



City of Staunton, Virginia



MS4 Program Plan 2018-2023

Update 4/13/2020

For the Virginia Stormwater Management Program General Permit Registration Statement for Small Municipal Separate Storm Sewer Systems (MS4)

General Permit No. VAR040132

DRAFT

Certification

CERTIFICATION STATEMENT

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.

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Permit Number: VAR040132

MS4 Name: City of Staunton

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INTRODUCTION

Discharges from municipal separate storm sewer systems are regulated under the Virginia Stormwater Management Act, the Virginia Stormwater Management Program (VSMP) Permit regulations and the Clean Water Act as point source discharges. MS4 regulations were developed and implemented in two phases. Implementation of the first phase began in the early 1990s and required that operators of MS4s serving populations of greater than 100,000 people (per the 1990 decennial census) apply for and obtain a permit to discharge stormwater from their outfalls. The second phase of MS4 regulations became effective March 23, 2003, and required that operators of small MS4s in "urbanized areas" (as defined by the latest decennial census) obtain a permit to discharge stormwater from their outfalls.

In August 2013, the City of Staunton received a Notice of Designation as a regulated small MS4. Part of the City's jurisdiction had been identified as being located within an urbanized area according to the 2010 Decennial Census. As a result, the City must apply for and maintain coverage under the General Permit for the Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems. Similar to the Phase I programs, small MS4 programs must be designed and implemented to control the discharge of pollutants from their storm sewer system to the maximum extent practicable in a manner that protects the water quality in nearby streams, rivers, wetlands and bays.

On May 16, 2018, the City of Staunton submitted a Registration Statement outlining the City's MS4 Program to the Department of Environmental Quality (DEQ). On November 1, 2018, the City received notification from DEQ that the City had obtained coverage under the General VPDES Permit for Small MS4s. Coverage under the Virginia General Permit for Discharges from Small Municipal Storm Sewer Systems requires each MS4 locality to submit an annual report by October 1 of each year describing the status of the Program's implementation for the previous permit year, July 1 through June 30.

Stormwater discharges from Phase II (small) MS4s are regulated under the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems. Small MS4s include storm sewer systems operated by cities, counties, towns, federal facilities such as military bases, Veteran's Affairs hospitals and research facilities, Department of Defense facilities and parkways, and state facilities such as VDOT, community colleges and public universities. Under the General Permit, small MS4s must develop, implement and enforce a program that includes the following "six minimum control measures":

- Public education and outreach on stormwater impacts
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post-construction stormwater management in new development and redevelopment
- Pollution prevention/good housekeeping for municipal operations

ABOUT STAUNTON

Located in the historic Shenandoah Valley, Staunton was first settled in 1732. The hamlet was named in honor of Lady Staunton, wife of Sir William Gooch who served as lieutenant-governor of Virginia from 1727 to 1749. The Virginia General Assembly established Staunton as a town in 1761.

Staunton, unique among cities for its natural beauty and architectural heritage, provides an excellent quality of life for its unified community by continuing the tradition of citizen leadership, innovation, and perseverance. The best of its history combined with the best new ideas and technology make Staunton an exceptional small city with charm, energy, ambiance, and creativity that others seek to emulate.

Today, Staunton is an independent city with a population of 24,512 as of 2010 census, located within Augusta County. Staunton is approximately 19.7 square miles in size. The urbanized area within the City of Staunton is 13.2 square miles as identified in Figure 1. This urbanized area represents a portion of the Staunton-Waynesboro Metropolitan Statistical Area, as defined by the Office of Management and Budget, which had a population of 118,502 as of the 2010 census.

The City of Staunton lies within four (4) major watersheds. The hydrologic unit codes (HUC) are the following:

Name	HUC 12	VAHU6
➤ Lewis Creek	020700050301	PS06
➤ Christians Creek/Barterbrook Branch	020700050202	PS09
➤ Middle River/Falling Spring Run	020700050302	PS07
➤ Middle River/Bell Creek	020700050104	PS04

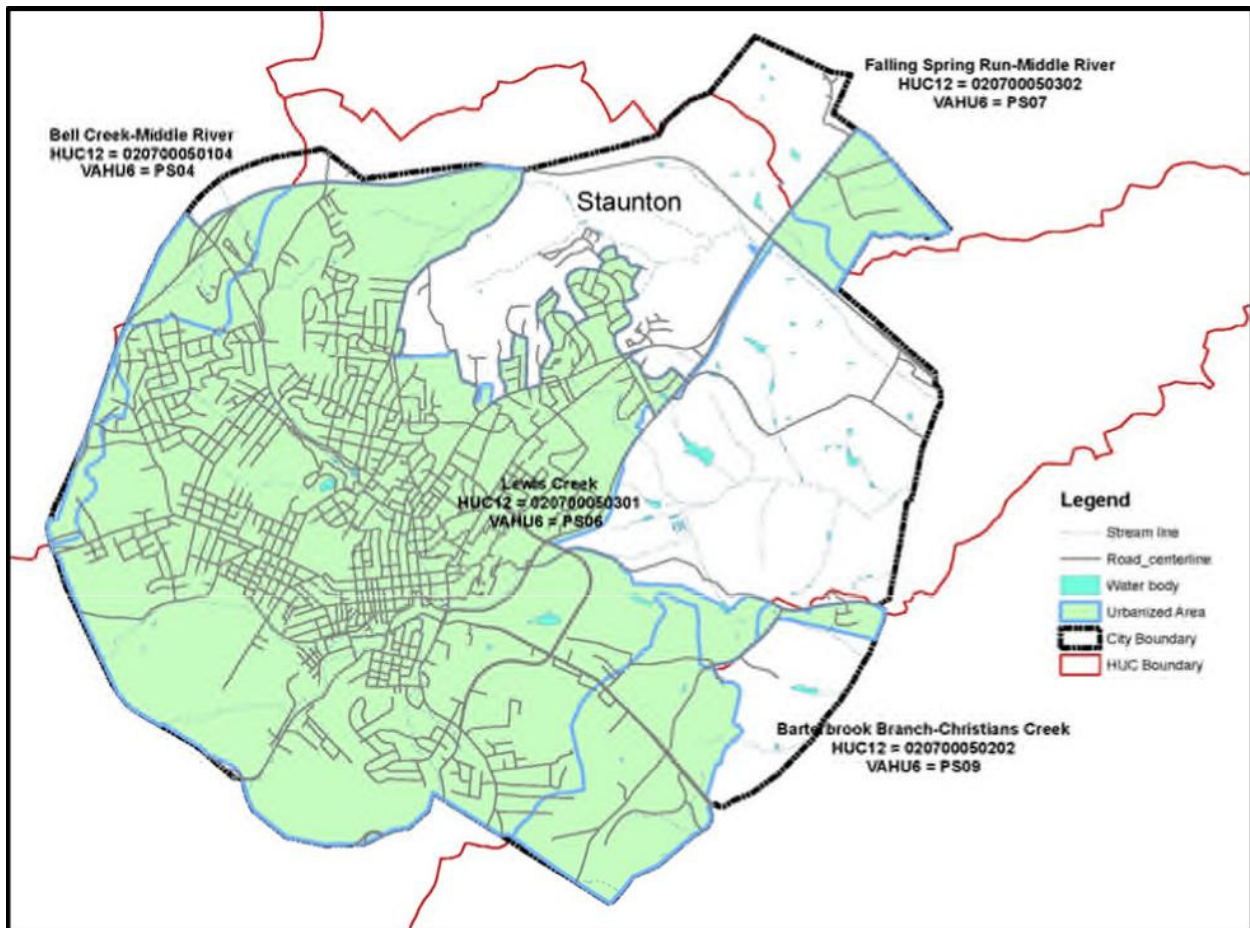


Figure 1

MS4 PROGRAM

Minimum Control Measure 1 – Public Education and Outreach

The public education and outreach (PE&O) BMPs will be a critical component of City's MS4 program. The PE&O program will help the citizens of the community better understand the environmental challenges that they are facing as a community. This new knowledge will encourage the community as a whole to implement changes in their lifestyles that will reduce the negative impacts their daily choices have on the environment. Additionally, this program empowers the citizens to become part of the stormwater solution by developing an understanding of program goals and a providing variety of ways to communicate observed issues to the program administer.

The PE&O BMP will focus on the following high priority areas:

- Waste/Pollution Management was selected due to the immediate impact to the community. The City of Staunton spends significant resources every year to clean streets, maintain BMP's, and to facilitate better water quality for the community.
- Watershed Awareness was selected to bring awareness to the importance of caring for and maintaining the quality of the City's watersheds and how the City's watersheds being located at the headwaters affect downstream watersheds and ultimately the Chesapeake Bay.
- Chesapeake Bay and local waterway nutrient impacts was chosen to increase citizen understanding and support for the City's nutrient reduction efforts. The City will be required to dedicate significant resources on the reduction of nutrients to address TMDL's. Resource allocation will be restricted without significant community support.

BMP – 1.1 School Presentations (Category - Speaking Engagements)

The City will continue to develop targeted presentations to school age children in grades 4 through 9. The presentations will be age appropriate with the goal to build on past presentations in future years. Presentations will include interactive tools to help better understand the effects of water pollution and strategies for prevention as they relate to the City's high priority topics.

Objective and Expected Results: By targeting grades 4 through 9, the City will be providing these children with the required information to foster stormwater awareness that will translate into long lasting positive changes toward stormwater issues.

Implementation Schedule: The City continue to provides the presentations throughout the permit cycle. The city will target 4 to 6 presentations per year. The Engineering Department will be responsible for developing and giving the presentations.

Method to Determine Effectiveness: The measure for this BMP will be based on the total number of presentations per year and the total number of students. The annual report will include these numbers.

BMP – 1.2 Waste Awareness Brochures (Category - Written Materials)

The City will develop educational brochures to provide information in an easy to read format. The brochures will concentrate on the high priority topics. In keeping the topics open to all high priority areas, the City will have the flexibility to modify the Program from one type topic to another as priorities change from one year to the next. Each brochure will include information about the topic, identify desirable changes in behavior and provide contact information for questions and reporting. The educational brochures will be made available through mass mailings and at various City offices and community events.

Objective and Expected Results: By distributing educational brochures to the citizens, the City will be raising the general awareness of stormwater issues as well as providing actions the public can take to help protect water quality and minimize impacts to stormwater runoff.

Implementation Schedule: Waste brochures will continue to be developed and distributed throughout the permit cycle. Distribution of the brochures will begin during the 3rd year of the permit. The Engineering Department will be responsible for the brochure's content and distribution.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total number of brochures distributed. The annual report will include this number.

BMP – 1.3 Watershed Awareness (Category - Electronic Media)

The City has developed internet social media material to provide information in an easy to share format. The material concentrates on the topic of "Watershed Awareness". This topic was chosen in order to bring awareness to the importance of caring for and maintaining the quality of the City's watersheds and how the City's watersheds being located at the headwaters affect downstream watersheds and ultimately the Chesapeake Bay. In keeping the social media format general, it will allow the City to have the flexibility to incorporate multiple types of social media outlets, i.e., Facebook, YouTube, etc. as priorities change and opportunities arise from one year to the next. Each post will include resources and information in regards to Staunton's watersheds and its effect on a local and state environmental well-being, identify desirable changes in behavior and provide contact information for questions and reporting. The material will be made available through social media posts through a public, City-run social media format.

Web link to the City's Facebook page:

<https://www.facebook.com/stauntonstormwater>

Objective and Expected Results: By using social media to reach citizens, the City will be raising the general awareness of the stormwater issues concerning watersheds, both locally and at the state level. The material will also provide actions the public can take to help protect water quality and minimize impacts to stormwater runoff.

Implementation Schedule: The Watershed Awareness social media material will continue be developed and posted throughout the permit cycle. The Engineering Department will be responsible for the social media material and its distribution.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total number of website hits. The annual report will include this number.

Minimum Control Measure 2 – Public Involvement / Participation

The public involvement/participation (POP) BMP will promote valuable input and assistance from the community. Providing the public opportunities to play an active role in the program is instrumental in a successful program. By promoting the availability of the program to the community, public participation will increase leading to a reduction in stormwater pollutants and improved water quality.

Web link to the MS4 Program and annual reports

<https://www.ci.staunton.va.us/departments/engineering-division/ms4-program>

BMP – 2.1 Stormwater Webpage

The City has a dedicated stormwater webpage which provides detailed stormwater information to the public. The stormwater webpage can be found on the City website at the address above. Information available on the webpage includes: definitions of common stormwater elements (i.e. stormwater, watershed, Chesapeake Bay, pollution prevention, etc.), details about why stormwater is important, identification of how citizens can help, links to the City's stormwater program elements (Ordinances, erosion & sediment control, policies, design standards, general permit, annual reports, etc.), links to Federal and State stormwater program information and contact information for reporting and questions.

