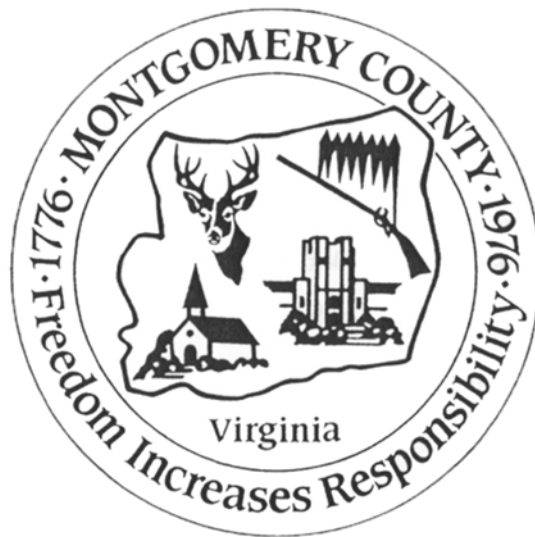


**Montgomery County**  
**Municipal Separate Storm Sewer System (MS4)**  
**VPDES Permit No. VAR040134**  
**Year 1 Annual Report**



**Coverage Issued: May 21, 2014**  
**Reporting Period: July 1, 2014 through June 30, 2015**

Prepared by:

Montgomery County  
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755 Roanoke St. Ste. 1C  
Christiansburg, VA 24073

Date: September 30, 2015

## Background Information

This document serves as the annual report for the reporting period of July 1, 2014 through June 30, 2015 for Montgomery County, Virginia General Permit No. VAR040134 (effective May 21, 2014 – June 30, 2018).

In this past permit year there have been no significant modifications to any department's roles and responsibilities as described in the County's Program Plan (dated April 2014). MS4 outfalls and associated acreage by HUC have not been mapped during the permit year; therefore, no new MS4 outfalls and associated acreage by HUC were added during the permit year. Minor revisions to BMPs are described in the body of the annual report based upon evaluations made upon the end of the first reporting year.

### 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

9/30/15  
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. *To be provided in the 2015/2016 annual report.*
2. 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. *To be provided in the 2015/2016 annual report. However, Channel 190 on Shentel and XFINITY is the local channel that periodically shows information regarding stormwater management. The information is contained in a rotating slide format under the heading of "Solution to Stormwater Pollution, Healthy Habits for Clean Water." Slide titles include: Proper recycling for oil other chemicals, Examples of chemical pollutants, Directions for sparing use of pesticides and fertilizer, Suggestions for sweeping up debris and not overwatering lawns, Proper use and disposal of construction debris, Suggestion for use of nontoxic and recycled products, Description of Septic System Maintenance.*
3. 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. *To be provided in the 2015/2016 annual report.*

### **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 was added to the County's website covering construction pollution, MS4 permit, stormwater reporting, and the stormwater ordinance.

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

#### **Annual Reporting Requirements**

- |                              |                                  |
|------------------------------|----------------------------------|
| 1. Estimated number of views | 228                              |
| 2. Most popular material     | Stormwater management/MS4 Permit |
| 3. Least popular material    | Report Stormwater Problems       |

### **BMP 1-2: Stormwater Education Program**

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 Director of Engineering and Regulatory Compliance met with the Montgomery County Public Schools Director of Curriculum and the New River Valley Resource Commission to discuss synergies of existing curriculum and potential new curriculum for implementation for the next academic year.

#### **Annual Reporting Requirements**

1. Summary of educational program. *No programs as part of formal curriculum were provided in reporting year. However, the Virginia Cooperative Extension did provide afterschool activities related to water quality including: April 21 and 28, 2015- Christiansburg Middle School – Stream Quality Assessment program at Camp Alta Mons, Students did biological (macroinvertebrate counts), physical (topography and temperature), and chemical water testing (pH, turbidity, nitrates, dissolved oxygen). Program contained an introduction to sources of pollution (nutrient, petroleum, heated/cooled water, organic waste, inorganic waste, pesticide/herbicides, etc.). Approximately 75 children attended over the two days.*

*April 23 and 24, 2015 - Blacksburg Middle School – same program as above at Camp Alta Mons. Approximately 85 children attended over the two days.*

2. Summary of future program goals. *To be provided in the 2015/2016 annual report.*

## **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.*

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

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

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

The Director of Engineering and Regulatory Compliance is currently working with the Public Information office 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; refer to **Appendix 2**.*
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**

The Director of Engineering and Regulatory Compliance will provide an update to the Board of Supervisors during an upcoming regular meeting within the next reporting year.

