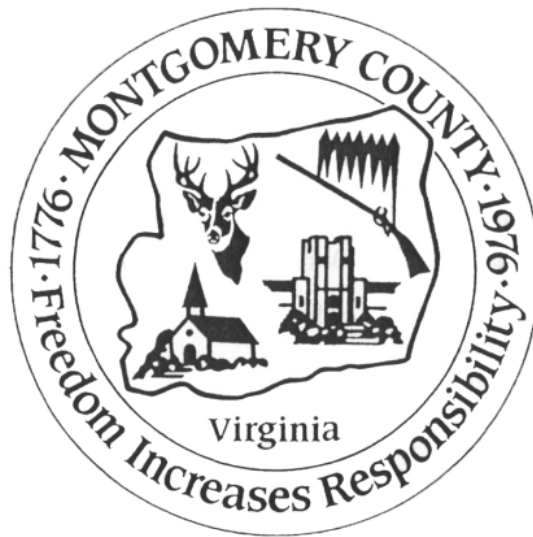


**Montgomery County**  
**Municipal Separate Storm Sewer System (MS4)**  
**VPDES Permit No. VAR040134**  
**Year 4 Annual Report**



**Coverage Issued: May 21, 2014**  
**Reporting Period: July 1, 2017 through June 30, 2018**

Prepared by:  
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Date: September 21, 2018

## Background Information

This document serves as the annual report for the reporting period of July 1, 2017 through June 30, 2018 for Montgomery County, Virginia General Permit No. VAR040134 (effective May 21, 2014 – October 30, 2018).

Modifications to roles and responsibilities as described in the County's Program Plan are listed in the plan as revised September 20, 2018. The following staffing information is noteworthy with regard to the County's commitment to MS4 permit compliance. An organizational chart is provided to clarify the staff positions within both the County government and the Montgomery County School System (MCPS) that support MS4 program compliance. These staffing measures provide measurable increases to the resources available towards the County's MS4 compliance efforts.

The annual report addresses the requirements of the MS4 Permit. Revisions to BMPs are described in the body of the annual report based upon evaluations made upon the end of the third reporting year. Each BMP section addresses permit condition II.E.3.b with an assessment of the BMP and the progress in meeting identified measurable goals for each minimum control measure. Specific actions and activities are proposed where progress towards BMP and Program Plan goals were found to not meet the measurable goals of the permit.

No new MS4 outfalls were added in the reporting period. The total number of identified outfalls were reduced by four due to the sale of County properties to private entities. No monitoring data was collected during the 2016-2017 permit year 4.

### 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.

  
County Administrator

9/21/18  
Date

VAR040134  
Permit Number

Montgomery County, VA  
MS4 Name

## Minimum Control Measure Implementation

### MCM 1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

This minimum control measure is intended to implement a diverse public education program to increase target audience knowledge about the steps that can be taken to reduce stormwater pollution and hazards associated with illegal discharges and improper disposal of waste.

#### Annual Reporting Requirements

1. Identification of three (3) high-priority water quality issues that contribute to the discharge of stormwater and a rationale for the selection of the three high-priority water quality issues.
  - i. *Bacteria*
  - ii. *Nutrients (Nitrogen and Phosphorous)*
  - iii. *Sediment*
  
2. Identification and estimation of the population size of the target audience or audiences who is most likely to have significant impacts for each high-priority water quality issue.  
*The target audience information presented was developed after the completion of permit year 3.*

*The following target audience selections are unchanged based on an evaluation of appropriate target audiences as well as the progress in developing the year 4 MCM 1 Public Education and Outreach program elements and MCM 2 Public Involvement/Participation activities that county staff executed in permit year 4. The rationales for the selections are provided in the updated Program Plan.*

- i. *Bacteria*
    - a. *Target Audience: 98,602 persons and 35,199 households of the County*
  - ii. *Nutrients (Nitrogen and Phosphorous)*
    - a. *Target Audience: 98,602 persons and 35,199 households of the County*
  - iii. *Sediment*
    - a. *Target Audience: Montgomery County School System (MCPS) sixth grade student population, an estimated 750-850 students*
  
3. Development of relevant message or messages and associated educational and outreach materials for message distribution to the selected target audiences while considering the viewpoints and concerns of the target audiences including minorities, disadvantaged audiences, and minors.  
*The messaging for water quality issues #1 and #2 was developed to address the understanding that everyday activities such as lawn care, water use, and pet waste management all have potential impacts on water quality and the actions of individuals can have a positive effect on the environment. The messaging is primarily through printed materials and giveaway items (i.e. Pet waste bag dispensers and magnets for distribution at public events to be paired with pet waste informational sheets). Social media and news media coverage are also used as messaging mediums. This outreach is directed to a broad audience across the socioeconomic spectrum.*

