Ensure contract language for controls	$\boxtimes$ Yes / $\Box$ No
6E	Conduct MS4 employee training	$\boxtimes$ Yes / $\Box$ No
SC1	Chesapeake Bay TMDL Action Plan	$\boxtimes$ Yes / $\Box$ No
-	Local TMDL Action Plans	$N/A^2$

 Table 2. Evaluation summary for each BMP for the reporting year.

<sup>1</sup>Refer to BMP section within this program plan for full description and requirements for each BMP.

<sup>2</sup> TCC has not been assigned a waste load allocation from a local TMDL; and therefore, is not required to implement a TMDL Action Plan specific to any local TMDLs.

# **Minimum Control Measure Annual Reporting**

Reporting provided for each BMP described in the TCC MS4 Program Plan to address each MCM is provided below. Information provided is only that explicitly required by the General Permit and the TCC MS4 Program Plan. Please refer to the Program Plan for additional information for each BMP.

# **MCM 1: Public Education and Outreach**

Annual reporting required for each BMP to address MCM 1, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 1A – Public Education & Outreach Plan

Annual reporting associated with this BMP requires:

- ✓ A list of the high-priority stormwater issues addressed during the reporting year (Table 1A-1).
- ✓ A list of the strategies used to communicate each high-priority stormwater issue (Table 1A-1).
- $\checkmark$  The public survey results described for use as a measure of effectiveness (Table 1A-2).

#### Table 1A-1. Reporting for high priority stormwater issues addressed during the reporting year.

High Priority Stormwater Issue	Strategy
1. General public education on: (1) stormwater impacts to	Traditional Written Materials
surface waters and (2) steps to reduce pollution.	(brochure)
2. Illicit discharge prohibition/enforcement on the TCC campus	Media Materials
disciplinary implications, hazards and proper waste disposal.	(Closed circuit TV slides)
3. Increase applicable staff's knowledge regarding pollutants of	Traditional Written Materials
concern for the Chesapeake Bay TMDL.	(brochure)

 Table 1A-2. Public survey results used for measure of effectiveness.

#### **Results from Public Survey**

Two follow-up surveys: (1) Focused on material for WQ issues #1 & #2 distributed to all of the TCC public. (2) Focused on WQ issue #3 distributed to applicable staff. Next survey to assess improvement of scores will be in the spring of 2023. Since the 2019 survey, the public score remained the same at 78%. Staff scores have increased from 89% to 90%. Scores will continue to be assessed over time to measure effectiveness.

Date Distributed:	Number of Respondents:	Average Score:
(1) 7/19/21 & (2) 9/27/21	(1) 220 and (2) 31	(1) 78% and (2) 90%

#### Summary of BMP Effectiveness based on Program Plan Measurable Goal

Does the measure of BMP effectiveness require Program Plan modification?

# **MCM 2: Public Involvement and Participation**

Annual reporting required for each BMP to address MCM 2, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 2A – Dedicated MS4 Webpage

Annual reporting associated with this BMP requires:

- ✓ The current TCC MS4 Program and stormwater pollution prevention webpage address and a description of updates implemented within the reporting year. A description of updates implemented to the webpage within the reporting year; and
- ✓ Indication of the completion of an annual review of the webpage to ensure the required information to be posted is maintained and up to date.

#### Table 2A-1. Reporting for high priority stormwater issues addressed during the reporting year.

Dedicated Stormwater Webpage Reporting		
Link to current MS4 Program and Stormwater pollution prevention webpage: https://www.tcc.edu/about-tcc/leadership-governance/stormwater-management/		
An annual review of the website conducted to ensure all information required to be posted on the website has continued to be maintained?		
Description of updates implemented during the reporting year: No updates.		

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	Yes 🔽 No

#### BMP 2B – Procedures for Receipt/ Response to Public Reports/Input

Annual reporting associated with this BMP requires:

- ✓ Each potential illicit discharge report and percentage of reports closed;
- ✓ Each instance of public input and percent for which TCC provided response; and
- ✓ Assessment if all illicit discharges were not closed or all input did not receive response.

Illicit Discharge Reports <sup>1</sup>			
Number of instances:	Number of instances closed:	Percent of instances closed:	
0	0	N/A	
Were 100% of instances of illicit discharge reports closed?		N/A	
Public Input on Program Plan <sup>2</sup>			
Number of instances: Number of responses:		Percent of instances responded	
0	0	to: <i>N/A</i>	
Was a response provided to all instance of public input?		N/A	

<sup>1</sup> Illicit discharge reports are provided in Appendix A, if > zero instances.

