



Municipal Separate Storm Sewer System Annual Report

Roanoke, Virginia

Reporting Period: July 1, 2020 to June 30, 2021

Date: October 1, 2021

General Permit No. VAR040030

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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: Robert H. Sandel

Signature: *Robert H. Sandel*

Title: College President

Date: 9/22/2021

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Background and Purpose

Virginia Western Community College (VWCC) 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. VWCC is authorized to discharge stormwater runoff from the campus’s MS4s under the Virginia Stormwater Management Program Regulations, Virginia Pollutant Discharge Elimination System Regulations (VPDES), and the Virginia State Water Control Law.

VWCC 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, VWCC 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 VWCC to submit an annual report to the Virginia Department of Environmental Quality (DEQ) no later than October 1st of each year that reports on program implementation from July 1st of the previous year to June 30th of the current year. Consistent with the requirements of the General Permit, this report is annually completed as summarized in Table 1.

Table 1. General information required for annual reporting.

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.

Compliance Summary

Reported information is consistent with the specific annual reporting required in the General Permit and the VWCC 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 VWCC stormwater management [webpage](#). 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). VWCC 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.

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

BMP # ¹	Description Summary ¹	Effective
1A	Public Education & Outreach	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
2A	Maintain dedicated webpage	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
2B	Receive/respond to public reports/input	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
2C	Public Participation Activities	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
3A	MS4 Map and Information Table	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
3B	Prohibition of non-stormwater discharges	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
3C	Perform dry weather outfall screenings	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
4A	Implement VCCS Stnds. & Specs for ESC & SWM	<input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No
4B	Control Non-stormwater discharges (construction)	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
5A	Implement VCCS Stnds. & Specs for ESC & SWM	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
5B	Conduct annual SWM Facility Inspections	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
5C	Update SWM Facility Spreadsheet	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
5D	Report to DEQ Construction Stormwater Database	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
6A	Implement Good Housekeeping Procedures	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
6B	Conduct annual campus-wide SWPPP Evaluation	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
6C	Maintain Current Nutrient Management Plan	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
6D	Ensure contract language for controls	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
6E	Conduct MS4 employee training	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
SC1	Roanoke River Sediment TMDL Action Plan	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
SC2	Roanoke River, Ore Brach Bacteria TMDL Action Plan	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No

¹ Refer to BMP section within the program plan for full description and requirements for each BMP.

Minimum Control Measure Annual Reporting

Reporting provided for each BMP described in the VWCC MS4 Program Plan to address each MCM is provided below. Information provided is only that explicitly required by the General Permit and the VWCC 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).
- ✓ 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
<i>1. General public education on: (1) stormwater impacts to surface waters and (2) steps to reduce pollution.</i>	<i>Traditional Written Materials (Brochure)</i>
<i>2. Illicit discharge prohibition/enforcement on the VWCC campus disciplinary implications, hazards and proper waste disposal.</i>	<i>Media Materials (Closed circuit TV slides)</i>
<i>3. Increase applicable staff's knowledge regarding pollutants of concern for the Chesapeake Bay TMDL.</i>	<i>Traditional Written Materials (Brochure)</i>

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

Results from Public Survey		
<i>Two initial baseline surveys: (1) Focused on material for WQ issues # 1 & #2 distributed to all of the VWCC 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 (last year of permit cycle per Program Plan).</i>		
Date Distributed: <i>(1) 9/25/20 and (2) 9/23/20</i>	Number of Respondents: <i>(1) 143 and (2) 5</i>	Average Score: <i>(1) 76% and (2) 74%</i>

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 VWCC 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.viriniawestern.edu/fpd/stormwater-management/	
An annual review of the website conducted to ensure all information required to be posted on the website was performed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Description of updates implemented during the reporting year: <i>VWCC added the 2019-2020 MS4 annual report, as required during the reporting year. VWCC also added updated versions of the (1) VCCS Annual Standards and Specifications for ESC and SWM, (2) VWCC Nutrient Management Plan, and the VWCC SWM Facility Database.</i>	

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 VWCC provided response; and
- ✓ Assessment if all illicit discharges were not closed or all input did not receive response.