### **Annual Reporting Requirements**

The Board of Supervisors agenda and meeting minutes will be provided in the 2015/2016 annual report.

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

Develop a plan and a MOU with the Town of Blacksburg, Town of Christiansburg, City of Radford, Radford University and/or Virginia Tech to participate in up to three (3) local outreach activities, including the annual update to the Board of Supervisors.

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

The Director of Engineering and Regulatory Compliance met on December 11, 2014 with the Town of Blacksburg, Town of Christiansburg, and Virginia Tech to discuss the MOU and to identify three (3) local outreach activities. The group, including the City of Radford, plans to meet in November 2015 to finalize the MOU and determine the three (3) local outreach activities.

#### **Annual Reporting Requirements**

1. The Memorandum of Understanding is under development and will be provided with the 2015/2016 annual report.
2. Summary of the three (3) events. *To be completed in the 2015/2016 annual report.*

### **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).

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

As per the MS4 Program Plan, 50% of the MS4 outfalls are to be mapped and a database created by June 2016; 100% of the MS4 outfalls are to be mapped and a database created by June 2017. *Mapping of outfalls will begin fall of 2015.*

#### **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: *To be provided in the 2015/2016 annual report.*

#### **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 Director of Engineering and Regulatory Compliance completed a draft of the program that efficiently and effectively meets the 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 developed by the County. A list of physical interconnection will be developed upon completion of the MS4 Outfall Map and Database.*
  
2. Summary of outfalls screened during the reporting period. *Since the outfall mapping is not yet completed, outfalls were not screened during this annual reporting period.*
  - a. Total number of outfalls screened. *None*
  - b. Screening results *Not applicable*
  - c. Details of follow-up actions, if any. *None.*
  
3. A summary of each investigation conducted by the operator of any suspected illicit discharge. *There were no investigations during this annual reporting period.*

## **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          | 56          |
| 2. Total number of acres disturbed                               | 69.16 acres |
| 3. Total number of inspections conducted                         | 398         |
| 4. Total number of enforcement actions taken                     | 6           |
| 5. Type of enforcement actions taken during the reporting period |             |
| a. Stop Work Order (3)   |             |
| b. Notice of Corrective Action (3)                               |             |

### **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 Engineering and Regulatory Compliance 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 Engineering and Regulatory Compliance provided an update to the program within the reporting period.*

## **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 Engineering and Regulatory Compliance 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.*
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. *No stormwater facilities were completed during the reporting year.*

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

Develop, adopt, and enforce an ordinance and policies and a 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 was developed to meet the requirements of the MS4 General Permit.

#### **Annual Reporting Requirements**

Submit an electronic database of all stormwater management facilities, including those completed during each reporting year, with the annual report. *Outfalls and limits of the MS4 system is under development; refer to BMP 3-1.*

**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**

Program is currently under development.

**Annual Reporting Requirements**

Provide information regarding strategies employed, the means of advertisement, location of the event, and the number of citizens reached. *Program is under development.*

## **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 6-4.*

### **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**

Increased the number of household waste events by seven (7) per year and citizen participation.

### **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. Since December 2014, approximately 200 citizens participated and the Authority has collected approximately 40 cubic feet of solids and 2,205 gallons of liquid.

**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**

Program is under development with a permit target for completion of June 2016.

**Annual Reporting Requirements**

Summarize the status of the good housekeeping procedures development including tasks completed to date and schedule updates. *Program is under development with a permit target for completion of June 2016.*

**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**

Four (4) high-priority facilities were identified within the current MS4 boundary.