<sup>2</sup> Public input and response documentation is in Appendix B, if > zero instances.

#### Summary of BMP Effectiveness based on Program Plan Measurable Goal

Does the measure of BMP effectiveness require Program Plan modification?

🗌 Yes 🔽 No

#### **BMP 2C – Public Involvement/Participation Activities**

Annual reporting associated with this BMP requires:

- $\checkmark$  A description of the activities;
- $\checkmark$  A report of the metric to measure the benefit to water quality; and
- $\checkmark$  An evaluation as to whether or not the activity is beneficial to improving water quality.

Public Involvement/Participation Activities			
Involvement Type <sup>1</sup>	Description of activity <sup>2</sup>	Report on the Metric to measure benefit to water quality	Beneficial to Improving water quality?
Pollution prevention	Install/maintain cigarette butt stations with stormwater message displayed on them.	50 stations inspected and maintained	🔽 Yes 🔲 No
Educational Events	Maintained demonstration of a SWM control project – educational signage at bioretention (BMP P-11) at Portsmouth Campus.	Inherent as a benefit to college public walking by and observing the signage.	✓ Yes □ No
Pollution prevention	Implementation and maintenance of storm drain marker program.	All inlets marked. A minimum of 20% of markers inspected and maintained annually.	Ves 🗖 No
Disposal or collection events	Custodial Services Recycling Program for paper, glass, and plastics	260 tons of recycled material collected during the reporting period	Ves 🗖 No

<sup>1</sup> A minimum of two involvement types must be used annually.

<sup>2</sup> TCC did not collaborate with any other MS4 permittees for any of the listed activities.

# 

# MCM 3: Illicit Discharge Detection and Elimination

Annual reporting required for each BMP to address MCM 3, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 3A – Maintain MS4 Map and Information Table

Annual reporting associated with this BMP requires:

✓ 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<sup>th</sup> of the reporting year;

#### **Certification Statement: MS4 Map & Information Table Updates**

"In accordance with the General Permit and the TCC Program Plan, TCC confirms as part of this annual report that the MS4 map and information table have been update, as needed and applicable, to reflect any changes to the MS4 occurring during the reporting year."

Yes

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	Yes 🔽 No

# BMP 3B – Prohibition of Unauthorized Non-stormwater Discharges

Annual reporting associated with this BMP includes reporting requirements for BMP 3C, in addition to the following:

- ✓ The number of illicit discharges purposefully caused by a member of the TCC public;
- ✓ An assessment, when applicable, of any disciplinary action in context to the protection of water quality.

Illicit Discharge Prohibition Enforcement		
(If applicable, instances are added below of illicit discharges purposefully caused by the TCC Public)		
No. Add Instance Disciplinary action taken? (Yes / No)		Description of action taken
Total number of instances for current reporting year.		0
Total number of instances for last reporting year.		0
Total number of instances two years previous.		0
Total number of instances three year prior.		0
Does trend indicate the BMP is ineffective?		Yes 🔽 No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	TYes Vo

#### BMP 3C – Maintain, Implement, Enforce IDDE Written Procedures (Includes Screening)

Annual reporting associated with this BMP requires:

- ✓ The total number of outfalls screened during the reporting period as part of the dry weather screening program; and
- ✓ A list of illicit discharges to the MS4 including spills reaching the MS4. Each instance of illicit discharge will be documented using the "IDDE Tracking Form" in the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* to include the following information:
  - The source of illicit discharge;
  - The dates that the discharge was observed, reported, or both;
  - Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);
  - How the investigation was resolved;
  - A description of any follow-up activities; and
  - The date the investigation was closed.
- ✓ An annual assessment of the percentage of detected illicit discharges that are eliminated, including any necessary modification(s) needed for the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* for cases where a detected illicit discharge was not eliminated. A schedule for completing any modification will also be provided.

<b>Outfall Screening &amp; IDDE Procedure Effectiveness</b>	
Total number of outfalls screened as part of dry weather screening program.	9
Total number of TCC outfalls.	9
Were 100% of outfalls screened during the reporting year?	Yes No

Effectiveness Assessment for Addressing Illicit Discharges	
Were all instances of identified illicit discharge listed in Appendix A closed?	None identified.