Illicit Discharge Reports¹		
Number of instances: <i>1</i>	Number of instances closed: <i>1</i>	Percent of instances closed: <i>100%</i>
Public Input on Program Plan²		
Number of instances: <i>0</i>	Number of responses: <i>N/A</i>	Percent of instances responded to: <i>N/A</i>

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

² 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

BMP 2C – Public Involvement/Participation Activities

Annual reporting associated with this BMP requires:

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

Public Involvement/Participation Activities			
Involvement Type¹	Description of activity²	Report on the Metric to measure benefit to water quality	Beneficial to Improving water quality?
<i>Disposal or collection events</i>	<i>Recycling Program (paper, plastics, aluminum, glass and cardboard)</i>	<i>11.7 tons diverted from landfills during the reporting period</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Educational Events (10/8/20)</i>	<i>2020 reporting period Staff participation - Regional Stormwater Advisory Committee. (VWCC, Roanoke County, Roanoke City, Franklin County, SWCD)</i>	<i>Stormwater focused committee allows for collaboration and shared opportunities to improve water quality.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Pollution prevention</i>	<i>Implementation and maintenance of storm drain marker program.</i>	<i>A minimum of 20% of markers inspected and maintained annually.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>Educational Events (2/9/21 and 5/26/21)</i>	<i>2021 reporting period Staff participation - Regional Stormwater Advisory Committee.</i>	<i>Stormwater focused committee allows for collaboration and shared opportunities to improve water quality.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

¹ A minimum of two involvement types must be used annually.

² VWCC did not rely on any other MS4 permittees for any of the listed activities.

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 30th of the reporting year;

Certification Statement: MS4 Map & Information Table Updates	Confirm?
<p><i>“In accordance with the General Permit and the VWCC Program Plan, VWCC confirms as part of this annual report that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring during the reporting year.”</i></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 VWCC 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 VWCC Public)		
No.	Add Instance	Disciplinary action taken? (Yes / No)
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.		2
Total number of instances three year prior.		0
Does trend indicate the BMP is ineffective?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 *VWCC 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 in the *VWCC 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.

Outfall Screening & IDDE Procedure Effectiveness	
Total number of outfalls screened as part of dry weather screening program.	3
Total number of VWCC outfalls.	3
Were 100% of outfalls screened during the reporting year?	Yes

Effectiveness Assessment for Addressing Illicit Discharges	
Were all instances of identified illicit discharge listed in Appendix A closed?	Yes

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 of the BMP, 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 DEQ-approved 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
- ✓ The total number and type of enforcement actions implemented and the type of enforcement actions.

Certification Statement: Adherence to the VCCS Standards & Specifications for ESC	
<i>“In accordance with the General Permit and the VWCC Program Plan, VWCC 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.”</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

ESC Inspections & Enforcement Summary	
Total number of ESC inspections conducted: <i>16 – Anderson Hall Demo & 17 – Transportation Plaza (33 total)</i>	
Were any enforcement actions taken during the reporting year?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Total number of illicit discharges originating from land disturbance activity:	1
<p>A description of any potential changes to the subsequent annual standards and specifications to prevent future occurrences, if applicable:</p> <p><i>No changes needed to standards and specifications. A field change was made to the plans to add additional silt fence. Refer to reporting for BMP 2B and Appendix A regarding the single instance.</i></p>	

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 VWCC 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.

Certification Statement: Adherence to the VCCS Standards & Specifications for SWM	
<p><i>“In accordance with the General Permit and the VWCC Program Plan, VWCC 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 Stormwater Management.”</i></p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
<p>Does the measure of BMP effectiveness require Program Plan modification?</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 VWCC’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: 19	
Was at least one inspection performed on each VWCC SWM facility during the reporting year?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Were any significant maintenance, repair, or retrofit activities necessary to ensure the BMP performs as designed as a result of inspection?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Provide the BMP ID and a description of any significant maintenance, including an assessment of the timeliness of the needed actions.</p> <ul style="list-style-type: none"> • <i>BMP #1: (1) Remove sampling at toe of embankment; (2) Backfill/compact groundhog holes.</i> • <i>BMP #3: Remove sediment reducing capacity of inlet pipe into upper basin.</i> • <i>BMP #8: (1) Provide new mulch; (2) Review plans to ensure specified plantings.</i> • <i>BMP #9: Review plans to ensure specified plantings.</i> • <i>BMP #10: (1) Repair and address cause of areas of concentrated flow; (2) Clear around and uncover outlet structure; (3) Provide new mulch.</i> • <i>BMP #17: Remove sediment accumulation in Filterra unit.</i> <p><i>During the reporting period, clearing of woody brush was removed from the engineered embankment at BMP #2, as requested from DEQ audit.</i></p> <p><i>Please refer to MS4 mapping for BMP location and to the annual MS4 inspection report for additional minor maintenance items. The specified maintenance is scheduled to be completed in the fall of 2021 and spring of 2022.</i></p>	

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) VWCC 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) VWCC 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.

Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Applicable for Reporting Year)	
<i>“VWCC 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.”</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

¹ 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.

Certification Statement: Report to Virginia Construction Stormwater General Permit Database (Not Applicable for Reporting Year)	
Confirmation Statement: <i>“VWCC 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.”</i>	Marked box below is confirmation <input checked="" type="checkbox"/>

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 VWCC 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 *VWCC Staff Handbook of Good Housekeeping and Pollution Prevention* to prevent future occurrences of illicit discharge(s), if applicable.