- Relevant messaging for water quality issue #3 was directed to MCPS sixth grade students. The sixth grade curriculum has a Living Systems Science Strand. Major topics of Living Systems include the relationship between organisms and the non-living environment, the different types of environments and organisms they support, and the relationships among organisms in the food chain. These topics are addressed at a variety of outreach stations the students visit on the education day event, see the "stations and presenters' information provided in the BMP 1.2 Stormwater Education Day documentation for details of the stations and presenters.*
4. Public participation during public education and outreach program development.  
*MCPS staff and volunteer presenters provide input for the Stormwater Education Day participation development. Public input for program development is solicited at Outreach events including the New River Valley Homebuilder's Association (NRVHBA) annual home show, and events at the Montgomery County Animal Adoption and Care Center. The New river Watershed Roundtable participates in the development and execution of the ReNew the New river cleanup activities.*
  5. Summary of annual education and outreach activities designed to reach an equivalent 20% of each high-priority issue target audience.  
*Printed materials were the MCM 1 activities designed to reach 20% of the target audience for water quality issues #1 and #2. 5,000 Parks and Recreation department "Go Play" catalogs for Winter/Spring 2017 contained lawn and garden care messaging to address nutrient and sediment reductions. 5,000 2018 Spring/Summer catalogs were printed with pet waste messaging to address bacteria and nutrient reductions. The Go Play catalogs were also available online. 1,500 "scoop the Poop and Broomin' and Bloomin'" inserts we added to the March 2018 homebuilders show bags provided to attendees. 30,000 newsletters containing MCM 1 messaging for all three water quality issues were printed for insertion in the June 2018 real estate bill mailings. 2018 Relevant messaging to reach 20% of the target audience for water quality issue #3 was developed by MCPS in the form of evaluations before and after attendance by the sixth grade MCPS students at the Stormwater Education Days. This outreach reached 700 students in the permit year.*
  6. Adjustment of target audiences and messages including educational materials and delivery mechanisms to reach target audiences in order to address any observed weaknesses or shortcomings.  
*Electronic media use and news organization coverage of public participation events are a focus as messaging mechanisms for the County wide target audience beyond those reached by the printed outreach materials. The year 4 statistics for social platform messaging to the target audience is included in BMP 1-1 in this year's report.*  
  
*Target audiences have now been established. The selected target audience of the entire County for water quality issues #1 and #2 lends support to the desire to collaborate with the town MS4 programs. Direct mail of material to a large audience, as well as coordination of messaging during multiple events where printed materials and giveaways are distributed should continue to reach an acceptable segment of the target audience.*

*Relevant messaging for water quality issue #3 was evaluated by MCPS in the form of evaluations before and after attendance at the completed Stormwater Education Days. MCPS staff is highly satisfied with the water quality issue #3 audience outreach and a continuing program attempting to reach all four middle schools in the school system are planned for permit year 5, pending volunteer availability for the required number of events.*

7. A list of the education and outreach activities conducted during the reporting period for each high-priority water quality issue, the estimated number of people reached, and an estimated percentage of the target audience or audiences that will be reached.  
*See BMP 1-2, 1-3, and 2-3. Please also see the summary of annual education and outreach activities (item #5) above for the estimated outreach numbers.*

A list of the education and outreach activities that will be conducted during the next reporting period for each high-priority water quality issue, the estimated number of people that will be reached, and an estimated percentage of the target audience or audiences that will be reached. *See item 2 in BMP 1-2, 1-3, and 2-3*

### **BMP 1-1: Montgomery County Stormwater Management Website**

Develop a Montgomery County Stormwater Management website, where citizens can obtain information regarding the County's Stormwater Management Program, ordinances, design guidelines, general information, contact information, pollution prevention information, educational programs and links to other organizations and sites. The website will also inform the citizens about on-going community based projects.

#### **Measureable Goals Achieved in Reporting Year**

Stormwater management web page is located on County's website covering construction pollution, MS4 permit, stormwater reporting, and the stormwater ordinance.

<http://www.montgomerycountyyva.gov/content/15989/16023/16945/default.aspx>

#### **1. Annual Reporting Requirements**

- |                              |                                    |
|------------------------------|------------------------------------|
| 1. Estimated number of views | 1845 views                         |
| 2. Most popular material     | Forms and Publications (825 views) |
| 3. Least popular material    | Construction Pollution (41 views)  |

2. Summary of future program goals. Add an outreach public comment link. Update the website to a more appealing format and to better address public stormwater concerns and needs.

### **BMP 1-2: Stormwater Education Program (Water Quality Issue #3)**

Develop a stormwater educational program for Montgomery County school age children. Educators will develop and provide programs addressing storm water and related water quality issues. Different programs will target appropriate grade levels and will be SOL correlated.

