

GENERAL PERMIT FOR
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)
PERMIT NO. VAR040113
PERMIT CYCLE: 2023-2028

**Millbrook High School and
Redbud Elementary School Campus**

Year 1 Annual Report
Reporting Period: July 1, 2023 – June 30, 2024



***Frederick County
Public Schools***

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1 BACKGROUND INFORMATION

1.1 Regulatory Requirement

In accordance with the requirements of Permit Number VAR040113, this Annual Report is hereby submitted in compliance with the Frederick County Public School's (FCPS) Millbrook High School and Redbud Elementary School Campus General Permit for Small Municipal Separate Storm Sewer Systems (MS4). A link to the MS4 Program Plan and latest Annual Report can be found at:

<https://www.frederickcountyschoolsva.net/about/ms4-program>

2 ANNUAL REPORTING REQUIREMENTS

2.1 Regulatory Requirement

The permittee, system name, and permit number as listed below:

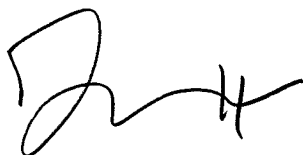
Permittee: Frederick County Public Schools – Millbrook HS & Redbud ES Campus
System Name: General Permit for Small Municipal Separate Storm Sewer Systems
Permit Number: VAR040113

2.2 Reporting Period

This document serves as the Annual Report for Permit Year 1 of the 2023-2028 Virginia MS4 General Permit. The reporting period is July 1st, 2023, to June 30th, 2024.

2.3 Signed Certification 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.



Dr. George C. Hummer
Superintendent of Schools

November 8, 2024

Date

2.4 Minimum Control Measures (MCM) Reporting Items

All applicable Minimum Control Measures (MCM) reporting items can be found in Sections 3 - 8 of this Annual Report.

2.5 Evaluation of the MS4 Program Implementation

Based on the current program results, FCPS is confident that the Minimum Control Measures (MCM) being implemented are appropriate, effective, and meet the requirements of the 2023-2028 Virginia MS4 General Permit. As such, FCPS does not currently anticipate the need to make any changes to its MS4 Program. FCPS will continue to monitor the status, appropriateness, and effectiveness of each MCM as part of our iterative process to reduce pollutant loadings and protect water quality.

2.6 Chesapeake Bay TMDL Special Condition Update

Updates, if any, to the Chesapeake Bay TMDL Special Condition as established under Part II A of the General Permit requirements are detailed in **Section 9**.

2.7 Local TMDL Special Condition Update

Updates, if any, to the Local TMDL Special Condition as established under Part II B of the General Permit requirements are detailed in **Section 10**.

3 MINIMUM CONTROL MEASURE 1 – PUBLIC EDUCATION AND OUTREACH

3.1 High Priority Stormwater Issues

FCPS addressed three high priority stormwater issues during the reporting period using a combination of strategies including K-12 curriculum, websites, and newsletters. The three high priority stormwater issues are the following:

1.) Reduce local stormwater pollution.

Both schools include pollution prevention and awareness as a part of curriculum. An outline of curriculum has been provided as Report Appendix A & B

2.) Increase knowledge of hazards associated illicit discharges and improper waste disposal.

Both schools prepare and distribute newsletters to students and parents. Stormwater quality & pollution prevention included as regular topics. School newsletters are provided as Report Appendix A1.

3.) Information distribution to help parents, students, staff, and faculty to identify individuals, groups and activities which may have significant stormwater impacts.

Each school's website links back to the FCPS MS4 website, which contains a section "Stormwater Education for Kids" which contains information for children to understand stormwater and the effects of stormwater pollution.

<https://water.unl.edu/article/stormwater-management/stormwater-education-kids>

3.2 High Priority Stormwater Strategies

FCPS uses traditional written materials, like newsletters, to distribute important information about the school, its facilities & grounds, and activities. Public awareness of stormwater pollution prevention is included in the newsletters. The newsletters are available in English and Spanish. In addition,

curriculum in both the Elementary and High School is supplemented with pollution prevention, stewardship, and knowledge about stormwater.

4 MINIMUM CONTROL MEASURE 2 – PUBLIC INVOLVEMENT AND PARTICIPATION

4.1 Summary of Public Input

During this reporting period, FCPS continued to offer planned activities. Public Complaint / comment forms are still available via the FCPS MS4 website. However, no comments were provided by the public during permit reporting period.