# MCM 4: Construction Site Stormwater Runoff Control

Annual reporting required for each BMP to address MCM 4, as described in the General Permit and MS4 Program Plan, is provided below.

#### BMP 4A – Address Discharge from Regulated Construction Site Stormwater Runoff

Annual reporting associated with this BMP requires:

- ✓ A confirmation statement, as a result of the annual assessment for effectiveness, that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current DEQ-approved standards and specifications for ESC.
  - If one or more of the land disturbing projects were not conducted with the DEQapproved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications.
- ✓ Total number of ESC inspections conducted; and
- $\checkmark$  The total number and type of enforcement actions taken.

#### Certification Statement: Adherence to the VCCS Standards & Specifications for ESC

Confirmation Statement: "In accordance with the General Permit and the TCC Program Plan, TCC confirms that land disturbing projects that occurred during the reporting period have been conducted in accordance with the latest DEQ-approved standards and specifications for Erosion and Sediment Control."

#### ESC Inspections & Enforcement Summary

Total number of ESC inspections conducted: *N/A – No projects during the reporting year.* 

Were any enforcement actions taken during the reporting year?

🗌 Yes 🔽 No

Yes No

✓ N/A

# Summary of BMP Effectiveness based on Program Plan Measurable Goal

Does the measure of BMP effectiveness require Program Plan modification?

🗌 Yes 🔽 No

# BMP 4B –Controls to Prevent Non-stormwater Discharges during Land Disturbance

Annual reporting associated with this BMP requires:

- ✓ The total number of illicit discharge originating from land disturbance activity of the total illicit discharges reports listed in Appendix A; and
- ✓ Any potential changes to the subsequent annual standards and specifications to prevent future occurrences.

Illicit Discharge from Land Disturbance Activity	
Were there any instances during the reporting period of illicit discharges originating from land disturbance activity?	Yes 🔽 No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	TYes Vo

# MCM 5: Post-construction SWM for Development

Annual reporting required for each BMP to address MCM 5, as described in the General Permit and MS4 Program Plan, is provided below. Please refer to the TCC MS4 Program Plan for specific BMP information.

#### BMP 5A – Address Post-construction Stormwater Runoff

Annual reporting associated with this BMP requires:

✓ A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current DEQ-approved standards and specifications for SWM.

Confirmation Statement: "In accordance with the General Permit and the TCC Program Plan, TCC confirms that applicable land disturbing projects that occurred during the reporting period, if any, have been conducted in accordance with the latest DEQ-approved standards and specifications for Stormwater Management."

	Yes	No
~	N/A	

<sup>1</sup> Not applicable since no projects were completed during the reporting year that required coverage; or if an applicable project was completed, a stormwater management facility was not installed as part of the project. See following certification statement.

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	TYes Vo

#### BMP 5B – Implement Inspection & Maintenance Program for SWM Facilities

Annual reporting associated with this BMP requires:

- ✓ The total number of inspections (completed forms) conducted on each of TCC's SWM facilities;
- ✓ A description of the significant maintenance, repair, or retrofit activities performed on each SWM facility, if any, to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection; and
- ✓ Summary of timelines for addressing any significant maintenance identified during inspections.

SWM Facility Inspections and Maintenance	
Total number of inspections conducted on SWM facilities for the reporting year is: 27	
Was at least one inspection performed on each TCC SWM facility during the reporting year?	Ves 🔽 No
Was any significant maintenance, repair, or retrofit activities necessary as a result of inspection?	Ves 🔽 No
If Yes, provide the BMP ID and a description of significant maintenance needed to ensure	
performance per design, including an assessment of the timeliness of the needed actions.	
No significant issues observed during inspections. Minor items identified are 2022 MS4 Inspections Report. Maintenance is mostly associated with thinni providing better access.	

#### BMP 5C - Maintain SWM Facilities Spreadsheet

No annual reporting necessary (see reporting for BMP 5D)

#### **BMP 5D – SWM Facilities Reporting to DEQ**

Annual reporting associated with this BMP requires:

- ✓ A confirmation statement that either: (1) TCC submitted SWM facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities was required or (2) TCC did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities.
  - If information was not submitted, an explanation as to why with a schedule for submission of the required information.
- ✓ A confirmation statement that TCC electronically reported, no later than the submission date of this annual report, SWM facilities and BMPs implemented between July 1 and June 30 using the DEQ BMP Warehouse that were 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) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required and the date on which the information was submitted.
  - If information was not submitted, an explanation as to why with a schedule for submission of the required information.

# Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Not Applicable for Reporting Year)

Confirmation Statement: "TCC submitted SWM facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities was required in accordance with the VCCS Standards and Specifications for ESC and SWM."

Yes No

N/A

<sup>1</sup> Not applicable since no projects were completed during the reporting year that required coverage; or if an applicable project was completed, a stormwater management facility was not installed as part of the project. See following certification statement.

# BMP 5D -SWM Facilities Reporting to DEQ (continued)

Certification Statement: Report to Virginia Construction Stormwater General Permit Database	
(Not Applicable for Reporting Year)	
Confirmation Statement: "TCC either did not complete any projects during the reporting period requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; or, if a project was completed, a stormwater management facility was not installed as part of the project."	Marked box below is confirmation

<b>Certification Statement: Reporting to the DEQ BMP Warehouse</b>		
Confirmation Statement: "TCC reported, prior to submission of this annual report, stormwater management facilities and BMPs implemented between July 1 and June 30 of the reporting period using the DEQ BMP Warehouse that were 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) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required."	Yes No	
Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Not Applicable for Reporting Year)		
Confirmation Statement: "TCC did not install SWM facilities and BMPs 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) and for which a General VPDES Permit for Discharges of Stormwater from	Marked box below is confirmation ⊠	

Construction Activities was not required"

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Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	TYes 🔽 No

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# MCM 6: Pollution Prevention & Good Housekeeping for Facilities

Annual reporting required for each BMP to address MCM 6, as described in the General Permit and MS4 Program Plan, is provided below. Please refer to the TCC MS4 Program Plan for specific BMP information.

#### BMP 6A – Written Procedures for Pollution Prevention/Good Housekeeping

Annual reporting associated with this BMP requires:

- ✓ A description of any illicit discharges originating from campus operations and maintenance activities, provided in reporting for BMP 3C; and
- ✓ A summary of any modifications to operational procedures in the *TCC Staff Handbook of Good Housekeeping and Pollution Prevention* to prevent future occurrences of illicit discharge(s), if applicable.

Were there any illicit discharges from BMP 3C reporting that originated from campus operations of maintenance activities?

🗌 Yes 🔽 No

Summary of BMP Effectiveness based on Program Plan Measurable Goal			
Does the measure of BMP effectiveness require Program Plan modification?	TYes Vo		

# BMP 6B –SWPPPs for High Priority/ High Potential Facilities for Discharging Pollutants

Annual reporting for this BMP requires a summary of the annual campus assessment to determine if a SWPPP is required based on the criteria described in the General Permit that defines high priority facilities that have high potential of discharging pollutants.

Annual Campus SWPPP Assessment Results			
Was an annual evaluation performed to determine if a SWPPP is required?	Ves 🔽 No		
If yes, is a SWPPP required?	TYes 🔽 No		

Summary of BMP Effectiveness based on Program Plan Measurable Goal			
Does the measure of BMP effectiveness require Program Plan modification?	🗌 Yes 🔽 No		

# BMP 6C - Maintain/ Implement Nutrient Management Plans and Deicing Policy

Annual reporting for this BMP will include a summary of any new NMPs developed, including

- $\checkmark$  Locations and total acreage for where the NMP applies; and the
- $\checkmark$  Date of the latest DCR approval for the NMP.

Nutrient Management			
Did TCC apply nutrients during the reporting year?	Ves 🔽 No		
TCC implements a Nutrient Management Plan that applies to the TCC MS4 regulated Chesapeake, Portsmouth, Norfolk and Virginia Beach and covers 8.0, 5.0, 0.1, and fertilized turf, respectively. The Nutrient Management Plan is approved by the Depa Conservation and Recreation and is valid through July 1, 2024.	32.5 acres of		

Summary of BMP Effectiveness based on Program Plan Measurable Goal			
Does the measure of BMP effectiveness require Program Plan modification?	🗌 Yes 🔽 No		
	<u> </u>		

#### BMP 6D – Contractor Requirements to Utilize Controls to Minimize Pollutant Discharges

Annual reporting for this BMP requires:

- ✓ The number of illicit discharges originating from contractor activities.
- ✓ Summary of assessment to modify procurement procedures or the *TCC Staff Handbook of* Good Housekeeping and Pollution Prevention to prevent future instances.