#### **Measureable Goals Achieved in Reporting Year**

The Environmental Services staff coordinated with the Town of Christiansburg, Town of Blacksburg, Virginia Tech. Virginia Cooperative Extension Service, volunteer presenters, and the

Montgomery County Public Schools to develop and facilitate three Stormwater Education Days for MPCS 6<sup>th</sup> Graders during the school year.

### **Annual Reporting Requirements**

1. Summary of educational program.

*295 Blacksburg Middle School 6<sup>th</sup> grade students, 24 presenters, and 24 teachers/chaperones participated in the November 3<sup>rd</sup>, 2017 Stormwater Education Day.*

*230 Christiansburg Middle School 6<sup>th</sup> grade students, 32 presenters, and 24 teachers/chaperones participated in the April 12, 2018 Stormwater Education Day.*

*90 Auburn Middle School 6<sup>th</sup> grade students, 16 presenters, and 10 teachers/chaperones participated in the April 13, 2018 Stormwater Education Day morning session.*

*85 Shawsville Middle School 6<sup>th</sup> grade students, 16 presenters, and 10 teachers/chaperones participated in the April 13, 2018 Stormwater Education Day afternoon session.*

*Over 95% of the 2015-2016 sixth grade class attended the two stormwater days.*

*MCPS developed evaluation criteria that serve as MCM1 education materials:*

*Pre evaluation link <https://goo.gl/forms/ZangRjFPxDnAM3Hs1>*

*Pre evaluation results*

*<https://docs.google.com/forms/d/1ThTf63Wqotjxbs6UJgtzUdmdEZwMeY0CEP8ItMwOsBc/viewanalytics>*

*Post evaluation link <https://goo.gl/forms/AEiRK7tMDjtHWY053>*

*Post evaluation results*

*[https://docs.google.com/forms/d/1luqVFbqNYmJJzTOL\\_wP0H\\_1qyBSkk\\_5b4Sc6V6nkqIk/viewanalytics](https://docs.google.com/forms/d/1luqVFbqNYmJJzTOL_wP0H_1qyBSkk_5b4Sc6V6nkqIk/viewanalytics)*

*The day included instruction on stormwater runoff and watersheds, types of pollution, stream table demonstrations of bank instability, karst conditions in our area, erosion and sediment controls, explanations of how different land conditions effect runoff, the relationship between organisms and the surrounding environment, the different types of environments and organisms they support, and the relationships among organisms in the food chain.*

2. Summary of future program goals. *Schedule Stormwater Education days for all MPCS 6<sup>th</sup> Graders in permit year. Sessions are tentatively scheduled for November 4, 2018, and two days in April, 2018, to be determined*

**BMP 1-3: Bacteria and Nutrients Education and Outreach (Water Quality Issues #1 and #2)**

**Measureable Goals Achieved in Reporting Year**

The county provided printed educational materials through mailings inserted into tax billing statements, informational brochures at government offices, and information provided in conjunction with giveaway items. Residents and households reached through the direct mailing inserted with tax billing statements exceeded 20% of the target audience.

**Annual Reporting Requirements**

1. Note that copies of the following materials and/or purchasing receipts are provided in Appendix 1-3.

5,000 Parks and Recreation department “Go Play” catalogs for Winter/Spring 2017 contained lawn and garden care messaging to address nutrient and sediment reductions.

5,000 2018 Spring/Summer catalogs were printed with pet waste messaging to address bacteria and nutrient reductions. The Go Play catalogs were also available online.

1,500 “scoop the Poop and Broomin’ and Bloomin’” inserts we added to the March 2018 homebuilders show bags provided to attendees.

30,000 newsletters containing MCM 1 messaging for all three water quality issues were printed for insertion in the June 2018 real estate bill mailings.

“Scoop the Poop!” magnets with link to the [www.montva.com/gogreenmc](http://www.montva.com/gogreenmc) green government campaign were distributed at the county Animal Care and Adoption Center 1<sup>st</sup> Anniversary grand opening on May 26, 2018.  
<https://www.montgomerycountyva.gov/acac>

The 2017 Stormwater Education Day event was the subject of a news article in the local News Messenger in both print and online.  
<https://montcova.com/top-stories/pooling-their-efforts-local-agencies-teach-mcps-students-about-water/>  
The News Messenger paper circulation is approximately 6,500 and each subscriber received an email containing the article in addition to paper distribution.

An April 3<sup>rd</sup> Face book post of the Scoop the Poop flyer reached 2,843 people. Four Twitter posts highlighting MS4 outreach materials amassed a total of 3,573 impressions.

2. Summary of future program goals. *Social media and news media outreach will continue and are more clearly identified as outreach methods in the revised Program Plan. Mailer inserts will be employed with the June 2019 tax bill mailings. Printed educational material will be included in the Montgomery County Park and Recreation Department “Go Play” activity catalog. A NRVHBA homebuilder’s show flyer will be inserted into the packets all show attendees receive. Printed materials will continue to be made available at government offices and at public participation events.*

## **MCM 2: PUBLIC INVOLVEMENT/PARTICIPATION**

This minimum control measure is intended to implement a program that helps to inform and educate County residents.