Effectiveness of Program to Prevent Illicit Discharges from Campus Operations

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?

Yes No

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 to determine if a SWPPP is required performed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, is a SWPPP required?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

Annual reporting for this BMP will include a summary of any new Nutrient Management Plan developed, including

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

Nutrient Management	
Did VWCC apply nutrients during the reporting year?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<i>VWCC has, and implements, a Nutrient Management Plan for a total of 22.8 acres of turf on the campus that was approved by the Department of Conservation and Recreation on August 24, 2021 and is valid through June 28, 2024.</i>	

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program Plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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 *VWCC Staff Handbook of Good Housekeeping and Pollution Prevention* to prevent future instances.

BMP 6A Annual Reporting Form	
Were there any illicit discharges during the reporting period that originated from contractor activities?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Total number of illicit discharges originating from contractor activities:	1
<p>Describe any potential changes to the procurement procedures or the VWCC Staff Handbook for Good Housekeeping and Pollution Prevention to prevent future occurrences, if applicable. <i>Refer to reporting for BMP 2B and Appendix A. A single instance resulting from a construction activity was reported by college staff. The instance was deemed to be due to a lack of adequate controls installed per ESC design plan. As such, no changes are needed for procurement nor the Handbook.</i></p>	

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

BMP 6E – Training Plan for Applicable Employees

Annual reporting associated with this BMP requires:

- ✓ The date of the most recent training event;
- ✓ The date of the prior training event (to ensure within 24 months);
- ✓ The number of employees who attended the most recent training event;
- ✓ 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:	<i>February 17, 2021</i>
Date of previous training:	<i>August 22, 2019</i>
Has training continued to be provided a minimum of once every 24 months?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Number of employees that attended the latest training event.	<i>13</i>
Number of employees identified to be required to participate in training (as defined by the general permit and program plan).	<i>13</i>
Percent of those identified that attended training.	<i>100%</i>
Did the percentage of those identified to be required to attend training attend?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
A description of the objective of the latest training event: <i>Familiarize staff with recognition and reporting of illicit discharges, practices during road, street, and parking lot maintenance, housekeeping wastewater management, TMDLs, and spill response.</i>	
Average quiz score from latest training event.	<i>87%</i>
Average quiz score from previous training.	<i>N/A (new assessment method starting 2021)</i>

Summary of BMP Effectiveness based on Program Plan Measurable Goal	
Does the measure of BMP effectiveness require Program plan modification?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 – Roanoke River Benthic TMDL Action Plan

Annual reporting associated with this BMP requires annually providing a status report on the implementation of the Action Plan with a summary of actions conducted during the reporting period to implement the action plan, provided below:

Roanoke River Benthic TMDL Action Plan Status Report			
<p><i>Street sweeping was implemented in accordance with the latest Action Plan. A total of 15.17 tons of debris was collected for the reporting period. Equivalent TSS reductions are based on results of sampling of swept material by MS4s statewide, including other VCCS MS4 permittees, as presented by Hixon and Dymond (2019) in the manuscript entitled, “Characterization of Street Sweeping Material for Addressing Total Maximum Daily Load Allocations” as published by the ASCE Journal of Sustainable Water in the Built Environment. DOI: 10.1061/JSWBAY.0000882. (Calculations for parking lots, ≤ 2 days since rain, as observed from historic rainfall data). The total mass is first converted to a dry mass (based on mean moisture content of 2.2% from Hixon & Dymond). The dry mass is then converted to the mass of material with particle sizes associated with TSS (< 841 μm), with a mean from the referenced study of 39.7%. As a direct measure of effectiveness, VWCC conducted particle size distribution on 4 collected samples from swept material during the reporting year, which yielded an average TSS-associated particle size of 35.8%. Result of the annually swept material based on the referenced study and the tested material are provided in the Table below.</i></p>			
Pollutant	Annual Reductions Required (tons/yr)	Reductions achieved this reporting year (tons) (Hixon & Dymond study)	Reductions achieved this reporting year (tons) (Sampled Swept Material)
Sediment (TSS)	4.33	5.89	5.32
Are reductions progressing to maintain targets?		Yes	
Were any modifications made to the action plan?		No	
<p><i>Plan Updates: No updates this reporting period. Sweeping of parking lots occurred on 12/6/20 (4 CY collected) and 3/27/21 (8 CY collected). Volume of material collected was translated to mass based on a density of 1.5 g/cm³.</i></p>			

BMP SC2 – Roanoke River, Wilson Creek, and Ore Branch Bacteria TMDL Action Plan

Annual reporting associated with this BMP requires annually providing a status report on the implementation of the Action Plan with a summary of actions conducted during the reporting period to implement the action plan, provided below:

Roanoke River, Wilson Creek, and Ore Branch Bacteria TMDL Action Plan Status Report	
<p><i>The VWCC Bacteria Action Plan, updated April 15, 2020, in accordance with the current MS4 General Permit, requires VWCC select and implement one strategy from Table 5 of the MS4 General Permit (Strategies for Bacteria Reduction Stormwater Control/Management). During this reporting period, and as described in the latest VWCC Bacteria Action Plan and the last annual report, VWCC contractors began conducting biannual inspections of dumpster areas for potential issues, including bacteria-laden illicit discharges. Dumpster and trash compactor inspections were conducted on June 28, 2021, as the first of the future biannual inspections. Inspections utilized a VWCC-developed protocol/inspection form that was completed for each of VWCC’s 5 dumpster and trash compactor locations. The inspections are supported by mapping that shows dumpster or compactor locations on campus.</i></p> <p><i>Inspection findings are as follows:</i></p> <ol style="list-style-type: none"> <i>1. Dumpster Location ‘B’ – Rusted through hole needs repair.</i> <i>2. Dumpster Location ‘D’ – Identify and implement methods to ensure lids cover all contents of dumpsters.</i> <p><i>Mapping with locations is available upon request. Each item listed above will be addressed by VWCC to prevent illicit discharge as described in the inspection forms.</i></p>	
Is the Action plan being implemented?	Yes
Were any modifications made to the action plan?	No
<p><i>Plan Updates: No changes to the actual Action Plan. However, VWCC developed supporting materials that include: (1) location mapping for dumpsters and compactors and (2) an inspection form which includes protocols for both inspecting and addressing identified issues.</i></p>	

Appendix A – Illicit Discharge Reports and Supporting Information

ILLICIT DISCHARGE INVESTIGATION FORM

- 1) Date potential, suspect or obvious Illicit Discharge observed or reported: 9/2/20

- 2) Initial Characterization (as identified on screening form):
 Potential Suspect Obvious None (reported)

- 3) Description of the potential, suspect or obvious Illicit Discharge:
Heavy rains and inadequate ESC measures resulted in sediment runoff from the Anderson Hall Demolition construction site.

- 4) Date of the start of the investigation: 9/2/20

- 5) Investigation methods and findings:
Contractor (ECS Mid-Atlantic) notified and determined additional silt fence was needed and clean-out of inlet protection, to be installed/completed by 9/4/20.

- 6) Was the discharge eliminated (resolved)?
 Yes No If yes, date resolved: 9/4/20

- 7) If “Yes” answered in Item # 6, provide the resolution to eliminate the discharge:
Removal of transported sediment and implementation of measures/maintenance described above.

- 8) If “No” answered in Item # 6, described the reasons:
N/A

- 9) Are any addition follow up action necessary (i.e. the discharge anticipated to recur)?
 Yes No

- 10) If yes, describe follow up actions with a time line to perform the actions.
N/A

Please attach supporting information to this form, as applicable, to support the responses provided. if the investigation was initiated from a dry weather outfall screening, attach the associated outfall Reconnaissance Form. Maintain form and documentation in files for annual reporting.



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FIELD REPORT

Project **VWCC - Anderson Hall Demolition**
Location **Roanoke, VA**
Client **Virginia Community College System**
Contractor **Branch Builds**

Project No. **8362-D**
Report No. **8**
Day & Date **Monday 8/31/2020**
Weather **68 °/ Cloudy**
On-Site Time **0.50**
Lab Time **0.25**
Travel Time* **0.50**
Total **1.25**
Re Obs Time **0.00**

***** Non Compliance Noted *****

Remarks **SWPPP**

Trip Charges*	Tolls/Parking*	Mileage* 26	Time of Arrival	Departure
Chargeable Items			5:00P	5:30P

* Travel time and mileage will be billed in accordance with the contract.

Summary of Services Performed (field test data, locations, elevations & depths are estimates) & Individuals Contacted.

The undersigned arrived on site, as requested, to observe SWPPP measures after a storm event.

The undersigned observed significant sediment runoff from the jobsite onto the parking lot and sidewalk on all three sides of the construction area. The only SWPPP measures implemented to prevent the sediment runoff were small sections of silt fence. This was not sufficient to contain the significant amount of sediment. The undersigned recommended that silt fence be implemented around all three sides of the jobsite until vegetational stabilization is implemented and construction is complete.

The undersigned also observed fabric for the drop inlet protection in the grass. The drop inlet protection had a significant amount of sediment build-up, which requires maintenance. After speaking to the superintendent, Adam Johnson with Branch Construction, it was agreed that the corrective actions will be completed within 48 hours, but was has until 9-04-2020 to complete.