<b>BMP 6A Annual Reporting Form</b>	
Were there any illicit discharges during the reporting period that originated from	Yes 🔽 No
contractor activities?	

Summary of BMP Effectiveness based on Program Plan Measurable Goal			
Does the measure of BMP effectiveness require Program Plan modification?	TYes 🔽 No		

#### **BMP 6E – Training Plan for Applicable Employees**

Annual reporting associated with this BMP requires:

- $\checkmark$  The date of the most recent training event;
- $\checkmark$  The date of the prior training event (to ensure within 24 months);
- ✓ The number of employees who attended the most recent training event;
- $\checkmark$  The objective of the training event; and
- ✓ The average quiz scores from the training event. If quiz scores average less than 80%, a summary will be report of the assessment of the training event with any necessary modifications to be incorporated into future training to improve teaching of the materials.

Good Housekeeping/Pollution Prevention Training			
Date of latest training event:	Sept. 19 – 22, 2022. Training was provided as training video specifically developed for TCC and online quiz (measure of effectiveness and documentation). The training was performed by individuals on separate dates and a new employee in November 2021.		
Number of employees that attended the latest training event.		6	
Number of employees identified to be required to participate in training (as defined by the general permit and program plan).			
Percent of those identified that attended training.		100%	
Did the % of those identified to be required to attend training attend?			
Description of the objective of the latest training event: Familiarize staff with the MS4 program, recognition and reporting of illicit discharges, the Staff Handbook for Good Housekeeping and Pollution Prevention, and priority areas on campus.			
Average quiz score from latest training event.   86%			

Summary of BMP Effectiveness based on Program Plan Measurable Goal		
Does the measure of BMP effectiveness require Program Plan modification?	Yes 🔽 No	

# Special Conditions for Total Maximum Daily Load Waste Load Allocations

Annual reporting required for each BMP to address Special Conditions for TMDLs, as described in the General Permit, is provided below.

#### BMP SC1 – Chesapeake Bay TMDL Action Plan

Annual reporting associated with this BMP requires the following:

- ✓ BMPs implemented during the reporting period (street sweeping);
- ✓ Progress towards meeting the required cumulative reductions in the Action Plan;
- ✓ A list of BMPs to be implemented the following reporting year (street sweeping); and
- $\checkmark$  Any revisions made to the Action Plan during the reporting year.

#### Chesapeake Bay TMDL Action Plan Annual Reporting

A total of 2.29 tons of swept material was collected for the reporting period. Equivalent TP, TN, and TSS reductions are partially based on results of sampling of swept material by MS4s statewide, including TCC, as presented by Hixon and Dymond (2019) in the manuscript entitled,

"Characterization of Street Sweeping Material for Addressing Total Maximum Daily Load Allocations" published by the ASCE Journal of Sustainable Water in the Built Environment. DOI: 10.1061/JSWBAY.0000882. Refined reduction quantification is based on median values of sampling results and the fraction of material susceptible to runoff as summarized in the following table (> 2 days since rain):

	TP	TN	TSS ( $\leq$ 841 $\mu$ m)
Days Since Rain	(lbs/ton) <sup>1</sup>	(lbs/ton) <sup>1</sup>	(lbs/ton) <sup>2</sup>
$\leq 2$	0.044	1.188	794 (39.7%)
> 2	0.324	1.336	1,308 (65.4%)

 $^1$  Values applied to material swept  $< 841 \ \mu m$  (computed with last column).

<sup>2</sup> Adjusted using a moisture content of 2.2% to compute dry weight, the median value measured in samples presented by Hixon and Dymond (2019).

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	Reductions	Reductions from existing	Reductions from	Total reductions
Pollutant	Required by	SWM facilities (lbs/yr)	Sweeping 2021-	2021-2022
	2023 (lbs/yr)	(2013-2018 Action Plan)	2022 (lbs./yr.)	(lbs./yr.)
TN	49.0	36.40	2.00	38.40
ТР	12.0	7.00	0.49	7.49
TSS	5,508	2,947	3,001	5,948
Are reductions progressing to achieve targets?		No – See	e below	

Note for future compliance: Due to the uncertainty of quantification methods for street sweeping moving forward and annual inconsistencies achieving targets, TCC developed a compliance reassessment during the reporting period and identified 740 LF of forest buffer and sweeping once every two-months to ensure compliance.

Were any modifications made to the action plan?

Yes, as descried above.