Objective and Expected Results: The objective of the dedicated website is to provide large amounts of detailed federal, state and local program information, accessible to a large number of citizens. The expected result is to easily be able to search for and find detailed information on stormwater in general as well as information pertaining to the City of Staunton's MS4 Program. The website also provides Citizens with information on how to report illicit discharges and stormwater related complaints.

Implementation Schedule: The City has implemented the website and will maintain the website by adding the annual reports and updating the site's content and links. The Engineering Department will be responsible for the page's content and will direct the webmaster of all required changes.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total number of website hits that occur each year. The annual report will include this number.

Web link to the City's Stormwater Webpages:

<https://www.ci.staunton.va.us/departments/engineering-division>

BMP – 2.2 Tree Planting Program (Restoration)

The City currently has a Tree Planting Program where new trees are planted, dead or diseased trees are replaced with new plantings and structural pruning is performed on young existing trees. The City also organizes and participates in an Arbor Day/Earth Day event where seedlings are handed out to participants. The City will continue its tree planting program and its participation in the Arbor Day/Earth Day event. The City will hand out seedlings and educational brochures and discuss the benefits of tree planting on water quality.

Objective and Expected Results: Encourage the community to actively take part in stormwater enhancements. Raise the general awareness of stormwater issues as well as discussing actions, such as tree planting, the public can take to help protect water quality and minimize impacts to stormwater runoff.

Implementation Schedule: The City will continue its Tree Planting Program and participating in the Arbor Day/Earth Day event. Parks and Recreation will continue to be responsible for these programs.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total number of trees planted, the number of trees pruned, the number of participants and the number of seedlings handed out at the Arbor Day/Earth Day event. The annual report will include these numbers.

BMP – 2.3 DEQ/DCR Adopt-A-Stream Program (Restoration)

The City actively participates in the Virginia Adopt-A-Stream program. The Stormwater Webpage includes links to Virginia's program with directions on how to apply. The City will procure and house the needed material for volunteers to use during the clean-up event. Materials will include safety information, trash bags, safety vests and traffic control-warning signs. The City will also coordinate trash pick-up if needed.

Objective and Expected Results: Encourage the community to actively take part in stormwater enhancements while improving stream quality.

Implementation Schedule: The City continues to implement the Adopt-A-Stream program. The Engineering Department is responsible for the website's content and for supplying volunteers with the available materials.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total linear feet of stream adopted. The annual report will include this number.

BMP – 2.4 Adopt-A-Street Program (Restoration)

The City currently has an Adopt-A-Street Program that is designed to provide an opportunity for citizens and civic groups to get involved in their community. Individuals, organizations or businesses may participate. These groups agree to adopt a street and to keep the designated area cleared of litter and other debris. In exchange, the program participants are given materials to help them with the cleanup. Signs bearing the name of their organization will be posted at the beginning of their designated cleanup areas. Areas may include City streets, vacant lots, walkways and public parking lot. The Stormwater Webpage includes links to the City's program.

Objective and Expected Results: Encourage the community to actively take part in stormwater enhancements by decreasing the trash and litter that could possibly reach a waterway.

Implementation Schedule: This program will be ongoing with Public Works continuing to be responsible for its implementation.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total miles of street adopted. The annual report will include this number.

BMP – 2.5 Stormwater Partnerships (Monitoring)

The City has established a partnership with the local environmental advocacy group, the Lewis Creek Watershed Advisory Committee. The partnership will ensure that local impaired waters and pollutants of concern are emphasized in education and outreach efforts.

Objective and Expected Results: To ensure the education, outreach efforts, and volunteer opportunities are enhanced to the maximum extent possible by a coordinated effort.

Implementation Schedule: The Engineering Department will continue to send a representative to committee meetings during the upcoming permit cycle.

Method to Determine Effectiveness: The effectiveness of this BMP will be based on the total number of meetings that were attended. The annual report will include this number.

BMP – 2.6 Hazardous Waste Collection Day (Disposal/Collection Event)

The City will continue to participate in the regional household hazardous waste collection day. The event is held once a year in the fall at the Augusta County Government Center. The following types of waste are accepted; solvents, oil based paints, fuels, used oil, computer equipment, lead-acid batteries, rechargeable batteries, herbicides/pesticides, small electronics, antifreeze, compact fluorescent bulbs, and fluorescent bulbs. Information about the event will be made available on the stormwater website. The city will also continue to send an informational flyer prior to the event.

Objective and Expected Results: By actively promoting the hazardous waste collection day, the City will reduce the risk of improper storage, disposal and discharges within the MS4.

Implementation Schedule: The program is ongoing. Public Works will continue to be responsible for coordinating the informational flyer.

Method to Determine Effectiveness: The City will track the total number of City vehicles dropping off hazardous waste. The annual report will include this number.

Minimum Control Measure 3 – Illicit Discharge Detection and Elimination

For the purposes of this permit, an illicit discharge is defined as any discharge to a municipal separate storm sewer that is not composed entirely of storm water, with the exceptions for those pursuant to any other VSMP permit. These discharges can have immediate and long lasting impacts to the ecosystem of your local water bodies.

BMP – 3.1 IDDE Detection Program

The City will maintain and implement their IDDE Detection Program to detect, identify and address unauthorized discharges. The program will use the storm sewer map to be developed and maintained will all outfalls identified. The mapping system will be used to screen for illicit discharges. The dry weather screening element of the program includes:

- Prioritized screening schedule
- Perform a minimum 50 field screenings per year, or screen all outfalls if less than 50 total in system
- Methodologies to collect general information such as last rain, quantity of rain, visual observations, etc.
- Defines the time frame to conduct investigations based on priorities
- Methodologies to determine the source of all illicit discharges
- Mechanisms to eliminate illicit discharges, including procedures for legal action
- Methods for follow up
- Mechanisms to track all investigations

The City will prohibit non-stormwater discharges into the storm sewer system through modifications to the ordinance. The stormwater webpage, stormwater hotline and BMP 2.5 will be used to promote and facilitate public reporting of illicit discharges. A copy of the program has been included in Appendix L.

Objective and Expected Results: The goal of this control measure is to develop, implement, and enforce a program to detect, identify and address illicit discharges into City's regulated MS4 system.

Implementation Schedule: The City will maintain and implement the IDDE program by the throughout the permit cycle. Engineering is responsible for implementing the program with support from Public Works for investigations. The Engineering Department is responsible for ongoing maintenance of the storm sewer mapping.

The illicit discharge ordinance, City of Staunton City Code, Title 13, Division IV, Illicit Discharge and Connections, can be found at: <http://www.codepublishing.com/VA/staunton.html>

Physical interconnection letters have been sent to VDOT and Augusta County during Permit Year 2.

Method to Determine Effectiveness: The City will track the number of illicit discharges detected and enforcement actions. The annual report will include these numbers.

BMP – 3.2 Mapping of Stormwater Network

The City will continue to maintain an accurate storm sewer system mapping and information table for City owned stormwater facilities using GIS and GPS locating technologies. Information to be collected and maintained includes:

- Outfalls
- Natural Streams
- Structural stormwater BMPs type and location
- Storm sewer type and size

The storm sewer map will include at least the following:

- Location of all MS4 outfalls
- A unique identifier for each outfall
- The name of location of all waters receiving discharges from MS4 outfalls and the associated HUC (6th order)

The associated information table for each outfall will include at least the following:

- A unique identifier
- The estimated MS4 acreage served
- The name of the receiving water and indication if the receiving water is impaired
- The name of any applicable TMDL(s)

Objective and Expected Results: The storm sewer mapping will be a critical element of the IDDE (BMP 3.2) and structural BMP maintenance (BMP 5.2) programs. Accurate and up-to-date mapping will be necessary for these programs to succeed.

Implementation Schedule: The City will continue to maintain the storm sewer mapping throughout the duration of the permit cycle. Engineering will be responsible for developing and maintaining the sewer mapping using GIS.

Method to Determine Effectiveness: The City will track the number of storm structures mapped. The annual report will include these numbers.

BMP – 3.3 SPCC Training

The City will continue to provide personnel with spill prevention control and countermeasure training. The plan specifies material handling procedures and storage requirements and identifies spill cleanup procedures for areas and processes in which spills may potentially occur.

Objective and Expected Results: The SPCC training attempts to standardize process operating procedures and employee training toward the goal of minimizing accidental pollutant release that could contaminate storm water runoff.

Implementation Schedule: The SPCC training is a current policy that will continue to be implemented throughout the permit cycle. Each department, Engineering, Public Works, Parks & Recreation and Fire Department will continue to be responsible for their departmental SPCC training.

Method to Determine Effectiveness: The City will track the number of personnel trained. The annual report will include this number.

Minimum Control Measure 4 – Construction Site Runoff Control

Uncontrolled stormwater runoff from construction sites can significantly impact rivers, lakes and estuaries. Sediment is the main pollutant of concern leaving a construction site. However, there are also other pollutants that commonly discharge from construction sites, including fertilizer, pesticides, oil and grease, concrete truck washout and construction debris. The construction site stormwater runoff control (CSSRC) BMP will be developed to significantly reduce or eliminate construction site pollutants from entering the local water bodies.

BMP – 4.1 Erosion and Sediment Control Program (VESCP)

The City administers an existing program that applies to large sites as well as single family home construction. The Engineering Department reviews site plans and performs site inspections. Any commercial site and any disturbance over 10,000 square feet require an erosion and sediment control plan to be submitted and approved. The City issues a land-disturbance permit prior to any land-disturbance taking place. A pre-construction meeting is held to discuss VESCP controls and to review the plan. A City VESCP inspector also makes site visits and approves the initial controls installed. The program is enforceable through the City Code (Chapter 13). The City has 1 certified VESCP Program Administrator, 2 certified VESCP inspectors and 2 VESCP certified plan reviewers.

The legal authorities utilized by the City to ensure compliance with our VESCP and VSMP Programs include the following:

- ❖ Staunton City Code - Title 13
- ❖ City's Subdivision and Zoning Ordinance
- ❖ Virginia Erosion and Sediment Control Law and Regulations
- ❖ Virginia Stormwater Management Act and Regulations

Additional information concerning the City's Erosion and Sediment Control Program (VESCP) can be found at: <https://www.ci.staunton.va.us/departments/engineering-division/erosion-and-sediment-control-program>

Written procedures and policies for plan review, inspection and enforcement can be found at: <http://www.codepublishing.com/VA/staunton.html> and <https://www.ci.staunton.va.us/government/permits>

Objective and Expected Results: The City's VESCP is in place to prevent adverse impacts from erosion and sedimentation from all construction sites.

Implementation Schedule: The VESCP is an existing program and will continue to be implemented throughout the permit cycle. Engineering will continue to be responsible for the VESCP.

Method to Determine Effectiveness: A number of parameters will be tracked pertaining to the VESCP including; number of land disturbing activities, acres of land disturbed, number of inspections, and enforcement actions. The annual report will include these values.

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Minimum Control Measure 5 – Post Construction Runoff Control

Post-construction stormwater impacts are increases in the type and quantity of pollutants entering the receiving streams. An increase in the quantity of runoff can cause stream bank scouring and downstream flooding. Implementing a combination of structural and non-structural BMPs can reduce the water quality effects of increased impervious areas and are crucial elements of MS4 programs. Procedures need to be developed and implemented to inspect and maintain all permanent structural BMPs for both City and privately maintained facilities.

BMP – 5.1 Require VSMP Permits

The City became a VSMP Authority on July 1, 2014, responsible for administration of our local VSMP Program in accordance with Commonwealth of Virginia regulations. The City will require a VSMP permit for land disturbances of 1 acre or greater and land disturbances less than 1 acre but part of a common plan of development 1 acre or greater. Evidence of permit coverage from DEQ will be required prior to any land-disturbance taking place. The City Engineering Department is responsible for BMP 5.1 and employs 1 certified VSMP Program Administrator, 2 certified VSMP inspectors and 1 VSMP certified plan reviewers. Written procedures for inspection and enforcement are located in the engineering offices at 116 W Beverley Street. A copy of the VSMP approval letting is in Appendix Y.

See BMP 4.1 for a description of the legal authorities and written procedures utilized by the City to ensure compliance with our VESCP and VSMP Programs.

Objective and Expected Results: The City will adhere to current Commonwealth of Virginia regulations with regard to the VSMP permitting to prevent adverse impacts of urban stormwater runoff.

Implementation Schedule: The City of Staunton will implement local VSMP Program administration in accordance with Commonwealth of Virginia Regulations and will continue to require applicable VSMP requirements be instituted throughout the permit cycle. The City will implement changes to their local ordinances to comply with modifications to the VSMP permitting regulations. Engineering will be responsible for verifying VSMP permit compliance.