4.2 MS4 Program and Stormwater Website

Frederick County Public Schools' MS4 Program Plan, which includes Program Appendices and TMDL Action Plans, along with the current and previous annual reports for the current permit cycle, are available for viewing and download at:

<https://www.frederickcountyschoolsva.net/about/ms4-program>

This MS4 Annual Report and any revisions to FCPS' MS4 Program Plan, including elements described in section 2.5, will be placed on-line within thirty (30) days of submission to DEQ.

4.3 Public Involvement Activities

During this reporting period, some annual pollution clean-up and stormwater maintenance events did occur. Some examples are shown below. Additional events and activities are listed in Report Appendix A and B

- School Wide Garden – Establish at Red Bur Run ES, and utilized year-round by staff, students, an parent volunteers. Over 400 participants accessed the garden.
- Trash and removed/prevented potential silt/sediment from entering storm drains from the stadium bleachers.
- 3rd Grade students worked with the principal to restore a grassy area on the playground. Students researched ground cover and erosion.
- Horticulture Career Development Event. Students researched and'; made a presentation regarding soil, water, nutrient, and environmental requirements for a specific horticulture project.

4.4 Water Quality Metric and Evaluation

With two FCPS schools within the MS4, a unique opportunity to participate in environmental practice, maintenance, and reporting, continues to be rewarding for students and faculty alike. The events were considered successful and FCPS is enthusiastic about future program events.

A means to record and measure efficacy of events requires more consideration and has not been incorporated into the Program Plan. Use of event attendee surveys or similar utility may be examined.

4.5 MS4 Permittees Collaboration

FCPS did not collaborate with any other MS4 permittees during this permit cycle. FCPS currently

does not have any plans to collaborate with other MS4 permittees but reserves the right to do so if a mutually beneficial opportunity arises.

5 MINIMUM CONTROL MEASURE 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

5.1 Confirmation Statement

FCPS confirms the MS4 map and information table do not require updating, based on all activities occurring during the permit reporting period.

5.2 Outfalls Screened

FCPS conducted dry weather screening on eight (8) locations which have identified as “Potential Discharge Areas” and may incur illicit discharge as shown on the MS4 Map (Items A-E). No suspect discharges were found at any of the eight (8) areas. See Illicit Discharge Screening reports – Report Appendix C

5.3 Illicit Discharges

In addition to quarterly inspections, no other instances of illicit discharge were observed or reported for this permit period.

1) <i>Illicit Discharge Source</i>	<i>N/A for Permit reporting period</i>
2) <i>Illicit Discharge Dates</i>	<i>N/A for Permit reporting period</i>
3) <i>Discovery Method</i>	<i>N/A for Permit reporting period</i>
4) <i>Resolution</i>	<i>N/A for Permit reporting period</i>
5) <i>Follow-up Activities</i>	<i>N/A for Permit reporting period</i>
6) <i>Closure Date</i>	<i>N/A for Permit reporting period</i>

6 MINIMUM CONTROL MEASURE 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

6.1 Confirmation Statement

The Millbrook High School / Redbud Run Elementary School Campus is a completely developed campus with all facilities required for an elementary and high school. There are no regular, current, or planned construction activities.

6.2 Construction Land Disturbance (Part I.E.4.d (1))

No land disturbance projects were underway, initiated or completed during the permit reporting period.

• <i>Confirmation Statement</i>	<i>N/A for Permit reporting period</i>
• <i>Project Non-Conformance</i>	<i>N/A for Permit reporting period</i>
• <i>Number of Inspections</i>	<i>N/A for Permit reporting period</i>
• <i>Enforcement</i>	<i>N/A for Permit reporting period</i>

7 MINIMUM CONTROL MEASURE 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT FOR NEW DEVELOPMENT AND DEVELOPMENT ON PRIOR DEVELOPED LANDS

7.1 Virginia Stormwater Management Program Information

The Millbrook High School / Redbud Run Elementary School Campus is a completely developed campus with all facilities required for an elementary and high school. When the campus was developed, five (5) stormwater management areas were installed to control the quantity of stormwater runoff. These areas are regularly maintained and inspected to ensure their continued effectiveness. There are no regular, current, or planned development activities which would require additional stormwater management.