### **Annual Reporting Requirements**

1. Update the MS4 Program Plan a minimum of once a year. *Refer to BMP 2-1.*
2. Post copies of the annual report on the website. *Refer to BMP 2-1.*
3. Participate in a minimum of four (4) local activities annually. *Refer to BMP 2-2 and 2-3.*
4. Allow for public input on the MS4 outreach plan. *Refer to BMP 1-1.*

### **BMP 2-1: Montgomery County MS4 Program Plan and Annual Reports Posted to Stormwater Website**

The Montgomery County's MS4 Program Plan and annual reports are posted to the Stormwater Management website, where citizens can provide review and comment.

### **Measureable Goals Achieved in Reporting Year**

The Director of Environmental Services/County Engineer worked with the Public Information office and the Stormwater Specialist to update and post the permit, program plan, and annual report(s) to the stormwater management website.

### **Annual Reporting Requirements**

1. Update the MS4 Program Plan a minimum of once a year. *The MS4 Program Plan was updated; a revised plan will be posted.*
2. Post copies of the annual report on the website. *Web link to the MS4 Program plan and annual report web page:*  
<http://www.montgomerycountymd.gov/content/15989/16023/16945/default.aspx>

### **BMP 2-2: MS4 Annual Report to Board of Supervisors**

Provide an annual update to the Montgomery County Board of Supervisors.

### **Measureable Goals Achieved in Reporting Year**

No update was provided to the Board of Supervisors during the permit year. Participation at the County Animal Care and Adoption Center grand opening on April 29, 2016 was substituted as an additional outreach event.

### **Annual Reporting Requirements**

The year 4 requirement was met through substitution of another event. Staff will provide updates to the Board of Supervisors within the 2018-2019 year 5 reporting year if necessary to meet the four outreach and participation activity minimum.



**BMP 2-3: Annual Local Outreach Activities**

Develop a plan with the Town of Blacksburg, Town of Christiansburg, City of Radford, Radford University and/or Virginia Tech to participate in up to four (4) local outreach activities.

**Measureable Goals Achieved in Reporting Year**

Four (4) local outreach activities were conducted.

**Annual Reporting Requirements**

1. 475 people participated in the Renew the New annual river cleanup event. The New River Valley Regional Commission Website posts a video covering the event, <https://www.youtube.com/watch?v=0vkSn8Wpsfc&t=3s>

295 Blacksburg Middle School 6<sup>th</sup> grade students, 24 presenters, and 24 teachers/chaperones participated in the November 3<sup>rd</sup>, 2017 Stormwater Education Day.

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1,755 persons attended the 2018 New River Valley Homebuilders Association Expo on March 9-11, 2018. Staff from the County, Virginia Tech, Christiansburg, and Blacksburg participated in this event and provided stormwater themed children's coloring pages, a county insert into materials provided to each attendee, and answered questions from the public on stormwater issues.

The County Broomin' and Bloomin' cleanup event was held on April 28, 2018. 111 total participants from 24 total groups participated. In the 2017 event the participants collected litter along approximately 41 miles of roads during the event.

2. Summary of future program goals and the minimum events planned. *A minimum four (4) events are planned for permit year 2018-2019 from among the following:*
  - Renew the New River cleanup. *The county will obtain specific Montgomery County area participation in the 2018 event.*
  - November Stormwater Education Day.
  - Annual update to the Montgomery County Board of Supervisors. *This event is a reserve in case of the cancellation of other planned events.*
  - March 2019 New River Valley Homebuilders Expo.
  - April 2019 Broomin' and Bloomin' Cleanup. *Staff will look at ways to attract larger groups to participate in the cleanup event.*
  - April 2019 Stormwater Education Day 1
  - April 2019 Stormwater Education Day 2

### **MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION**

This minimum control measure is intended to detect and eliminate illicit discharges to the MS4 storm system.

#### **Annual Reporting Requirements**

1. A list of any written notifications of physical interconnection given by the operator to other MS4s. *Refer to BMP 3-3.*
2. The total number of outfalls screened during the reporting period, the screening results, and detail of any follow-up actions necessitated by the screening results. *Refer to BMP 3-3.*
3. A summary of each investigation conducted by the operator of any suspected illicit discharge. The summary must include: (i) the date that the suspected discharge was observed, reported, or both; (ii) how the investigation was resolved, including any follow-up, and (iii) resolution of the investigation and the date the investigation was closed. *Refer to BMP 3-3.*

#### **BMP 3-1: Storm Sewer and Outfall Map and Database**

Develop, maintain, and update a Storm Sewer and Outfall Map and Database to include the following information as required by the MS4 General Permit (9VAC25-890-40):