Method to Determine Effectiveness: The total number of permits, inspections, enforcement actions, exemptions applied for and exemptions granted will be tracked. The annual report will include these values.

BMP – 5.2 Structural BMP Maintenance

The City has a program to ensure proper maintenance of all City owned structural BMPs. The City will continue to require a maintenance agreement for any new privately owned structural BMP. The City will continue to encourage owners of private structural BMPs without agreements to acquire the maintenance agreement. The City's engineering division maintains a

database of stormwater management facilities. This database is located at the engineering offices at 116 W Beverley Street.

Objective and Expected Results: By continuing the BMP maintenance program the City will ensure BMPs are performing optimally and are minimizing adverse impacts to state waters.

Implementation Schedule: The BMP maintenance program will be an ongoing effort throughout the permit cycle. The development of the program will be a joint effort between Engineering and Public Works. Public Works will be responsible for the actual maintenance of all City owned structural BMPs. Engineering will be responsible for documenting new privately owned BMP agreements.

Method to Determine Effectiveness: The City will track to the total number of new BMP agreements. The annual report will include this number.

Achievements for Permit Year 5: The City continued the Structural BMP Maintenance Program during Permit Year 5. The City acquired Maintenance Agreements on all new BMPs and was able to acquire Maintenance Agreements on several existing BMPs. The City will continue the Structural BMP Maintenance Program during the next permit year.

BMP – 5.3 Structural BMP Inspection

The City operates a program to inspect structural BMPs within the City. The existing maintenance agreements require property owners of private BMPs to inspect maintain and submit a report to the City. The standardized report is available on the stormwater webpage. The City will also inspect private BMPs once every five years. City owned BMPs will be inspected annually per the program described in BMP 5.2.

Objective and Expected Results: By continuing the BMP inspection program the City will ensure BMPs are performing optimally and achieving design pollutant reduction.

Implementation Schedule: The BMP inspection program will be ongoing throughout the permit cycle. Engineering will be responsible for implementing the programs and performing the inspections.

Method to Determine Effectiveness: The City will track the total number of BMP inspection reports submitted by private owners and completed by city personnel. The annual report will include these numbers.

BMP – 5.4 Structural BMP Database

The maintenance of the structural BMP database will be instrumental in implementing BMP 5.1 and BMP 5.2. The BMP database includes the type of BMP, ownership, location, date brought online, HUC code, receiving waters, if receiving waterway is impaired, if maintenance agreement exists, number of acres treated and most recent inspection.

Objective and Expected Results: The database will be used to track BMP inspections and maintenance to ensure that all BMPs are functioning properly and as designed.

Implementation Schedule: The BMP database will be maintained throughout the permit cycle. Engineering will be responsible for compiling and maintaining the database.

Method to Determine Effectiveness: The City will include the updates to the BMP database in the annual report.

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Minimum Control Measure 6 – Pollution / Good Housekeeping

The Pollution Prevention/Good Housekeeping BMPs allow the City to examine and alter their own actions in an effort to reduce the amount of pollutant that collects on streets, parking lots, and open spaces as a result of runoff from vehicle maintenance areas and poor stormwater maintenance.

BMP – 6.1 Street Sweeping

The City will continue its program of regular street sweeping.

Objective and Expected Results: The street sweeping program will reduce the adverse effects that pollutants found on public roads have on receiving waters.

Implementation Schedule: Public works will continue this ongoing program through the permit cycle.

Method to Determine Effectiveness: The City will track the number of road miles swept and tons of debris collected. The annual report will include these numbers.

BMP – 6.2 Pollution Prevention Training

City departments, Public Works, Parks & Recreation and Fire Department, will continue its pollution prevention training to its employees. Bi-monthly safety committee meetings will incorporate environmental protection into the agenda as part of Public Works' environmental management systems program.

Objective and Expected Results: The pollution prevention training empowers employees with the knowledge and operating procedures to minimize accidental pollutant release that could contaminate storm water runoff. Through this training, employees realize environmental stewardship has many far reaching benefits.

Implementation Schedule: The pollution prevention training is a current policy that will continue to be implemented throughout the permit cycle. Each department, Public Works, Parks & Recreation and Fire Department will continue to be responsible for their departmental pollution prevention training.

Method to Determine Effectiveness: The City will track the number of personnel trained. The annual report will include this number.

BMP – 6.3 Yard Debris Collection Program

The City will continue its yard debris collection program. Residents are asked to rake leaves to the curb each fall where Public Works crews vacuum them up for composting. Usually each area of the city will have two specific periods for leaf collection. Leaves may be bagged and, in limited numbers, put out with regular refuse.

Objective and Expected Results: By collecting and composting yard waste the City is reducing the amount of gross discards that would otherwise end up in streams.

Implementation Schedule: This is an ongoing program that Public Works will continue throughout the permit cycle.

Method to Determine Effectiveness: The City will track the total number of cubic yards and loads of debris collected. The annual report will include these numbers.

BMP – 6.4 Dedicated Vehicle Wash Facility

The City currently operates and maintains a dedicated vehicle wash facility at its equipment maintenance shop.

Objective and Expected Results: This program eliminates the many pollutants that would otherwise enter into the stormwater system in a dedicated vehicle wash facility did not exist.

Implementation Schedule: This is an ongoing program that Public Works will continue throughout the permit cycle.

Method to Determine Effectiveness: The City will track the total number of vehicles washed. The annual report will include this number.

BMP – 6.5 Storm Sewer Inspection and Maintenance

The City has developed a programmatic storm sewer inspection and maintenance program. The program includes expected routine maintenance and non-routine (repair) maintenance.

Objective and Expected Results: The storm sewer inspection and maintenance program will ensure the storm sewer system is in good working order.

Implementation Schedule: The ongoing program will continue throughout the permit cycle. Engineering and Public works will be responsible for developing and implementing the program.

Method to Determine Effectiveness: The City will document the number of storm structures and linear feet of storm sewer inspected. The annual report will include these numbers.

BMP – 6.6 Maintain SWPPP for Required City Facility

The City identified 5 high priority City facilities that it operates. They are:

Municipal High-Priority Facilities with A High Potential for Pollutant Discharge			
Name of facility	Facility Address	Operator	Location of SWPPP
Public Works Operations Facility	1911 Craigmont Road	Public Works	1911 Craigmont Road
Parks and Recreation Maintenance Facilities	330 Park Boulevard	Parks and Recreation	330 Park Boulevard
Middlebrook Avenue Salt Storage Facility	866 Middlebrook Avenue	Public Works	1911 Craigmont Road
Recycle Center	600 Churchville Avenue	Public Works	1911 Craigmont Road
Parks and Recreation Pools	600 Churchville Avenue / 1000 Montgomery Avenue	Parks and Recreation	1000 Montgomery Avenue

The City will maintain the Stormwater Pollution Prevention Plans (SWPPPs) for each high priority facility. The SWPPS will be maintained by the facilities operators which include Public Works and Parks and Recreation staff. Each SWPPP is located on site at the facility and is available upon request.

Objective and Expected Results: These documents will provide guidance to prevent and reduce pollutant runoff from municipal operations.

Implementation Schedule: The city will maintain the SWPPPS for each high priority facilities throughout the permit cycle.

Method to Determine Effectiveness: The annual report will include the total number of inspections completed SWPPPs.

BMP – 6.7 Maintain Nutrient Management Plan for Required City Sites

The City identified 6 sites over one acre that require a Nutrient Management Plan (NMP). Those sites are:

Municipal Facilities Requiring Nutrient Management Plans			
Name of facility	Facility Address	Planner	Acres Covered Under NMP
Gypsy Hill Golf Course	300 Park Boulevard	Parks and Recreation	1.90
Braves Baseball	600 Churchville Avenue	Parks and Recreation	2.5
Gypsy Hill Baseball Fields	600 Churchville Avenue	Parks and Recreation	2.5
Montgomery Hall Baseball/Softball Fields	1000 Montgomery Avenue	Parks and Recreation	5.4
Montgomery Hall Soccer Fields	1000 Montgomery Avenue	Parks and Recreation	4
Staunton Football Complex	600 Churchville Avenue	Parks and Recreation	2.25

The City maintains a Nutrient Management Plan for each of these sites. The plans are located at each of the facilities and are available for review upon request.

Objective and Expected Results: The developed NMP will define the amount, source, placement, form and timing of the application of nutrients and soil amendments to ensure optimal management.

Implementation Schedule: The city will continue to implement the NMP through this permit cycle.

Method to Determine Effectiveness: The annual report will include the total amount of nutrients applied to the acreage of each site.

Chesapeake Bay TMDL

In December of 2010, the United States Environmental Protection Agency established a total maximum daily load (TMDL), or “Pollution Diet”, to limit the amount of phosphorus, nitrogen, and sediments that can be released into the streams, creeks, and rivers that feed the Chesapeake Bay. These measures were established as an effort to improve the water quality of the Bay and to return it to a swimmable and fishable state. The Bay TMDL limits were divided into smaller TMDLs that were assigned to drainage basins across six (6) states including Virginia. To respond to the TMDL the Commonwealth of Virginia committed to a phased approach to implementation for MS4 programs. The phased approach for MS4 communities includes a requirement to meet a reduction goal of 40% during the 2018 - 2023 MS4 Permit Cycle. The City of Staunton has developed a draft TMDL action plan based on the 2013 – 2018 permit cycle guidance document. The Virginia Department of Environmental Quality has indicated that a new guidance document will be provided for the final development of the phase II TMDL action plans. Once the guidance is provided, the City will finalize the action plan. The City of Staunton will then employ appropriate actions to meet the planning document during the 2018 – 2023 to the maximum extent practical.

Objective and Expected Results: The development of a Chesapeake Bay TMDL Action Plan that will provide implementation guidelines and a program of management practices that will facilitate compliance with the condition of future permits.

Implementation Schedule: The City will submit the TMDL Action Plan for the second permit cycle (July 1, 2018- June 30, 2023) within 12 months of the permit issuance date (November 2019).

Local TMDL

The City of Staunton is located within the South River and Middle River watersheds in Augusta County Va. This waterway was listed as high priority impairment list for fecal coliform and general benthic in 1996. As a result, a TMLD was developed and approved in April of 2004. The City was not specifically allocated a waste load as part of the TMDL planning process. The final TMDL instead provided allocations to the major sub-watersheds. The Lewis Creek watershed was excluded from the TMDL implementation plan due to legacy toxicity issues and differences in the nature of the benthic impairment. The City of Staunton is not required to develop an implementation plan since the City of Staunton and the Lewis Creek watershed were excluded from the TMDL implementation plans.

Objective and Expected Results: None.

Implementation Schedule: Not Applicable.

Responsible Parties

The departments of responsibility for implementation of MS4 program elements are included in BMP descriptions above. Contact information for each responsible party is located below:

Modifications to Responsible Parties:

Date: September 20, 2017

None

Executive Officer

Title: City Manager

Name: Stephen F. Owen

Address: P.O. Box 58
Staunton, VA 24402

Phone: 540-332-3812

Email: Owensf@ci.staunton.va.us

Program Management

Department of Engineering

Title: City Engineer

Name: Nickie D. Mills

Address: P.O. Box 58
Staunton, VA 24402

Phone: 540-332-3858

Email: millsnd@ci.staunton.va.us

Department of Public Works

Title: Director

Name: Thomas C. Sliwoski

Address: P.O. Box 58
Staunton, VA 24402

Phone: 540-332-3892

Email: sliwoskitc@ci.staunton.va.us

Department of Parks and Recreation

Title: Director

Name: Christopher Tuttle

Address: P.O. Box 58
Staunton, VA 24402

Phone: 540-332-3945

Email: tuttlecj@ci.staunton.va.us

Staunton Fire Department

Title: Fire Chief

Name: R. Scott Garber

Address: 500 N. Augusta Street
Staunton, VA 24401

Phone: 540-332-3884

Email: garberr@ci.staunton.va.us

APPENDICES

APPENDIX A

GENERAL PERMIT REGISTRATION STATEMENT

GENERAL PERMIT REGISTRATION STATEMENT FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (VAR04)

(Please Type or Clearly Print All Information)

1. Name, Type, and Location of the Small Municipal Separate Storm Sewer System (MS4):

Name: City of Staunton, Virginia

Type: ☒ City ☐ County ☐ Incorporated Town ☐ Unincorporated Town ☐ College or University
☐ Local School Board ☐ Military Installation ☐ Transport System ☐ Federal or State Facility
☐ Other: _____

Location (City or County Name): City of Staunton, Virginia

2. Small MS4 Operator:

Name: City of Staunton, Virginia

Address: 116 West Beverley Street

City: Staunton State: VA Zip: 24401

3. Hydrologic Unit Code(s) as identified in the most recent version of Virginia's 6th Order National Watershed Boundary Dataset currently receiving discharges or that have potential to receive discharges from the regulated Small MS4:

PS04 (Middle River-Bell Creek) PS06 (Lewis Creek)
PS07 (Middle River-Falling Spring Run) PS09 (Christians Creek-Barterbrook Branch)

4. Attach a description of the estimated drainage area (in acres) served by the Small MS4 discharging to any impaired receiving surface water(s) listed in the 2010 Virginia 305(b)/303(d) Water Quality Assessment Integrated Report and a description of the land use of each such drainage area. (See attachment)

5. Any approved TMDL waste load(s) allocated to the Small MS4:

None

6. The name(s) of any regulated physically interconnected MS4s to which the Small MS4 discharges:

County of Augusta, Virginia

7. For operators that had coverage under the 2008 Small MS4 General Permit, attach a copy of the currently implemented MS4 Program Plan. The operator shall continue to implement this plan and any updates as required by 9VAC25-890-40, Table I.