- No land disturbance applications or VSMP permits were enacted during the permit reporting period.
- Annual Inspections have been performed by the MS4 coordinator or their designee, in accordance with the program plan.
- No modification, repair or retrofit has affected the function of the SMF or BMP facilities during the reporting period.

7.2 Annual Stormwater Management Facility Inspections (publicly owned)

Based on the results of the annual inspection, performed on June 22, 2024, most of the SWM or BMP areas require maintenance and or repairs, above and beyond scheduled mowing, where applicable. The Detailed inspection report can be viewed as Report Appendix D. A summary is provided below:

The following is a detailed report for the field inspection of stormwater management (SWM) and Best Management Practices (BMP) in-place at the Frederick County Public Schools’ (FCPS) Redbud Run Elementary School and Millbrook High School, located at 250 and 251 First Woods Drive Winchester Virginia, in accordance with the minimum requirements established by FCPS MS4 – VAR040113.

There are 7 SWM/BMP Facilities owned and managed by FCPS MS4 – VAR040113. The agreement states inspections shall be performed annually, utilizing the requirements and forms established by FCPS MS4 Program Plan.

Each facility has been physically inspected and photographed during a dry period where significant rain had not fallen in more than 48 hours. Our findings and recommendations are as follows:

As a general recommendation, annual inspections allow for evaluation of SWM / BMP facilities and tracking of their overall health and functionality. All BMP measures, such as the ones installed on the site, will require maintenance at some regular interval, for the life of the BMP. If left unattended, and unmaintained, the BMP will stop functioning as intended, and the owner will incur additional costs to replace or rebuild the facility.

SWM / BMP Facility Inventory

BMP#	Description	General Condition
A	Retention (Wet) Pond/Wetland	Facility Requires Maintenance
B	Detention Pond (Dry)	Facility Requires Maintenance
C	Detention Pond (Dry)	Facility Requires Maintenance
D	Detention Pond (Dry)	Facility Requires Maintenance
E	Detention Pond (Dry)	No Comment
F	Manufactured Hydrodynamic BMP	Facility Requires Maintenance
G	Manufactured Hydrodynamic BMP	Facility Requires Maintenance

7.3 Enforcement Actions

Since FCPS did not record any violations or incidents associated with the related SMF's or BMP's, no enforcement actions were recorded for the permit reporting period.

7.4 Annual Stormwater Management Facility Inspections (privately owned)

FCPS Does not have any privately owned SMF associated with this MS4 permit. Therefore, there are no inspection activities recorded for the permit reporting period.

7.5 Significant Maintenance, Repair, or Retrofit Activities on SWM Facilities (publicly owned)

Based on the results of the annual inspection, the MS4 has evaluated the recommendations and is pursuing a plan to:

- BMP A - Wet Pond: Address corrective actions presented in the DEQ Audit (April 2024) (clean SWM Wet Pond, remove all leafy and woody debris from control structure, and remove invasive vegetative growth, and stabilize denuded areas along the embankment.
- BMP B (Dry Pond): Stabilize denuded areas along various areas of the Pond embankment.
- BMP C (Dry Pond): Remove invasive growth, brush and debris.
- BMP D (Dry Pond): Remove invasive growth around outlet, place rip-rap as necessary to stabilize outlet, remove buildup of siltation and sedimentation at both inlet and outlet.
- BMP E (Dry Pond): Remove invasive growth, brush and debris. Address access to this BMP
- BMP F (Manufactured Hydrodynamic Separator) - Address corrective actions presented in the DEQ Audit (April 2024)
- BMP G (Manufactured Hydrodynamic Separator) – Arrange for maintenance / cleaning from qualified sub-contractor.

7.6 Virginia Construction Stormwater General Permit Database Confirmation Statement

FCPS confirms that no projects were submitted through the Virginia Construction Stormwater General Permit (CGP) for land disturbance activities nor was a DVPES permit for discharges of stormwater obtained. During the permit reporting period.

7.7 BMP Warehouse Submittal Confirmation

FCPS confirms that no projects requiring a VMSP permit occurred during the permit reporting period. Therefore, updates to the DEQ BMP Warehouse were not warranted for the reporting year 2023-2024.

8 MINIMUM CONTROL MEASURE 6 – POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

8.1 Operation Procedures Summary

In accordance with the program plan, the MOU with Frederick County Parks & Recreation Dept. remains in-place for campus grounds maintenance. In addition, the fueling and hazardous materials practices described also remain in place and unaltered during the permit reporting period.