1. An Outfall Map
  - a. The location of all MS4 outfalls. In cases where the outfall is located outside of the MS4 operator's legal responsibility, the operator may elect to map the known point of discharge location closest to the actual outfall. Each mapped outfall must be given a unique identifier, which must be noted on the map; and
  - b. The name and location of all waters receiving discharges from the MS4 outfalls and the associated HUC.
2. An associated information table shall include the following for each outfall
  - a. The unique identifier;
  - b. The estimated MS4 acreage served;
  - c. The name of the receiving surface water and indication as to whether the receiving water is listed as impaired in the Virginia 2010 303(d)/305(b) Water Quality Assessment Integrated Report; and
  - d. The name of any applicable TMDL or TMDLs.

#### **Measureable Goals Achieved in Reporting Year**

60 of 61 MS4 outfalls were mapped and a database application was created for public use.

#### **Annual Reporting Requirements**

Status of the outfall map and database development, including any schedule updates and documentation of property transfers that may have occurred since the prior annual report: *An outfall map and database are prepared and are available to the public as the [Montgomery County VA MS4 Outfall Map](#).*

**BMP 3-2: Illicit Discharge Ordinance**

Establish a program to detect and eliminate illicit discharges in to the Municipal Separate Storm Sewer System by developing and adopting regulations and an enforcement program to prevent illegal discharges into the MS4 storm drain system.

**Measureable Goals Achieved in Reporting Year**

The Illicit Discharge Ordinance was drafted and public hearing was held on June 9, 2015.

The Illicit Discharge Ordinance was approved by the Board of Supervisors on June 22, 2015.

**Annual Reporting Requirements:**

Status of ordinance development and adoption. *The Illicit Discharge Ordinance was drafted and public hearing was held on June 9, 2015. Board of Supervisors approved the ordinance on June 22, 2015.*

**BMP 3-3: Illicit Discharge Program**

Develop, implement, and enforce a program to detect and eliminate illicit discharges, as defined in the MS4 General Permit (9VAC25-890-40).

**Measureable Goals Achieved in Reporting Year**

The Environmental Services implemented a program to investigate illicit discharge reports in accordance with MS4 General Permit Requirements. Routine screening of outfalls were performed in accordance with MS4 General Permit Requirements

**Annual Reporting Requirements**

1. Status of the illicit discharge program development, including any schedule updates and a list of physical interconnection given by the operator to other MS4s. *The illicit discharge program was previously developed by the County. Current known physical interconnections occur with the Town of Christiansburg, Town of Blacksburg, and VDOT. Two interconnections from the Town of Christiansburg were noted by letter in the 2016/2017 reporting period.*

Summary of outfalls screened during the reporting period. *The outfall mapping was completed in 2016. 60 of the 61 identified outfalls were inspected in the permit year. Access from private property to allow for access to the remaining outfall has been granted to allow for future inspection of the remaining outfall.*

- a. Total number of outfalls screened. *60 (Outfall 56 was the only outfall not inspected due to access issues. The county has received permission to enter private property to access the outfall for inspection in the 2018-2019 permit year.*
- b. Screening Results *Outfall #47 had standing water that is probable air conditioning unit condensate. This outfall will be reinspected in the 2018-2019 permit year during cool and dry weather conditions for verification.*
- c. Details of follow-up actions, if any. *Coordinate with building maintenance staff and monitor when no HVAC air conditioning units are in operation.*

A summary of each investigation conducted by the operator of any suspected illicit discharge. Six investigations were conducted. Two remain open *See the BMP3-3 appendix for details of the six investigations.*

2. Summary of future program goals. *Increase awareness of online reporting capability for illicit discharge.*

#### **MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

This minimum control measure is intended to reduce pollutants in stormwater runoff from land disturbing activities to the MS4 storm system.

##### **Annual Reporting Requirements**

- |  |              |
|--|--------------|
| 1. Total number of regulated land-disturbing activities          | 144          |
| 2. Total number of acres disturbed                               | 162.79 acres |
| 3. Total number of inspections conducted                         | 579          |
| 4. Total number of enforcement actions taken                     | 21           |
| 5. Type of enforcement actions taken during the reporting period |              |

Notice to Comply (11)

Notice of Corrective Action (6)

Stop Work Order/Notice of Violation (4)

A summary of the enforcement actions is provided in appendix 4-2

#### **BMP 4-1: Erosion and Sediment Control Program Update**

Update the existing Erosion and Sediment Control Ordinance and associated documents including written plan review procedures, written inspection procedures and schedule, written compliance and enforcement, certification of staff, and definition of roles and responsibilities procedures to comply with the requirements of the MS4 General Permit.

##### **Measureable Goals Achieved in Reporting Year**

The Director of Environmental Services/County Engineer drafted an update of the Erosion and Sediment Control Ordinance and program, including specifics regarding steep slope development.