8. For operators applying for initial coverage designated under 9VAC25-890-10 A, a schedule of development of an MS4 Program Plan that complies with 9VAC25-890-40 and includes the following:
- A list of BMPs that the operator proposes to implement for each of the stormwater minimum control measures and their associated measurable goals pursuant to 9VAC25-890-40, Section II B, that includes:
 - A list of the existing policies, ordinances, schedules, inspection forms, written procedures, and other documents necessary for BMP implementation; and
 - The individual(s), department(s), division(s), or unit(s) responsible for implementing the BMP;
 - The objective and expected results of each BMP in meeting the measurable goals of the stormwater minimum control measures;

(DEQ 199-148) (08/13)

- c. The implementation schedule of each BMP including any interim milestones for the implementation of a proposed BMP; and
- d. The method that will be utilized to determine the effectiveness of each BMP and the MS4 Program as a whole.
9. List all existing signed agreements between the operator and any applicable third party where the operator has entered into an agreement in order to implement minimum control measures or portions of minimum control measures:

None

10. The name, address, telephone number and email address of either the principal executive officer or ranking elected official as defined in 9VAC25-870-370:

Mr. Stephen F. Owen – City Manager – City of Staunton, Virginia
P. O. Box 58 Staunton, VA 24402
Telephone: 540-332-3812 email: OwenSF@ci.staunton.va.us

11. The name, position title, address, telephone number and email address of any duly authorized representative as defined in 9VAC25-870-370:

12. **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: Stephen F. Owen

Title: City Manager

Signature: [Signature]

Date: February 9, 2014

(For Department of Environmental Quality Use Only)

Accepted / Not Accepted By: _____

Date: _____

Basin: _____

Stream Class: _____

Section: _____

Special Standards: _____

Registration Statement #4 Attachment:

4. Attach a description of the estimated drainage area (in acres) served by the Small MS4 discharging to any impaired receiving surface water(s) listed in the 2010 Virginia 305(b)/303(d) Water Quality Assessment Integrated Report and a description of the land use of each such drainage area.

Receiving waters listed in the 2010 Virginia 305(b)/303(d) Water Quality Assessment Integrated Report:

LEWIS CREEK

Potomac and Shenandoah River Basin

Estimated drainage area: 10,523 acres

Length: 5.5 miles

Category 5 – Waters needing Total Maximum Daily Load Study

Cause Group Code: B12R-01-PCB

Cause: PCB in fish tissue

Cause Category: 5A

Description: The Lewis Creek watershed consists of approximately 65% residential/commercial, 15% forest and 20% pasture/cropland/open.

DRAFT

APPENDIX B

ADOPT-A-STREET PROGRAM

In order to enhance the environment and the appearance of our City, the undersigned applicant, requests permission to Adopt-A-Street at the following location:

In consideration of being allowed to be part of Adopt-A-Street and be present on or near any public rights of way, any accepted applicant will perform any related activity in accordance with the City of Staunton's terms attached hereto and incorporated herein by reference and any applicable law. The applicant also hereby agrees to indemnify and save harmless the City of Staunton, its officials, employees or agents, from responsibility, damage or liability or any claim arising from the applicant's exercise of the activities and privileges granted under this agreement.

This agreement may be terminated by the City of Staunton at any time the applicant does not comply with this agreement or at any time the applicant's work effort is discovered to be unsatisfactory. The City reserves the right to revise or discontinue this program at any time. The applicant likewise may terminate this agreement at any time.

The applicant hereby assumes all risk of damage or injury resulting from the activities performed hereunder, and acknowledges that certain risks are inherent in litter pick up, especially in areas open to the public or where vehicular traffic is present, such as on or near the public right of way.

It is agreed that the applicant is not an agent, employee or volunteer of the City while participating in this Adopt-a-Street program. As such, the City of Staunton will not provide any worker's compensation insurance, general liability or automobile insurance or uninsured/underinsured insurance motorist coverage, or any other insurance for the acts or omissions of the applicant while engaged in any activities arising out of or related to this Adopt-A-Street agreement or activity. It is further agreed that the City will not defend, hold harmless, or indemnify the applicant for any claims of loss, injury, death, or damage arising out of or related to this Adopt-A-Street agreement.

APPLICANT: _____

PRIMARY CONTACT NAME/TITLE: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

FAX NUMBER: _____

EMAIL ADDRESS: _____

SIGNATURE: _____

The undersigned is the official City representative who has the legal authority to give permission for the property location named in the aforesaid agreement to be involved in and designated in the Adopt-A-Street program as administered by the City of Staunton.

DATE: _____

CITY OFFICIAL/TITLE: _____

Permission is hereby given to perform the work described, insofar as the City of Staunton has the right, power, and authority under the terms of this agreement.

ADOPT-A-STREET PROGRAM

The Adopt-A-Street program is designed to encourage citizen participation in beautification and litter cleanup of designated areas in their community at regular intervals. Individuals, organizations or businesses may agree to adopt-a-street and to keep the designated area cleared of litter and other debris.

In exchange, program participants are given materials to help them with the cleanup and signs bearing the name of their organization to be posted at the beginning of their designated clean-up area. Areas may include sections of City streets, parks, vacant lots, parking lots, walkways, streets, public grounds or other littered areas.

- The Adopt-A-Street agreement must be approved by the City of Staunton.

The Department of Public Works will coordinate, review and approve the proposed areas of adoption. If there is any unresolved concern with regard to safety or question concerning safety, the proposed adoption will not be approved.

- Any local community organization, business or individual (18 years or older) will be allowed to adopt a street. The City of Staunton reserves the right to deny adoption requests for any reason whatsoever.
- All participants must sign an agreement with the City.
- Participants will be required to adopt for a minimum of one year, with four cleanups per year.
- Group members less than 15 years of age must be supervised by an adult at least 18 years of age. There should be one adult 18 years of age or older for every six group members less than 15 years of age. (NO BABIES, INFANTS or TODDLERS PLEASE!)

- It is recommended that participants hold at least two meetings a year to review safety and other guidelines.
- The City of Staunton will supply participants with trash bags, safety vests, and appropriate signs. The group's representative should contact the City before a planned cleanup to arrange for pickup of materials and to coordinate dates and times. The representative will ensure all items are returned to the City.
- The Department of Public Works will assist in disposing all trash.
- Participants are urged to separate and recycle appropriate materials.
- Signs noting the Adopt-A-Street program and the participant's name will be provided for installation in the cleanup area.
- Adopting groups are encouraged to schedule two of their four cleanups in April and October to coincide with the national and statewide litter control clean ups or with Earth Day (April) and America Recycles Day (November).
- The City of Staunton reserves the right to revise these terms as needed.

The following equipment items have been loaned to _____

in support of cleaning up _____ on _____:

_____ Safety Vests

_____ Grab sticks

_____ Signs

Items will be returned to the Department of Public Works on _____.

Organizational Representative

Date

Adopted Street Names		
Name of street	Miles adopted	Organization
Bells Lane	1.80	Augusta Bird Club
Greenway Road	0.16	Bob & Sharon Driscoll
West Beverley Street (from Thornrose Avenue to Jefferson Street)	0.52	Newtown Neighborhood Association
Lewis Street	0.67	Petersons Enterprises
Lacy B King Way	0.60	Liberty Point
West Beverley Street (from Thornrose Avenue to western corporate limits)	1.60	West End Alliance
Morris Mill Road (from West Beverley Street to Essex Drive)	0.50	Bea Henry
Total	5.85	

APPENDIX C

EROSION AND SEDIMENT CONTROL PROGRAM INSPECTION FORM

Project Name:

Inspection Date:

Time:

Inspected by:

- ☐ Pre-Construction
- ☐ Clearing and Grubbing
- ☐ Rough Grading

STAGE OF CONSTRUCTION

- ☐ Building Construction
- ☐ Finish Grading
- ☐ Final Stabilization
- ☐ Construction of SWM facilities
- ☐ Maintenance of SWM facilities
- ☐ Other

* State Regulation (section)	Check if repeat violation	Problem location & description Corrective action required (skip a line between items)

*Refers to applicable regulation found in the most recent publication of the Virginia Erosion and Sediment Control Regulations (9VAC25-840), the General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880), or the Virginia Stormwater Management Program Regulations (9VAC25-870).

Verbal/Written notification given to:

Completion deadlines:

Report Prepared by:

Date:

APPENDIX D
STORMWATER POLLUTION PREVENTION PLAN INSPECTION FORM

DRAFT



SWPPP INSPECTION CHECKLIST

PROJECT: _____

DATE OF INSPECTION: _____

ITEM	YES	NO	N/A
INITIAL INSPECTION - Section 9VAC25-880-70 Part II A			
Signed copy of registration statement			
Copy of permit coverage letter			
Copy of general permit			
Copy of SWPPP			
Copy of the approved SWM plan			
Copy of the approved E and S plan			
Copy of the approved PPP plan			
Contractor(s) to implement and maintain control measures identified			
Name			
Phone number			
Email address			
Public notification - Section 9VAC25-880-70 Part II C & D			
Copy of permit coverage letter shall be posted near entrance of site			
Location where SWPPP can be accessed for public review, either electronic or hard copy, shall be posted at site entrance			
REGULAR NSPECTIONS - Section 9VAC25-880-70 Part II B			
SWPPP onsite			
If changes to site have been made, has SWPPP been amended?			
Modifications or updates shall be noted and shall include the following:			
Record dates when:			
Major grading activities occur			
Construction activities temporarily or permanently cease on a portion of the site			
Stabilization measures are initiated			
Documentation on when and why controls were replaced or modified			
Corrective actions completed within 7 days			
Areas that have reached final stabilization and no further inspections required			
All properties no longer under legal control of operator with date			
Date of any prohibited discharge, discharge volume released and actions taken			

Actions taken to prevent reoccurrence of any prohibited discharge			
Measures taken to address any issues identified during inspections			
All amendments, modifications or updates shall be signed by operator			
Inspections by operator performed in accordance with General Permit			
Section 9VAC25-880-70 Part II F			
Chesapeake Bay TMDL - inspection schedule amended per Section			
9VAC25-880-70 Part I B4			
at least once every four business days, or			
at least once every five business days and no later than 48 hours			
following a storm event of 0.25 inches or greater			
Evidence of any nonstormwater discharges			
Evidence of any pollutant discharges			
OPERATOR INSPECTION REPORTS			
Date and time of inspection			
Date and rainfall amount of last measurable event			
Summary of findings			
Locations of prohibited discharges			
Locations of control measures requiring maintenance			
Locations of control measures that failed to operate			
Locations where the approved erosion control plan has not been properly implemented			
Locations where additional control measures are needed			
List of any corrective actions required			
Any corrective actions required by a previous report not implemented			
Date and signature of operator			

APPENDIX E

STORMWATER HOTLINE PROCEDURES

Per the City's General Permit VAR040132 for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), the City has established a stormwater hotline. The stormwater hotline consists of dedicated unmanned telephone line and dedicated email address. The city has developed a database for recording all messages received on the hotline. In implementing the city's stormwater hotline, the following procedures shall be followed:

1. The Hotline shall be checked for messages on a daily basis by the proper personnel in the City Engineering Department.
2. The Engineering Department shall log all necessary information into the hotline database.
3. The Engineering Department will determine the urgency and nature of each message (drainage issues, erosion control issues, general questions, etc.). If the issue of concern involves another city department, engineering will notify the appropriate departments.
4. If required, city personnel will conduct a site visit for assessment.
5. All actions by city departments shall be recorded in the hotline database.
6. After the issue has been addressed, all outcomes/conclusions shall be entered in the hotline database.