- (1) MCPS Facilities Department
- (2) Christiansburg High School
- (3) Christiansburg Middle School
- (4) Elliston Industrial Park

**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; no SWPPPs have been developed to date. The County intends to develop the SWPPPs as per the following schedule.*

<u>Site</u>	<u>Scheduled Completion</u>
(1) MCPS Facilities Department	June 2016
(2) Christiansburg High School	June 2017
(3) Christiansburg Middle School	June 2017
(4) Elliston Industrial Park	June 2018

**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.

**Measureable Goals Achieved in Reporting Year**

Twelve (12) applicable lands within the current MS4 boundary were identified.

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

**Annual Reporting Requirements**

- 1. Status of the program development and implementation. *Twelve (12) applicable lands within the current MS4 boundary were identified. The County intends to develop the SWPPPs as per the following schedule.*

	<u>Site</u>	<u>Scheduled Completion</u>
(1)	<i>Blacksburg Middle/High School</i>	<i>June 2016</i>
(2)	<i>Christiansburg High School</i>	<i>June 2016</i>
(3)	<i>Christiansburg Middle School</i>	<i>June 2016</i>
(4)	<i>Old Christiansburg Middle School</i>	<i>June 2017</i>
(5)	<i>Christiansburg Primary/Elementary School</i>	<i>June 2017</i>
(6)	<i>Falling Branch Elementary School</i>	<i>June 2017</i>
(7)	<i>Prices Fork Elementary School</i>	<i>June 2017</i>
(8)	<i>Gilbert Linkous Elementary School</i>	<i>June 2017</i>
(9)	<i>Harding Ave. Elementary School</i>	<i>June 2017</i>
(10)	<i>Margaret Beeks Elementary School</i>	<i>June 2018</i>
(11)	<i>Old Blacksburg High School</i>	<i>June 2018</i>
(12)	<i>Old Blacksburg Middle School</i>	<i>June 2018</i>



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

	<u>Site</u>	<u>Acres</u>
(1)	<i>Blacksburg Middle/High School</i>	44.2
(2)	<i>Christiansburg High School</i>	18.9
(3)	<i>Christiansburg Middle School</i>	15.5
(4)	<i>Old Christiansburg Middle School</i>	9.5
(5)	<i>Christiansburg Primary/Elementary School</i>	21.0
(6)	<i>Falling Branch Elementary School</i>	13.8
(7)	<i>Prices Fork Elementary School</i>	8.7
(8)	<i>Gilbert Linkous Elementary School</i>	6.0
(9)	<i>Harding Ave. Elementary School</i>	3.7
(10)	<i>Margaret Beeks Elementary School</i>	8.7
(11)	<i>Old Blacksburg High School</i>	12.9
(12)	<i>Old Blacksburg Middle School</i>	<u>16.5</u>
<b>Total Acres:</b>		<b>179.4</b>

3. Acreage of lands upon which turf and landscape nutrient management plans have been implemented. *None during this reporting period.*

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

Develop an annual written training plan, possibly in conjunction with adjoining jurisdictions via an MOU, including a schedule of training events that ensures implementation of the training requirements of the MS4 Permit.

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

Director of Engineering and Regulatory Compliance has met and plans to meet in November 2015 with adjacent MS4 agencies, including the Town of Blacksburg, Town of Christiansburg, City of Radford, and Virginia Tech to discuss opportunities for a regional training program.

#### **Annual Reporting Requirements**

1. Summary of required training events – *None completed to date.*
2. Summary of the training or certification program is provided to emergency response employees shall be included in the first annual report. *The emergency services manager is preparing information regarding training for spill response. To be completed by June 30, 2016. Routine training is currently held three times per year that includes spill response and hazardous material handling.*

### **OTHER MS4 PERMIT REPORTING REQUIREMENTS**

- A. Results of information collected and analyzed, including monitoring data, if any, during the reporting period. *No additional information was collected and/or analyzed.*
- B. 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.*
- D. Notice that the operator is relying on another government entity to satisfy some of the state permit obligations (if applicable). *This will be addressed with a MOU with adjoining MS4 agencies.*
- 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.*