##### **Annual Reporting Requirements**

Summary of tasks completed to date and updated schedule, as needed, for the erosion and sediment control program update. *The Director of Environmental Services/County Engineer provided an update to the program on July 25, 2016 and the revised ordinance was approved on September 12, 2016.*

**BMP 4-2: Erosion and Sediment Control Tracking and Reporting**

Develop a tracking and reporting mechanism for regulated land-disturbing activities to provide the required reporting in all subsequent annual reports.

**Measureable Goals Achieved in Reporting Year**

The Director of Environmental Services/County Engineer developed a current and accurate database of regulated land-disturbing activities.

**Annual Reporting Requirements**

1. Status of the tracking and reporting program development including tasks completed to date and schedule updates. *A tracking and reporting program – Montgomery Permitting and Inspections Portal – is currently being used to track land-disturbing activities. The Program Assistant will keep an excel database current to simplify end of year reporting.*
2. Upon completion of the program development, provide information regarding the total number of regulated land-disturbing activities, total number of acres disturbed, total number of inspections completed; and summary of enforcement actions taken, including the total number and type of enforcement actions taken during a reporting period. *Refer to information above in MCM 4.*

**MCM 5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND DEVELOPMENT ON PRIOR DEVELOPED LANDS**

This minimum control measure is intended to reduce pollutants in stormwater runoff from developed properties to the MS4 storm system.

**Annual Reporting Requirements**

1. Provide a summary of the electronic database of all known operator-owned and privately-owned stormwater management facilities that discharge into the MS4. *Refer to BMP 5-2.*
2. Submit an electronic database or spreadsheet of all stormwater management facilities brought online during each reporting year with the appropriate annual report. *Refer to BMP 5-2.*

**BMP 5-1: Stormwater Management Ordinance and Manual**

Develop, adopt, and enforce an ordinance and policies and procedures manual requiring stormwater quality and quantity controls for applicable land-disturbing activities in compliance with state and federal regulations and with the requirements of the MS4 General Permit.

**Measureable Goals Achieved in Reporting Year**

The stormwater ordinance and a policies and procedures manual to prevent or minimize water quality and quantity impacts from new or re-developments were adopted and implemented by July 1, 2014.

**Annual Reporting Requirements**

Summarize the status of the ordinance and manual development and evaluation. *The stormwater ordinance and manual have been adopted and implemented.*

**BMP 5-2: Stormwater Management Tracking and Reporting System**

Develop and maintain a database of all known operator-owned and privately-owned stormwater management facilities that discharge into the MS4 storm system for tracking and reporting.

**Measureable Goals Achieved in Reporting Year**

An electronic database for BMP inspection schedules is maintained to meet the requirements of the MS4 General Permit. All public facilities were inspected in the permit year

**Annual Reporting Requirements**

Submit an electronic database of all stormwater management facilities, including those completed during each reporting year, with the annual report. *Three (3) new BMP were made operational. Refer to Attachment 5-2.*

Summary of future program goals. *All private facilities within the MS4 urbanized area will be inspected in 2018-2019, year 5 of the County MS4 permit. All public facilities within the MS4 urbanized area will continue to be inspected annually.*



**BMP 5-3: Individual Lot Special Criteria**

Develop and implement strategies other than maintenance agreements such as periodic inspections, homeowner outreach and education, and other methods targeted at promoting the long-term maintenance of stormwater control measures that are designed to treat stormwater runoff solely from the individual residential lot.

**Measureable Goals Achieved in Reporting Year**

Individual Lot Special Criteria has been developed.

**Annual Reporting Requirements**

Provide information regarding strategies employed, the means of advertisement, location of the event, and the number of citizens reached. *No individual lot practices have been specified without a maintenance agreement in place, therefore no information is provided in this annual reporting period.*

### **MCM 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

This minimum control measure is intended to reduce pollutants in stormwater from daily operations and maintenance activities and municipal facilities, and from turf and landscape areas.

#### **Annual Reporting Requirements**

1. A summary report on the development and implementation of the daily operational procedures. *Refer to BMP 6-2.*
2. A summary report on the development and implementation of the required SWPPPs. *Refer to BMP 6-3.*
3. A summary report on the development and implementation of the turf and landscape nutrient management plans. *Refer to BMP 6-4.*
4. A summary report on the required training, including a list of training events, the training date, the number of employees attending training and the objective of the training. *Refer to BMP 6-5.*

#### **BMP 6-1: Household Hazardous Waste Event**

Expand current program and encourage citizen participation in events to dispose of household materials that could be hazardous to dispose of in bulk landfills.

#### **Measureable Goals Achieved in Reporting Year**

The Montgomery Regional Solid Waste Authority has a monthly hazardous waste collection schedule, therefore twelve events were held through the year.