Email address for City's Stormwater Hotline: StauntonStormwater@ci.staunton.va.us

Phone number for City's Stormwater Hotline: (540) 213-6517

APPENDIX F

INSPECTION AND MAINTENANCE POLICY FOR CITY OWNED STORMWATER MANAGEMENT FACILITIES

Per General Permit VAR04 for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), Section II-B-5-c-(2), for stormwater management facilities owned by the MS4 operator, the following conditions apply:

- a) The operator shall provide for adequate long-term operation and maintenance of its stormwater management facilities in accordance with written inspection and maintenance procedures included in the MS4 Program Plan,
- b) The operator shall inspect these stormwater management facilities annually. The operator may choose to implement an alternative schedule to inspect these stormwater facilities based on facility type and expected maintenance needs provided that the alternative schedule is included in the MS4 Program Plan, and
- c) The operator shall conduct maintenance on its stormwater management facilities as necessary.

Accordingly, the City of Staunton has developed an Inspection and Maintenance Program for city owned stormwater management facilities. The program is implemented through a joint effort between the city's engineering department and public works department. The engineering department is responsible for inspecting each facility. If any facility is found to be in need of maintenance, the necessary work is performed by the public works department. The engineering department has developed a database for all city owned facilities that will be utilized in tracking the annual inspections and maintenance efforts.

In implementing of the city's Inspection and Maintenance Program for city owned facilities, the following procedures shall be utilized:

- 1) The engineering department shall inspect each facility annually (on a fiscal year basis).
- 2) For each facility inspected, the engineering department shall complete a "Stormwater Management Facility Annual Inspection Report" form.
- 3) For any facility found in need of maintenance, a copy of the inspection form shall be sent by the engineering department to the city's street superintendent in the public works department.
- 4) The street superintendent shall schedule any necessary maintenance. The street superintendent shall coordinate with the engineering department the extent of the maintenance work, if necessary.
- 5) Upon completion of the required maintenance, the public works department shall fully note the work performed on the inspection form.
- 6) The street superintendent shall send a copy of the inspection form containing the description of the completed maintenance to the engineering department.
- 7) The engineering department will update the city owned facility database.
- 8) Records of all inspection forms shall be kept by the engineering department.

APPENDIX G

INSPECTION AND MAINTENANCE POLICY FOR PRIVATE OWNED STORMWATER MANAGEMENT FACILITIES

Per General Permit VAR04 for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4), Section II-B-5-c-(1), for stormwater management facilities not owned by the MS4 operator, the following conditions apply:

- a) The operator shall require adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop a recorded inspection schedule and maintenance agreement to the extent allowable under state or local law or other mechanism;
- b) The operator or his designee shall implement a schedule designed to inspect all privately owned stormwater management facilities that discharge into the MS4 at least once every five years to document that maintenance is being conducted in such a manner to ensure long-term operation in accordance with the approved design;
- c) The operator shall utilize its legal authority for enforcement of maintenance responsibilities if maintenance is neglected by the owner. The operator may develop and implement a progressive compliance and enforcement strategy provided that the strategy is included in the MS4 Program Plan; and
- d) Beginning with the issuance of this state permit, the operator may utilize 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 individual residential lot. Within 12 months of coverage under this permit, the operator shall develop and implement these alternative strategies and include them in the MS4 Program Plan.

Accordingly, the City of Staunton has developed an Inspection and Maintenance Program for privately owned stormwater management facilities. The program is implemented through the city's engineering department. The engineering department is responsible for inspecting each facility. If any facility is found to be in need of maintenance, a letter will be sent to the owner of the facility addressing the necessary maintenance.

The engineering department has developed a Stormwater Management Inspection and Maintenance Agreement. This legal agreement between the facility owner and the city requires the owner to inspect the facility on a regular basis and to maintain the facility as necessary to assure safe and proper functioning of the facility. The engineering department has also developed a database for all privately owned facilities that will be utilized in tracking the inspections and maintenance efforts.

In implementing of the city's Inspection and Maintenance Program for privately owned facilities, the following procedures shall be utilized:

- 1) The engineering department shall inspect each facility at least once every five (5) years (on a fiscal year basis).
- 2) For each facility inspected, the engineering department shall complete a "Stormwater Management Facility Annual Inspection Report" form.

- 3) For any facility found in need of maintenance, a letter shall be sent to the facility owner including a copy of the inspection form describing the required maintenance that needs to be performed.
- 4) If requested by the facility owner, the engineering department will coordinate with the owner the extent of the maintenance work.
- 5) Upon completion of the required maintenance, the owner shall fully note the work performed on the inspection form.
- 6) The facility owner shall send a copy of the inspection form containing the description of the completed maintenance to the engineering department.
- 7) The engineering department shall perform a follow-up inspection to ensure that the required maintenance has been adequately addressed.
- 8) The engineering department will update the private owned facility database.
- 9) Records of all inspection forms shall be kept by the engineering department.
- 10) If the property owner fails to complete the required maintenance acceptable to the City, the City may, after giving proper notice to the property owner, correct the deficiencies identified in the inspection form and charge the costs of such repairs to the property owner.

APPENDIX H

FIRE DEPARTMENT WRITTEN PROTOCOLS FOR DAILY OPERATIONS AND MAINTENANCE



Section 300 Hazardous Materials

Table of Contents

Section 300 Hazardous Materials

- 300.01, Program Management
- 301.01, Emergency Response
- 301.02, Containment and Cleanup
- 301.03, Decontamination Procedures
- 301.04, Personnel Safety
- 301.05, Contaminated Protective Clothing

	City of Staunton Fire & Rescue Department Standard Operating Guidelines	
	Hazardous Materials	
	Subject: Program Management	Section 300
	Approved: Assistant Chief	SOG# 300.01
	Approved: Jason C. Ball Deputy Chief	Initiated 01 APR 03
500 North Augusta Street Staunton, Virginia 24401	Approved: R. Scott Garber Fire Chief	Revised 01 JAN 15

I. Scope

This standard defines the parameters of the department's efforts to manage the hazardous materials problem within the community, both before and after the incident. It was promulgated to:

- A. Establish a program to identify occupancies that store, use, manufacture, or distribute hazardous materials in an effort to prevent incidents from occurring that could potentially involve a hazardous material; and
- B. Establish guidelines to be followed by the department for managing an incident that involves a hazardous material.

II. General

- A. The potential always exists within the community for an incident to occur that involves one or more hazardous materials. The frequency of occurrence and the fiscal resources of the district do not, however, allow the department to operate beyond the first-responder operational level as defined by NFPA 472, *Professional Competence of Responders to Hazardous Materials Incidents*.
- B. At the operational level, members are responsible for protecting people, property, and the environment from the effects of a hazardous material. Members will operate in a defensive role to contain the incident and prevent a release of a hazardous material from spreading.
- C. After the incident commander has secured the scene, a private vendor shall be called to the incident to control the incident and clean up the site.
- D. The private vendor may be furnished by the party responsible for the incident; otherwise, the department will contact a contractor from the approved vendor list.
 1. The responsible party shall be billed for all expenses incurred in resolving the incident.
 2. The local ordinance granting this authority:

III. Responsibilities

- A. The emergency management coordinator shall be responsible for the management and oversight of the department's hazardous materials program and shall be responsible for ensuring that the department is in strict compliance with all applicable state and federal regulations.
- B. The fire marshal shall be responsible for:
 1. Identifying businesses and other concerns that are involved in the manufacture, use, storage, or distribution of hazardous materials.
 2. Causing the periodic inspection of these businesses so as to reduce the possibility that an incident might occur.

3. Providing a list of these businesses to the company officers for use in preparing tactical surveys of these occupancies.
- C. The department shall equip each apparatus with a pair of binoculars, the appropriate manuals and reference materials, portable monitoring devices, and a supply of disposable protective suits.
- D. The Assistant Chief shall be responsible for training the members assigned to each shift to the first-responder operational level as outlined in NFPA 472.
- E. Company officers shall be responsible for:
 1. Preparing tactical surveys for occupancies within their first-due areas that manufacture, store, use, or distribute hazardous materials. During the preparation of the tactical survey, the company officer shall ask the business owner or manager to affix an NFPA 704, *Standard System for the Identification of the Hazards of Materials for Emergency Response* placard in a conspicuous place to identify the most severe hazard present in the occupancy.
 2. Ensuring that their driver inspects the manuals, equipment, and protective clothing assigned to their apparatus for use in a hazardous materials incident at the beginning of each shift.
 3. Ensuring that all members under their command maintain their training and skill levels at the first-responder operational level as defined by NFPA 472.

	City of Staunton Fire & Rescue Department Standard Operating Guidelines	
	Hazardous Materials	
	Subject: Emergency Response	Section 300
	Approved: Assistant Chief	SOG# 301.01
	Approved: Jason C. Ball Deputy Chief	Initiated 01 APR 03
500 North Augusta Street Staunton, Virginia 24401	Approved: R. Scott Garber Fire Chief	Revised 01 JAN 15

I. Scope

This standard establishes guidelines to be followed during the management of an incident involving a hazardous material. It was promulgated to:

- A. Establish guidelines for the management of a hazardous materials incident.
- B. Provide for the safety of response personnel.

II. Definitions

The following definitions are taken from a variety of sources including NFPA 472, *Standard for Professional Competence of Responders to Hazardous Materials Incidents*.

- A. **Cold zone**: The zone of a hazardous materials incident that contains the command post and such other support functions as are deemed necessary to control the incident. This zone is also referred to as the clean zone or support zone.
- B. **Confinement**: Those procedures taken to keep a material in a defined or local area once released.
- C. **Containment**: The actions taken to keep a material in its container (e.g., stop the release of the material or reduce the amount being released.)
- D. **Contaminant**: A hazardous material that physically remains on or in people, animals, the environment, or equipment, thereby creating a continuing risk of direct injury or a risk of exposure outside of the hot zone.

- E. Decontamination: The physical or chemical process of reducing and preventing the spread of contamination from persons and equipment used at a hazardous materials incident.
- F. Exposure: The process by which people, animals, the environment, and equipment are subjected to or come in contact with a hazardous material.
- G. Hazardous material: A substance that when released is capable of creating harm to people, the environment, animals, and property.
- H. Hot zone: The area immediately surrounding a hazardous materials incident. It extends far enough to where adverse effects from hazardous materials release will not be expected. It is also referred to as the exclusion zone or the restricted zone.
- I. Penetration: The movement of a material through a suit's closures-such as zippers, buttonholes, seams, flaps, or other design features of chemical protective clothing-and through punctures, cuts, and tears.
- J. Stabilization: The point in an incident at which the adverse behavior of the hazardous material is controlled.
- K. Warm zone: The control zone at a hazardous materials incident where personnel and equipment decontamination and hot zone support takes place. It includes control points for the access corridor, helping to reduce the spread of contamination. This zone is also referred to as the decontamination, contamination reduction, or limited access zone.

III. General

- A. The first-arriving officer at an incident involving hazardous materials shall report the following information to Dispatch:
 - 1. The exact location of the incident.
 - 2. The type and quantity of the materials involved, if known.
 - 3. The extent of damage and the number and types of injuries.
 - 4. The name of the carrier if a vehicle is involved.
 - 5. Any other pertinent information such as the hazardous material entering the storm drain or sanitary sewer system.
- B. The first-arriving officer shall also request any additional resources that may be needed, establish command, and begin securing the incident scene to prevent additional injuries or contamination.
- C. The area shall be evacuated if necessary. This function should be turned over to the police once sufficient law enforcement resources arrive on the scene.
- D. Dispatch shall provide the incident commander with the temperature, wind speed and direction, and humidity as soon as it is possible to do so.

IV Tactical Objectives

- A. The incident commander shall assess the situation and identify the products involved prior to committing personnel.
- B. If entry must be made into the hot zone to rescue someone or to contain a release, the appropriate level of protective clothing shall be worn by the personnel who enter.
- C. If personnel are committed to the hot zone, decontamination and rehab groups shall be established, as well as a warm zone and a cold zone.
- D. Decontamination of victims shall also occur prior to their being transported to a medical facility.
- E. Additional resources shall be requested in accordance with the district's Emergency Operations Plan. This includes the dispatch of additional resources or a private vendor if the incident exceeds the department's capabilities.
- F. The incident commander's objectives will be containment and stabilization. Final extinguishment and cleanup of incidents that exceed the capabilities of the

department will be the responsibility of the private vendor who responds to the incident.

- G. In more complicated incidents, it may be necessary to activate the Emergency Operations Plan.

	City of Staunton Fire & Rescue Department Standard Operating Guidelines	
	Hazardous Materials	
	Subject: Contamination and Cleanup	Section 300
	Approved: Assistant Chief	SOG# 301.02
	Approved: Jason C. Ball Deputy Chief	Initiated 01 APR 03
500 North Augusta Street Staunton, Virginia 24401	Approved: R. Scott Garber Fire Chief	Revised 01 JAN 15

I. Scope

This standard establishes guidelines for managing the containment and cleanup of a hazardous materials incident.