A link to the materials database hosted by FCPS is provided:

<https://chemmanagement.ehs.com/9/5f86b1e3-7254-4308-8d23-9a0a7b9befe3/ebinder/?nas=True>

8.2 New SWPPPs Summary

FCPS did not prepare any new SWPPP's for the Millbrook HS / Redbud Run ES campus during the permit reporting period.

8.3 Modified SWPPPs Summary

No SWPPP's required for the Millbrook HS / Redbud Run ES campus MS4 permittee.

8.4 Nutrient Management Plans Summary

FCPS has not developed any new turf or landscape nutrient management plans during the permit reporting period.

8.5 Location / Acreage of each land area

FCPS has not developed any new turf or landscape nutrient management plans during the permit reporting period, therefore, there aren't any new land areas / acreages to report for the permit reporting period.

8.6 Dates of Approved NMP's

FCPS has not developed any new turf or landscape nutrient management plans during the permit reporting period.

8.7 Training Events & Training Event Summary

The FCPS transportation and custodial depts have annual training of a variety of topics, some of which are related to MS4 compliance. In addition, the MOU with the Frederick County Parks & Recreation dept. has training events which are required for certifications.

- **FCPS Transportation Dept. – Safety, fueling, fuel spill clean-up.**
(See Report Appendix F)
 - The in-service meetings serve to train staff and raise awareness of various hazards. Water runoff is one of the DOE required topics. Brochures on storm water, ground water, runoff were distributed to staff.
 - 209 staff members total, attended the session(s)
- **FCPS Custodial Dept. – Hazardous Materials**
 - November 2023 – 2 separate sessions to inform the 13 custodial staff on 2 topics: “What is Stormwater” and “Bay 101: Stormwater Runoff” both accompanied with a presentation on the Chesapeake Bay watershed.
- **Frederick County Parks & Rec. Dept. – MOU for Grounds / SWM maintenance.**
(See Report Appendix E)
 - 3 staff currently hold a VDAC Service Pesticide Applicator Certificate
 - 1 staff were either granted and/or issued a Re-Certification for this fiscal year.
 - 3 Staff attended a Region Training event

9 CHESAPEAKE BAY TMDL SPECIAL CONDITIONS REQUIREMENTS

The Millbrook High School / Redbud Run Elementary School Campus is a completely developed campus with all facilities required for an elementary and high school.

In accordance with permit reporting requirements (PART II), annual reporting has been prepared utilizing DEQ templates and submitted electronically and are referenced as Report Appendix H & I

In addition, the TMDL Action Plans, Phase 3 (Draft) submitted with permit reissuance in November 2023, has been update in the MS4 Program Plan as Program Appendix A16.

While preparing the Final Phase 3 TMDL Action Plan, previous Program Appendices were discovered to be incorrectly referenced or missing. Subsequently, the following appendices have been added to the Program Plan (and website)

- *A12_Chesapeake Bay TMDL Action Plan - Phase I*
- *A13_Chesapeake Bay TMDL Action Plan - Phase I - Addendum 1*
- *A14_Chesapeake Bay TMDL Action Plan - Phase II*
- *A15_Chesapeake Bay TMDL Action Plan - Phase II - Addendum 1*
- *A16_Chesapeake Bay TMDL Action Plan - Phase III – Draft Rev*

9.1 Non-Reported BMPs

No BMP have been implemented or reported during the permit reporting period.

9.2 Credit Acquisitions

No additional nutrient credits were not purchased during the permit reporting period.

9.3 Cumulative Reduction Progress

The MS4 is up to date with all the required cumulative nutrient reductions for total nitrogen, total phosphorus, and total suspended solids*.

**The current permitting requirements, 2023-2028, no longer require the reduction of (TSS) Total Suspended Solids.*

9.4 BMP Implementation Summary

FCPS has no plans under development which propose to modify existing or incorporate new BMP's during the next permit reporting period (Year 2).

10 LOCAL TMDL SPECIAL CONDITIONS REQUIREMENTS

10.1 Summary of Actions

The Millbrook High School / Redbud Run Elementary School Campus is a completely developed campus with all facilities required for an elementary and high school. The are no plans under development or review which would change the current state of the site, its regulated discharge, or downstream contribution to regulated waters.