#### **Annual Reporting Requirements**

Since December 2014, the Montgomery Regional Solid Waste Authority has held monthly collection events at its permanent household hazardous waste facility located at 555 Authority Drive in Christiansburg, Virginia. These events are open to residents of the Town of Blacksburg, Town of Christiansburg, and Montgomery County.

**BMP 6-2: Municipal Good Housekeeping Procedures**

Develop and implement written procedures designed to minimize or prevent pollutant discharge from: (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers.

**Measureable Goals Achieved in Reporting Year**

Written procedures were developed in the previous reporting period.

**Annual Reporting Requirements**

Summarize the status of the good housekeeping procedures development including tasks completed to date and schedule updates. *Municipal Good Housekeeping Inspections Procedures were developed in the previous permit year. The procedures manual will be distributed during future training sessions.*

**BMP 6-3: Municipal SWPPPS**

Develop and update SWPPPs for high-priority municipal facilities, including a training program. Each facility will be evaluated for the potential of illicit discharges from storage yards, outdoor storage areas, waste transfer stations, fleet or maintenance shops and other municipal facilities. The disposal method for waste materials will be evaluated. Any operation that has potential to discharge material into the municipal separate storm sewer system will be examined for potential for unwanted discharge.

**Measureable Goals Achieved in Reporting Year**

Annual inspections were performed at three (3) high-priority facilities listed below in the permit year.

- (1) MCPS Facilities Department
- (2) Christiansburg High School
- (3) Christiansburg Middle School

Four (4) high-priority facilities were originally identified within the current MS4 boundary. The Elliston Industrial Park location has been removed from the municipal SWPPP high-priority list. The Montgomery County Public Service Authority operates The Elliston Wastewater Treatment Plant (WWTP) and stores equipment and materials at this location. The facility has a Virginia DEQ no exposure certification. The WWTP is separately permitted under permit number VA0062219.

**Annual Reporting Requirements**

Summarize the status of the SWPPP development, including name and location of facilities where the plans are completed, in progress, and yet to be started, and schedule updates. *The high-priority facilities were identified and a SWPPP was prepared for the facilities listed below. These facilities are under the control of Montgomery County Public Schools (MCPS). MCPS staff will address areas identified as needed action in the 2018-2019 permit year.*

<u>Site</u>	<u>Scheduled Completion</u>
(1) MCPS Facilities Department	(Completed)
(2) Christiansburg High School	(Completed)
(3) Christiansburg Middle School	(Completed)

**BMP 6-4: Municipal Nutrient Management Plans**

Develop and implement Nutrient Management Plans on all required lands as per the schedule provided in 9VAC25-890-40.

**Measurable Goals Achieved in Reporting Year**

Eleven (11) applicable lands within the current MS4 boundary were identified.

- (1) Kipps Elementary School
- (2) Blacksburg Middle/High School
- (3) Christiansburg High School
- (4) Christiansburg Middle School
- (5) Old Christiansburg Middle School
- (6) Christiansburg Primary School
- (7) Falling Branch Elementary School
- (8) Prices Fork Elementary School
- (9) Gilbert Linkous Elementary School
- (10) Harding Ave. Elementary School
- (11) Margaret Beeks Elementary School

**Annual Reporting Requirements**

1. Status of the program development and implementation. *Eleven (11) applicable lands within the current MS4 boundary are identified. Twelve (12) applicable lands within the current MS4 boundary were previously identified. One (1) new property location, Kipps Elementary School was identified. Two (2) County properties were sold, Old Blacksburg High School and Old Blacksburg Middle School. The modified schedule for completion of Nutrient Management Plans is as follows:*

<u>Site</u>	<u>Scheduled Completion</u>
(1) Kipps Elementary School	Completed June 2018
(2) Blacksburg Middle/High School	Completed June 2018
(3) Christiansburg High School	June 2019
(4) Christiansburg Middle School	Completed June 2018
(5) Montgomery Central Middle School	Completed June 2018
(6) Christiansburg Primary/Elementary School	June 2019
(7) Falling Branch Elementary School	Completed June 2018
(8) Prices Fork Elementary School	Completed June 2018
(9) Gilbert Linkous Elementary School	June 2019
(10) Harding Ave. Elementary School	June 2019
(11) Margaret Beeks Elementary School	June 2019
<del>(12) Old Blacksburg High School</del>	<del>Property sold</del>
<del>(13) Old Blacksburg Middle School</del>	<del>Property sold</del>