II. General

A. Containment methods may include but shall not be limited to:

1. Barriers in soil.
2. Berms and drains.
3. Booms.
4. Dikes.
5. Diverting streams.
6. Over-packed drums or other forms of containerization.
7. Patching and plugging of containers or vessels.
8. Portable catch basins.
9. Reorienting the container.
10. Trenches.

B. Displacement techniques may include but shall not be limited to:

1. Dispersion/dilution.
2. Excavating.
3. Hydraulic and mechanical dredging.
4. Skimming.
5. Vacuuming.

III. Responsibilities

A. The incident commander, in coordination with the appropriate state or federal official, is responsible for selecting and implementing the appropriate countermeasures to bring a hazardous materials incident to a safe and successful conclusion. This includes:

1. Ensuring that temporary storage sites, if necessary, are safe and secure.
2. Ensuring that final disposal is handled at an approved site.

- B. Notification of Virginia Department of Emergency Management and Virginia Environmental Protection Agency should occur during any major release of a hazardous material. Discretion of this notification is the responsibility of the Incident Commander.
- C. The persons responsible for the hazardous material are responsible for paying the full costs for cleanup and disposal operations.

	City of Staunton Fire & Rescue Department Standard Operating Guidelines	
	Hazardous Materials	
	Subject: Decontamination Procedures	Section 300
	Approved: Assistant Chief	SOG# 301.03
	Approved: Jason C. Ball Deputy Chief	Initiated 01 APR 03
500 North Augusta Street Staunton, Virginia 24401	Approved: R. Scott Garber Fire Chief	Revised 01 JAN 15

I. Scope

This standard establishes a procedure for the decontamination of people, equipment, and apparatus that become contaminated as a result of an exposure to a hazardous material. It was promulgated to:

- A. Prevent the spread of contaminants beyond the hazard zone at an incident involving a hazardous material.
- B. Reduce the possibility of death or injury due to exposure to a hazardous material.
- C. Establish a procedure to decontaminate equipment and apparatus exposed to a hazardous material so that the equipment and apparatus might promptly be returned to service.

II. General

- A. Contamination is the transfer of a hazardous material to persons, equipment, and the environment due to an exposure or contact with a hazardous material. The magnitude of the exposure depends on the duration of the exposure and the concentration of the hazardous material.
- B. Decontamination (decon) is the process of removing contaminants from people and equipment. Decon should occur in the warm zone so as to minimize the possibility of secondary contamination.
- C. There are four basic methods of decontamination available to response personnel:
 1. Dilution: The use of water to flush the contaminant from the victim or piece of equipment. Be sure to impound or collect the contaminated water from this process.
 2. Absorption: The use of an absorbent for picking up a liquid contaminant. This works well on a spill.
 3. Chemical degradation: The use of another material (e.g., household bleach or baking soda) to change the chemical structure of the hazardous material so as to neutralize the material.

4. Isolation and disposal: The isolation of a hazardous material by collecting it and then disposing of it in accordance with state and federal regulations. While this may be a more costly alternative, it is often the easiest technique to employ.

III. Procedure

- A. If contamination has occurred at a hazardous materials incident, the incident commander shall appoint a decon officer. The decon officer shall establish a decontamination group in the warm zone. The site of the decon group should be selected on the basis of
 1. Accessibility and location. (Special note: Due consideration must be given to the privacy of potential victims and rescue workers.)
 2. Surface material.
 3. Lighting.
 4. Drains and waterways.
 5. Water supply.
 6. Weather.
- B. All personnel, victims, and equipment must be decontaminated prior to being allowed entry into the cold zone. The specific decontamination measures employed in the decon group will depend on the circumstances surrounding the incident and the level of contamination.
- C. Members assigned to the decon group will instruct contaminated members to follow the following procedure:
 1. Gross decontamination: A decontamination worker will remove the majority of the contamination from the victim and their tools by hosing down the victim or by providing a portable shower. A catch basin shall be used to confine the water used in this process.
 2. Tools and equipment: Any tools and equipment used by the victim should then be discarded at a designated location for further decontamination, if necessary.
 3. Scrub-down: The victim should then step into the rinse area, where a decontamination worker will scrub them with detergent and water. The water shall be kept for analysis prior to being released.
 4. Final step: After being washed down, the victim should then proceed to the final area, where articles of clothing and other equipment will be removed. These items shall be left in the decontamination area for further treatment or disposal.
- D. If a contaminated victim must be transported prior to being properly decontaminated, Medical Control and the destination emergency room shall be notified.
- E. If an ambulance becomes contaminated, the ambulance will be quarantined until the unit can be properly decontaminated.
- F. Members who are exposed to a hazardous material shall complete a Hazardous Materials Exposure Form and place a copy of it in their medical file.

	City of Staunton Fire & Rescue Department Standard Operating Guidelines	
	Hazardous Materials	
	Subject: Personnel Safety	Section 300
	Approved: Assistant Chief	SOG# 301.04
	Approved: Jason C. Ball Deputy Chief	Initiated 01 APR 03
500 North Augusta Street Staunton, Virginia 24401	Approved: R. Scott Garber Fire Chief	Revised 01 JAN 15

I. Scope

This standard establishes guidelines for members to follow when engaged in an incident involving a hazardous material. It was promulgated so as to minimize the risk of death and injury during Haz-mat incidents.

II. General

- A. The most important action to be taken at a hazardous materials incident is to recognize that a hazardous material is present. If the potential exists, assume the worst until it can be confirmed that no danger exists.
- B. The area must be secured and no one must be allowed to enter the area until the incident commander determines that it is safe to do so.
- C. Appropriate help should be summoned and the material or materials present should be identified.
- D. Once the problem has been identified, the incident commander should formulate an action plan to resolve the incident. Tactical surveys will be useful in this process. The action plan should focus on three goals:
 1. Life safety.
 2. Environmental protection.
 3. Property conservation.
- E. The incident commander should appoint a safety officer early in this process. The safety officer must remain in constant contact with the IC and should immediately correct any unsafe conditions or practices.

III. Operations

- A. There are three recognized levels of response:
 1. Level I: The least serious and within the capabilities of the department. Evacuation, if required, will be limited to the immediate area. Example: a gasoline or diesel spill.
 2. Level II: Beyond the capabilities of the department, a Level II incident requires the service of a formal Haz-Mat Response Team. Examples: the rupture of a pipeline or a fire with the threat of a BLEVE.
 3. Level III: The most serious type, requiring special resources from public and private agencies. It will require a large-scale evacuation and implementation of the jurisdiction's Emergency Operations Plan. Example: an incident that extends across jurisdictional boundaries.
- B. Operations will either be defensive or offensive.

1. Defensive operations focus on confinement without directly contacting the hazardous materials creating the problem.
 2. Offensive operations focus on aggressive actions on the material, container, or process, and they may result in contact with the materials. Offensive operations will not be conducted unless the incident commander can determine that the risk is worth the benefit.
- C. Personnel will not be allowed to enter the warm zone or the hot zone without the proper level of training and personal protection.
- D. Personnel will not be permitted to leave the warm zone or the hot zone without undergoing proper decontamination.
- E. The safety officer will appoint a medical surveillance team. The team will be responsible for monitoring members for indicators of toxic exposure effects, including:
1. Change in complexion, skin discoloration.
 2. Lack of coordination.
 3. Changes of demeanor.
 4. Excessive salivation, papillary response.
 5. Changes in speech pattern.
 6. Headaches.
 7. Dizziness.
 8. Blurred vision.
 9. Cramps.
 10. Irritation of eyes, skin, or respiratory tract.
- F. Any member exposed to a hazardous material shall complete a Hazardous Materials Exposure Form. A copy of the form shall be placed in the member's medical file.
- G. The incident commander shall also appoint a rehab officer. The rehab officer shall establish a rehab group. Members shall be rotated through the rehab group in accordance with the department's SOGS.

 500 North Augusta Street Staunton, Virginia 24401	City of Staunton Fire & Rescue Department Standard Operating Guidelines	
	Hazardous Materials	
	Subject: Contaminated Protective Clothing	Section 300
	Approved: Assistant Chief	SOG# 301.05
	Approved: Jason C. Ball Deputy Chief	Initiated 01 APR 03
	Approved: R. Scott Garber Fire Chief	Revised 01 JAN 15

I. Scope

This standard establishes guidelines to be followed when uniforms, protective clothing, or items of personal protective equipment are contaminated by a hazardous material.

II. Procedure

- A. Personnel who enter the warm zone or the hot zone at a hazardous materials incident run the risk of becoming contaminated by the materials involved.
- B. Members must pass through the decontamination group prior to being allowed to enter the cold zone.

1. At the entrance to the decon group, the member should discard any hand tools and equipment at the edge of the corridor so that they can be decontaminated.
 2. After the member has been rinsed off and decontaminated as much as possible, they shall proceed to the final area where a decontamination worker will assist them in removing their protective clothing.
 3. All articles of contaminated protective clothing shall be placed in a bag, then sealed and tagged. The tag should list the contaminant, the contents of the bag, the member's name, and the time and date.
 4. If a member's personal clothing or work uniform has been contaminated, the member should proceed to a showering station. After showering, they should dry off their body and change into clean clothes. Ensure that the member is afforded all due privacy.
 5. Contaminated uniforms and articles of personal clothing should be bagged, then sealed and tagged. Towels and other items used to dry off should also be placed in a bag for decontamination or disposal.
- C. The decon officer shall make a determination if contaminated items are salvageable. Items that cannot be properly decontaminated shall be disposed of in accordance with state and federal regulations.
- D. Items that may be decontaminated shall be returned to the member after being properly decontaminated.

APPENDIX I

FIRE DEPARTMENT ANNUAL TRAINING PLAN

Fire Department Training is in accordance with ISO:

- Fire Department personnel receive a minimum 6 hours per year of Hazardous Materials Training
- Hazardous Materials Technicians require an additional 24 hours per year of Hazardous Materials Training
- Hazardous Materials Specialists require an additional 48 hours per year of Hazardous Materials Training and must meet Hazardous Material Technician requirements

DRAFT

APPENDIX J

STAUNTON'S SOLUTION FOR STORMWATER POLLUTION, ISSUE NUMBER I

DRAFT

Be the Solution for Staunton's Stormwater Pollution

Yards

- Don't sweep grass clippings or leaves into storm drains
- Use pesticides sparingly
- Don't overuse and be aware of when applying fertilizer

Vehicles

- Properly clean oil spills
- Do not dispose of fluids (oils, antifreeze, soap, etc.) into storm drains

Home or Business

- Dispose of grease in appropriate receptacles
- Collect litter and debris from sidewalks and parking lots & dispose of properly
- Plant trees, shrubs, and plants at your site to help reduce contaminants

Pets

- Put your pet's waste in a plastic bag and dispose of it properly

Remember - Only Rain Down the Storm Drain



Reminder to clean up after your pet in Gypsy Hill Park

Staunton's Solutions for Stormwater Pollution

This brochure is the first of an annual publication to inspire the citizens of Staunton to be more proactive to help prevent the stormwater runoff pollution of our local streams and watersheds.

To report stormwater pollution or if you have a question concerning stormwater, please call the City's Stormwater Hot-line at **540-213-6517** or send an email to StauntonStormwater@ci.staunton.va.us

For more information on the City's ongoing efforts to reduce stormwater pollution, please find us on Facebook at: facebook.com/stauntonstormwater

GET INVOLVED!

There are many opportunities in Staunton offering public participation:

- Adopt-a-Street Program
- Adopt-a-Stream Program
- Regional Household Hazardous Waste Day
- Attend a monthly meeting of the Lewis Creek Watershed Advisory Committee

Call 540-332-3858 for details

Department of Engineering
116 West Beverley Street
3rd Floor

Staunton, VA 24401

Phone: (540) 332-3858

www.stauntonva.us

StauntonStormwater@ci.staunton.va.us



"City of Staunton – Stormwater Education"

Issue Number 1

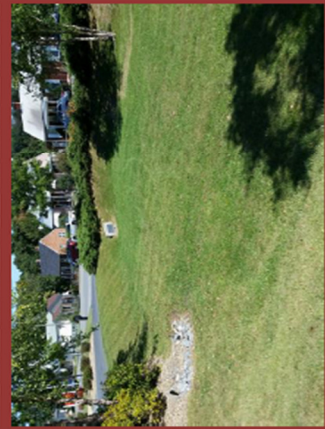


January 2016

About Staunton

- Population: 24,647
- Size: 20 square miles
- Average Rainfall: 38.5 inches per year
- 3.5 square miles of Impervious Surfaces
- 50 miles of storm sewer pipe
- 2,300 storm sewer structures
- Over 200 Stormwater Management Facilities (rain gardens, retention ponds, permeable pavers, etc.)

Permeable pavers in Staunton's RMA downtown parking lot



Dry detention pond at Westside Fire Station

What is Stormwater Pollution?

Like most Virginia cities, Staunton faces an ever growing issue of controlling stormwater runoff. Stormwater runoff is precipitation that is unable to be absorbed into the ground as a result of impervious surfaces, such as buildings, roads, sidewalks, driveways, and parking lots. As the stormwater runoff travels over these impervious surfaces, it picks up contaminants and debris. This polluted stormwater flows into the city's storm sewer system and eventually into our local waterways. Pollutant loaded stormwater runoff can occur very rapidly and impair local streams and tributaries.



Storm drain in downtown Staunton

Staunton's MS4 Program

Based on the 2010 Decennial Census, Staunton was identified as being located within a "regional urbanized area." Because of this, in 2013 the Department of Environmental Quality (DEQ), designated Staunton as a Municipal Separate Storm Sewer System (MS4) Community. As such, the city is mandated to obtain a permit from the DEQ and to develop, implement, and enforce a program to minimize the discharge of pollutants into the surface waters of the Commonwealth, particularly the Chesapeake Bay. Staunton obtained a MS4 permit in May 2014.

MS4 communities are required to include the following six minimum control measures, also called Best Management Practices (BMPs).

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Runoff Control
- Pollution Prevention and Good Housekeeping

Another integral component of the MS4 permit is the Chesapeake Bay TMDL (Total Maximum Daily Load) or "pollution diet", established by the EPA. This TMDL mandate sets specific pollutant reductions in phosphorus, nitrogen, and sediments that MS4s must meet by 2028. Staunton is required to develop a Chesapeake Bay Action Plan that demonstrates how the City will meet these mandated reductions.

For more information on Staunton's MS4 Program, visit the City Engineering Department's website at www.staunton.va.us/directory/departments-a-g/city-engineer/ms4-program

APPENDIX K

ADOPT-A-STREAM PROGRAM

ADOPT-A-STREAM PROGRAM APPLICATION

In order to enhance the environment and the appearance of our City, the undersigned applicant, requests permission to Adopt-A-Stream at the following location:

In consideration of being allowed to be part of the Adopt-A-Stream program and to be present on or near any public lands or rights of way, any accepted applicant will perform any related activity in accordance with the City of Staunton's terms attached hereto and incorporated herein by reference and any applicable law. The applicant also hereby agrees to indemnify and save harmless the City of Staunton, its officials, employees or agents, from responsibility, damage or liability or any claim arising from the applicant's exercise of the activities and privileges granted under this agreement.

This agreement may be terminated by the City of Staunton at any time the applicant does not comply with this agreement or at any time the applicant's work effort is discovered to be unsatisfactory. The City reserves the right to revise or discontinue the Adopt-a-Stream program at any time. The applicant likewise may terminate this agreement at any time.

The applicant hereby assumes all risk of damage or injury resulting from the activities performed hereunder, and acknowledges that certain risks are inherent in litter pick up and removal, especially in areas where navigation may be difficult, such as along stream banks, or in areas that may be open to the public or where vehicular traffic is present, such as on or near the public right of way.

It is agreed that the applicant is not an agent, employee or volunteer of the City of Staunton while participating in this Adopt-a-Stream program. As such, the City will not provide any worker's compensation insurance, general liability or automobile insurance or uninsured/underinsured insurance motorist coverage, or any other insurance for the acts or omissions of the applicant while engaged in any activities arising out of or related to this Adopt-A-Stream agreement or activity. It is further agreed that the City will not defend, hold harmless, or indemnify the applicant for any claims of loss, injury, death, or damage arising out of or related to this Adopt-A-Stream agreement.

APPLICANT: _____

PRIMARY CONTACT NAME/TITLE: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

EMAIL ADDRESS: _____

As a designated representative of, _____,
I have read, understand, and shall comply with the Adopt-a-Stream program conditions and safety tips
regarding participation in the program.

SIGNATURE: _____

The undersigned is the official City representative who has the legal authority to give permission for the
property location named in the aforesaid agreement to be involved in and designated in the Adopt-A-
Stream program as administered by the City of Staunton.

Permission is hereby given to perform the work described, insofar as the City of
Staunton has the right, power, and authority under the terms of this agreement.

CITY OFFICIAL: _____

TITLE: _____

DATE: _____

ADOPT-A-STREAM PROGRAM CONDITIONS

The Adopt-a-Stream program provides an opportunity for citizens and civic groups to get involved in
their community. The program is designed to encourage citizen participation in beautification and litter
cleanup of designated stream reaches in their community. Individuals, organizations or businesses may
participate in the program. Participation involves agreeing to clear a designated stream reach of litter and
other debris on a regular interval.

In exchange, a sign bearing the name of the organization will be installed at the designated cleanup area.
The City will bear the cost of producing, installing and maintaining the sign. The City will also provide
program participants materials to help with the cleanup.

Selected City maintained streams are eligible for adoption. Eligible sections will be determined by the
City. Those stream sections determined unsafe will not be eligible for adoption. Selected privately
owned streams may also be eligible for adoption providing the property owner gives written consent
allowing access to their property and is one of the signatories of the Adopt-a-Stream agreement.

- The Adopt-a-Stream agreement must be approved by the City of Staunton. The agreement shall
be submitted to the City MS4 Coordinator. The agreement will be forwarded on to the

appropriate City agency for review and approval. If there are any unresolved concerns with regard to safety or any questions concerning safety, the proposed adoption will not be approved.

- Local community organizations, such as civic, social or school groups, businesses or individuals 18 years or older are allowed to adopt a stream. The City of Staunton reserves the right to deny adoption requests for any reason whatsoever.
- All participants must sign the Liability Release Form.
- Participants are required to adopt for a minimum of two (2) years, with a minimum of two (2) cleanups per year. After two years, the adopting organization may renew their designation and agreement, modify their designation (choose a different stream) or terminate the agreement.
- Group members less than fifteen (15) years of age must be supervised by an adult at least eighteen (18) years of age. There shall be at least one adult eighteen (18) years of age or older for every six (6) group members less than fifteen (15) years of age.
- Participants should hold at least two (2) meetings a year to review safety and other guidelines.
- The City of Staunton will supply participants with plastic trash bags, safety vests and appropriate traffic control signs. The group's representative should contact the City's MS4 Coordinator at 540-332-3858 before a planned cleanup to arrange for pickup of materials and to coordinate dates and times. The representative shall ensure all items are returned to the City. Traffic control signs shall be displayed only during times when cleanup is actually taking place.
- If participants cannot dispose of the collected trash and debris, the Department of Public Works will assist in disposing of the trash.
- Within two weeks of each cleanup, participants shall file a report to the City's MS4 Coordinator detailing the following information:
 - a) copies of all sign in sheets
 - b) copies of signed liability release forms
 - c) date of cleanup
 - d) time of cleanup
 - e) number of participants involved
 - f) number of bags of trash collected
 - g) total pounds of trash collected (if available)
 - h) hours spent on cleanup
- Participants are urged to separate and recycle appropriate materials.
- A sign noting the Adopt-A-Street program and the participant's name will be provided for installation at the cleanup area. The City will bear the cost of producing, installing and

maintaining the sign. Businesses that wish to sponsor groups may do so. However, only the business name may go on the sign in block letters. No business slogans or logos are allowed.

- Participants are encouraged to schedule their two (2) cleanups in April and October to coincide with the national and statewide litter control clean ups or with Earth Day (April) and America Recycles Day (November).
- Prior to participating in a cleanup, participants are encouraged to read *Adopt-A-Stream Manual* published by the Department of Conservation and Recreation. The manual can be found at <http://www.dcr.virginia.gov/environmental-education/adopt#forms>
- The City of Staunton reserves the right to revise these terms as needed.

ADOPT-A-STREAM PROGRAM CLEANUP MATERIALS

The following equipment items have been loaned to:

in support of cleaning up

_____ Safety vests

_____ Grab sticks

_____ Trash bags

_____ Signs

Date of cleanup: _____

Date items will be returned on: _____

Organizational Representative

City Representative

Printed Name: _____

Printed Name: _____

Signature: _____

Signature: _____

Date: _____

Date: _____

ADOPT-A-STREAM PRECAUTIONS AND SAFETY TIPS

Urban streams often have some water quality impairment by the very nature of the lands that drain into them. This is the case with many of the streams and waterways in the City of Staunton, some of which have been identified by the Virginia Department of Environmental Quality as being impaired due to excessive levels of sediment and bacteria. A stream being impaired does not mean necessarily that the stream is dangerous to be in or around. What it does mean is that it is always advisable to follow some practical guidelines when interacting with an urban stream:

- Never conduct a stream cleanup or go into a stream during, or immediately following, a rainfall event. Stormwater runoff during storm events carry pollutants from impervious surfaces such as roof tops, streets, parking lots, etc., into local waterways, thereby increasing the levels of pollutants at these times.
- Always wear shoes and gloves to protect your feet and hands.
- Always wash your hands or use hand sanitizer immediately after being in contact with the stream.
- Do not ingest any of the stream water or sediment.

It is also advisable to abide by the following DOs and DON'Ts to help avoid injury:

DOs:

- Always wear an orange/yellow reflective safety vest so you can be easily seen and be identified as being part of the cleanup team.
- Always wear protective clothing that is easy to see; shoes (preferably waterproof boots), and work gloves. Sandals or open toed shoes should never be worn.
- Always work in daylight hours only and in good weather.
- Always be aware of your surroundings and passing motorists.
- Always work in groups of at least two people, never work alone.

DON'Ts

- Never horse around or do anything dangerous or distracting to yourself or others.
- Never participate in a cleanup under the influence of alcohol or drugs or while taking certain medications.
- Never overexert yourself.
- Never pick up hazardous materials - call the City Fire Department (911) to arrange for proper handling and disposal.

CITY OF STAUNTON ADOPT-A-STREAM PROGRAM
LIABILITY RELEASE FORM

As an Adopt-a-Stream program volunteer, I understand and shall comply with the City of Staunton Adopt-a-Stream program guidelines Conditions and Safety Tips. I will exercise care and safety while participating in any program events. I will seek further direction or explanation of anything not fully understood by me.

As an Adopt-a-Stream Program volunteer, I will at all times indemnify and save harmless the City of Staunton, City of Staunton employees, agents and officers from responsibility, damage, or liability arising from the exercise of the privileges granted under the Adopt-a-Stream program.

By voluntarily engaging in a stream cleanup activity, I personally assume all risks for any harm, injury, or damage during my participation.

Signature _____

Name (print) _____

Date _____

CITY OF STAUNTON ADOPT-A-STREAM PROGRAM
CLEANUP SIGN-IN SHEET

Page _____ of _____

Adopting Organization _____

Name of Waterway _____

Date of cleanup _____

Name	Street Address	City	State	Zip	Phone #	Email	Over 18?

APPENDIX L

ILLICIT DISCHARGE DETECTION & ELIMINATION PROGRAM

ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) PROGRAM

Per the City of Staunton's General Permit VAR040132 for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s), the City is required to effectively prohibit, through ordinance or other legal mechanism, non-stormwater discharges into the City's storm sewer system and local waterways. Accordingly, the City has developed an Illicit Discharge Detection and Elimination (IDDE) Program to detect, identify and address unauthorized non-stormwater discharges, including illegal dumping.

Per the General Permit, the City's IDDE Program must include the following elements:

Element #1 - The development of a prioritized dry weather screening schedule based on such criteria as age of infrastructure, land use, historical illegal discharges, dumping, cross connections, etc.;

The City will begin the program by dry weather screening all known outfalls. Once all known outfalls have been screened, the City will develop a prioritized screening schedule based on such criteria as age of infrastructure, land use, historical illegal discharges, dumping, cross connections, etc.

Element #2 - Dry weather screening of a minimum fifty (50) field screenings per year;

The City will screen a minimum of fifty (50) MS4 outfalls each year. For dry weather screening procedures, see the City of Staunton Dry Weather Field Screening of Outfalls Procedures.

Element #3 - Methodologies to collect general information such as last rain, quantity of rain, site descriptions, visual observations, estimated discharge rate, etc.;

For all illicit discharge investigations and outfall screenings, the following methods shall be utilized to collect the following general information:

- Date and quantity of the last rainfall event:
 - The official City weather observations located at watertreat\$ (cossrv24)monthyearwth
- Use the City Dry Weather Field Screening Outfall Inspection Form to collect the following data:
 - Site descriptions (conveyance type and dominant watershed land uses);
 - Estimated discharge rate (width of water surface, approximate depth of water, approximate flow velocity, and flow rate); and
 - Visual observations (odor, color, clarity, floatables, deposits or stains, vegetation condition, structural condition and biology).