2. Total acreage of lands where turf and landscape nutrient management plans are required.

<u>Site</u>	<u>Acres</u>
(1) <i>Kipps Elementary School</i>	1.6
(2) <i>Blacksburg Middle/High School</i>	44.2
(3) <i>Christiansburg High School</i>	18.9
(4) <i>Christiansburg Middle School</i>	15.5
(5) <i>Old Christiansburg Middle School</i>	9.5
(6) <i>Christiansburg Primary/Elementary School</i>	21.0
(7) <i>Falling Branch Elementary School</i>	13.8
(8) <i>Prices Fork Elementary School</i>	8.7
(9) <i>Gilbert Linkous Elementary School</i>	6.0
(10) <i>Harding Ave. Elementary School</i>	3.7
(11) <i>Margaret Beeks Elementary School</i>	<u>8.7</u>
<b>Total Acres: 151.6</b>	

3. Acreage of lands upon which turf and landscape nutrient management plans have been implemented.

<u>Site</u>	<u>Acres</u>
(1) <i>Kipps Elementary School</i>	1.6
(2) <i>Blacksburg Middle/High School</i>	44.2
(3) <i>Christiansburg Middle School</i>	15.5
(4) <i>Old Christiansburg Middle School</i>	9.5
(5) <i>Falling Branch Elementary School</i>	13.8
(6) <i>Prices Fork Elementary School</i>	<u>8.7</u>
<b>Total Acres: 93.3</b>	

**BMP 6-5: Municipal Training Program**

Develop an annual written training plan including a schedule of training events that ensures implementation of the training requirements of the MS4 Permit.

**Measurable Goals Achieved in Reporting Year**

An annual written training plan was developed; refer to Attachment 6-5.

**Annual Reporting Requirements**

1. Summary of required training events – *Training of senior level staff at Montgomery County Public Schools (MCPS) occurred in the permit year. See Appendix ‘BMP 6-5 Annual Training Documentation’ for a list of the staff trained, topics, covered, and materials provided.*

Appendix BMP 6-5, Municipal Training Program, details the training required and identifies the staff to be trained as listed below:

- a. *MCPS Facilities Staff*
  - b. *County Inspectors*
  - c. *Parks and Recreation Staff*
  - d. *Fire and Rescue Departments*
2. Program Goals for 2018-2019: *Training events as scheduled in the 2017-2018 permit year document ‘BMP 6-5 Municipal Training Program’ were not fully conducted during the reporting period, due to personnel changes and other commitments of existing staff. The training of senior MCPS staff completed in the 2017-2018 permit year as reported in “BMP 6-5 Annual Training Documentation”. The training reviewed the three training goals and included the planning of a training strategy for other relevant MCPS staff moving forward in the 2018-2019 permit year.*

*The County’s goal in the next reporting period is to conduct training sessions by June 30, 2018 for the four County staff groups listed in the training program document.*

## **OTHER MS4 PERMIT REPORTING REQUIREMENTS**

- A. Permit Condition II.E.3.c: Results of information collected and analyzed, including monitoring data, if any, during the reporting period. *No additional information was collected and/or analyzed.*
- B. Permit Condition II.E.3.d: A summary of the stormwater activities the operator plans to undertake during the next reporting cycle. *Refer to Minimum Control Measures discussion above.*
- C. A change in any identified best management practices or measurable goals for any of the minimum control measures including steps to be taken to address any deficiencies. *Refer to updated MS4 Program Plan; see Attachment 2-1.*
- D. Notice that the operator is relying on another government entity to satisfy some of the state permit obligations (if applicable). *A Memorandum of Agreement between the County of Montgomery, Virginia and the County School Board of Montgomery County, Virginia (MCPS) was signed on February 17, 2016 This will be addressed with a MOU with adjoining MS4 agencies. MCPS agrees to abide by all local, state and federal legal requirements, assume responsibility for costs of violations or remediation, develop and maintain good housekeeping practices, submit annual reporting information to the County, conduct all maintenance, labor, or repairs of MCPS stormwater systems and facilities, allow County right of entry, and cooperate fully with the County in all permitting processes. MCPS will designate, by name and position, a responsible agent for the agreement.*
- E. The approval status of any programs pursuant to Section II.C of the general permit (if appropriate), or the progress towards achieving full approval of these programs. *Refer to Minimum Control Measures discussion above.*
- F. Information required for any applicable TMDL special condition contained in Section I of the general permit. *Not applicable.*

## **ATTACHMENT INDEX**

- 1-1 MS4 Webpage Report
- 1-2 Stormwater Education Day Documentation
- 1-3 Bacteria and Nutrients Education and Outreach Documentation
- 2-1: MS4 Program Plan
- 2-3: Annual Local Outreach Activities Documentation
- 5-2: Database of stormwater management facilities completed during the reporting year
- 6-5: Municipal Training Program
- 6-5: Annual Training Documentation

MCPS to abide by all local, state and federal legal requirements, assume responsibility for costs of violations or remediation, develop and maintain good housekeeping practices, submit annual reporting information to the County, conduct all maintenance, labor, or repairs of MCPS stormwater systems and facilities, allow County right of entry, and cooperate fully with the County in all permitting processes. MCPS will designate, by name and position, a responsible agent for the agreement.