- A blank screening form can be found at stormwater\$ (\\cossrv24) \\MS4\\IDDE\\IDDE Program\\Dry Weather Field Screening

Element #4 - Define time frame to conduct investigations based on priorities;

Per the General Permit, a time frame upon which to conduct an investigation or investigations to identify and locate the source of any observed continuous or intermittent non-stormwater discharge shall be prioritized as follows:

- Illicit discharges suspected of being sanitary sewage or significantly contaminated must be investigated first;
- Investigations of illicit discharges suspected of being less hazardous to human health and safety such as noncontact cooling water or wash water may be delayed until after all suspected sanitary or significantly contaminated discharges have been investigated, eliminated, or identified;
- Discharges authorized under a separate VPDES or state permit require no further action under the MS4 General Permit.

Element #5 - Methodologies to determine the source of an illicit discharge;

All potential illicit discharges shall be investigated. For investigation procedures, see City of Staunton Illicit Discharge Investigation Procedures.

A dedicated stormwater hotline has been created for the reporting of potential illicit discharges and other types of pollution.

- The hotline phone number is (540) 213-6517
- The email address is StauntonStormwater@ci.staunton.va.us
- For calls or emails to the City stormwater hotline, see City of Staunton Stormwater Hotline Procedures.
- The City will utilize our stormwater webpage and Facebook page to promote the public reporting of illicit discharges.

Element #6 - Mechanisms to eliminate identified sources of illicit discharges, including procedures for legal action;

The City Council for the City of Staunton, on May 26, 2016, adopted an Illicit Discharge ordinance defining an illicit discharge and giving the City the enforcement powers to eliminate an illicit discharge. For the Illicit Discharge ordinance, see SCC Title 13, Division IV, Illicit Discharges and Connections.

Element #7 - Methods for follow-up investigations;

Illicit discharge investigations shall include follow-up investigations to verify that the illicit discharge has been eliminated. For follow-up investigation procedures, see City of Staunton Illicit Discharge Investigation Procedures.

Element #8 - Mechanisms to track all illicit discharge investigations;

Illicit discharge investigations shall include tracking and recordkeeping procedures. For these procedures, see the City of Staunton Illicit Discharge Investigation Procedures.

Illicit Discharge Investigation Procedures

Per the City of Staunton Illicit Discharge Detection & Elimination (IDDE) Program, the following procedures shall be utilized in the investigation of all illicit discharges:

- (1) An initial report of a potential illicit discharge is received by City staff. Report may be received by any of the following methods:
 - a. in person;
 - b. telephone;
 - c. email;
 - d. stormwater hotline (phone call or email); or
 - e. routine dry weather field screening of outfalls.
- (2) The initial report information shall be routed to the IDDE Administrator.
- (3) IDDE administrator shall enter the initial information into the City IDDE Database.
- (4) The administrator or designee, if warranted, shall perform a site visit to investigate for a potential illicit discharge.
- (5) If a potential, suspect or obvious illicit discharge is discovered, the administrator shall open an illicit discharge investigation. For each investigation, the administrator shall input all pertinent information into the City IDDE Database. The administrator is responsible for all recordkeeping during and after the investigation.
- (6) All pertinent information concerning illicit discharge investigations shall be filed in folders located at stormwater\$ (\\cossrv24) (V:)\\MS4\\IDDE\\IDDE Program\\IDDE Database - where associated documentation will be filed based on fiscal year.
- (7) The administrator or designee shall complete, if applicable, a City Dry Weather Field Screening Outfall Inspection Form. A blank screening form can be found at stormwater\$ (\\cossrv24) (V:)\\MS4\\IDDE\\IDDE Program\\Dry Weather Field Screening
- (8) If required, the administrator shall request the assistance of other city departments in the investigation. For example, the public works department can provide, as necessary, videoing of utility lines, utility line flushing, utility line discovery, dye testing and smoke testing.

- (9) Unknown substances discovered during an inspection may be tested with the following:
- a. The equipment in the IDDE Backpack;
 - b. Fire Department substance identification kit;
 - c. The incubator located at the City water treatment plant;
 - d. Through a third party consultant; and/or
 - e. The Central Shenandoah Planning District Commission's IDDE Kit (call 540-885-5174).
- Testing procedures should be consistent with: *Illicit Discharge Detection and Elimination Field Guide: How to Identify and Quickly Report Pollution Problems for Shenandoah Valley MS4 Communities*.
- (10) Investigators may use, as guides, the following Center for Watershed Protection's publications found at: http://cwp.org/online-watershed-library/cat_view/64-manuals-and-plans/79-illicit-discharge-detection-and-elimination:
- a. *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*
 - b. *Illicit Discharge Detection and Elimination: Technical Appendices*
 - c. *Illicit Discharge Detection and Tracking Guide*
 - d. *Illicit Discharge Detection and Elimination Field Guide: How to Identify and Quickly Report Pollution Problems for Shenandoah Valley MS4 Communities*
- (11) As the investigation progresses, the administrator shall update the IDDE Database and other investigation files with all documentation, photos, letters, emails, telephone conversation logs, etc. associated with the illicit discharge event.
- (12) The time frame upon which to conduct an investigation or investigations to identify and locate the source of any observed continuous or intermittent non-stormwater discharge shall be prioritized as stated in the City Illicit Discharge Detection and Elimination (IDDE) Program.
- (13) If an illicit discharge is found, but within six months of the beginning of the investigation neither the source, nor the same non-stormwater discharge has been identified, then this shall be documented by the administrator in the IDDE Database and the investigation closed.
- (14) If the observed discharge is intermittent, the administrator must document that a minimum of three separate investigations were made in attempt to observe the discharge when it was flowing. If these attempts are unsuccessful, this shall be documented by the administrator in the IDDE Database and the investigation closed.
- (15) If an illicit discharge is found, the IDDE administrator will coordinate, as necessary, a clean-up of the discharge. This may involve other City departments.
- (16) If the source of the illicit discharge is discovered, the administrator shall contact the property owner or responsible party and require that mitigation procedures, a Pollution Prevention Plan, be

created and implemented as soon as possible. Any procedures developed will be filed with the City's IDDE Database to ensure corrective actions. The timeframe for follow-up investigations and corrective actions are determined by the administrator on a case-by-case basis.

(17) Enforcement escalation against violators is outlined as follows:

- a. Warning letter – A warning letter is issued for a first offense illicit discharge with typically a two-week follow-up investigation by the City.
- b. Pollution Prevention Plan (PPP) – A Pollution Prevention Plan is required from the property owner or responsible party of a larger discharge incident during a first offense. The PPP will include the corrective actions to be taken to address the discharge specifically and the mitigation measures to be implemented to prevent further discharges.
- c. Notice of Violation – A Notice of Violation is issued after a second offense, if corrective actions have not been taken prior to the two-week follow-up investigation, or if a PPP required by the City has not been developed.
- d. Civil Penalties – Civil penalties are assessed per SCC Title 13, Division IV, Illicit Discharges and Connections.

(18) If an illicit discharge is detected, the administrator will utilize the enforcement actions as stated in the City of Staunton City Code Title 13, Division IV, Illicit Discharge and Connections to eliminate the illicit discharge. Once the illicit discharge has been terminated, the resolution shall be documented by the administrator in the IDDE Database and the investigation closed.

(19) Enforcement actions shall include follow-up investigations in order to verify that the illicit discharge has been eliminated.

(20) When an illicit discharge investigation is resolved, the investigation is closed by the administrator and the IDDE Database updated. The location of the illicit discharge is added to the City storm sewer system mapping.

(21) If an illicit discharge is traced to jurisdictional boundaries, the following individuals shall be notified of the investigation:

- a. Morgan Shrewsbury, County of Augusta, MS4 Coordinator
540-245-5700 or mshrewsbury@co.augusta.va.us
- b. Morris Walton with Louis Berger, VDOT IDDE Contact
804-317-8720 or mwalton@louisberger.com or IDDEReports@vdot.virginia.gov

(22) The IDDE Database will be included with the MS4 Annual Reports. The reported information shall include the following:

- a. The date that the suspected discharge was observed, reported, or both;
- b. How the investigation was resolved, including any follow-up investigations; and
- c. Resolution of the investigation and the date the investigation was closed.

- (23) The City public works department has its own processes and procedures for managing sanitary sewer overflows and for the reporting of the information to DEQ. In the event that there is a sewer overflow that enters the City's storm sewer system or local waters, the public works department will inform the IDDE administrator. The administrator will determine what steps, if any, should be followed. The public works department will provide copies of Sanitary Sewer Overflow (SOS) reports to the IDDE administrator.
- (24) The City fire department has its own processes and procedures for managing hazardous chemicals/materials and for the reporting of the information to DEQ. In the event that there is a discharge that enters the City's storm sewer system or local waters, the fire department will inform the IDDE administrator. The administrator will determine what steps, if any, should be followed.
- (25) The City police department notifies the City fire department of any hazardous chemicals/materials spills/overflows, which is handled accordingly per Fire Department procedures. The police department will notify the IDDE administrator of any suspected illicit discharges. The administrator will determine what steps, if any, should be followed.
- (26) Required materials for an illicit discharge investigation:
- a. Waders (if applicable)
 - b. Camera/Smartphone/Tablet
 - c. Safety Vest
 - d. Manhole Hook & Large hammer
 - e. Outfall Maps
 - f. Current Dry Weather Field Screening Inspection Form (if available)
 - g. IDDE Backpack
 - i. First Aid Kit
 - ii. Nitrile/latex Gloves
 - iii. Flashlight
 - iv. Clipboard/Notepad
 - v. Pencils/Pens/Permanent Marker/Highlighter
 - vi. Measuring Tape
 - vii. Hand Sanitizing Gel
 - viii. Duct Tape
 - ix. Water Collection Bottles
 - x. Water Collection Bags
 - xi. Chlorine detection kit
 - xii. Dye Tablets
 - xiii. Plumber's Putty
 - xiv. Measuring Bottle/Jug
 - xv. Stopwatch

Dry Weather Field Screening of Outfalls Procedures

Per the City of Staunton Illicit Discharge Detection & Elimination (IDDE) Program, the following procedures shall be utilized in all dry weather field screenings of outfalls:

- (1) A minimum of fifty (50) MS4 outfalls shall be dry weather field screened annually.
- (2) Dry weather field screening of outfalls shall only be performed after at least forty-eight (48) hours has passed since the last storm event.
- (3) The IDDE administrator or designee will conduct all dry weather field screenings of outfalls.
- (4) For each screening, the administrator or designee shall complete a City Dry Weather Field Screening Outfall Inspection Form. A blank screening form can be found at stormwater\$ (\\cossrv24) (V:)\\MS4\\IDDE\\IDDE Program\\Dry Weather Field Screening.
- (5) Investigators may use, as guides, the following Center for Watershed Protection's publications found at: http://cwp.org/online-watershed-library/cat_view/64-manuals-and-plans/79-illicit-discharge-detection-and-elimination:
 - a. *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*
 - b. *Illicit Discharge Detection and Elimination: Technical Appendices*
 - c. *Illicit Discharge Detection and Tracking Guide*
 - d. *Illicit Discharge Detection and Elimination Field Guide: How to Identify and Quickly Report Pollution Problems for Shenandoah Valley MS4 Communities*
- (6) During the inspection, if a potential, suspect or obvious illicit discharge is discovered, the inspector shall notify the IDDE administrator and the procedures stated in the City Illicit Discharge Investigations Procedures shall be followed.
- (7) The following minimum information shall be collected during each screening for each outfall and inputted into the City MS4 Outfall Database:
 - a. A unique identifier for the outfall;
 - 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.
 - e. The MS4 Outfall Database will be provided upon request by DEQ or the public.
- (8) If a new MS4 outfall is located, the outfall shall be given a unique identifier and the location of the outfall shall be added to the City storm sewer MS4 Outfall Map.

- (9) The number of MS4 outfalls screened will be reported to DEQ with the MS4 Annual Report. The report shall include the following:
- a. The total number of outfalls screened;
 - b. The screening results; and
 - c. Details of any follow-up actions necessitated by the screening results.
- (10) IDDE administrator shall be responsible for the recordkeeping of all documentation on dry weather field screenings of outfalls.
- (11) All dry weather field screening of outfalls information shall be filed in the City's Field Screening Database file located at stormwater\$ (\\cossrv24) (V:)\MS4\IDDE\IDDE Program\Dry Weather Field Screening - where associated documentation will be filed based on fiscal year. The City's MS4 Outfall Database can be found at stormwater\$ (\\cossrv24) (V:)\MS4\IDDE\IDDE Program\IDDE Database - where associated documentation will be filed based on fiscal year.
- (12) Required materials for dry weather field screening of outfalls:
- a. Waders
 - b. Camera/Smartphone
 - c. Safety Vest
 - d. Outfall Maps
 - e. Current Dry Weather Field Screening Inspection Form (if available)
 - f. Gloves
 - g. Flashlight
 - h. Clipboard/Notepad
 - i. Pencils/Pens/Highlighter
 - j. Measuring Tape

DRY WEATHER FIELD SCREENING OUTFALL INSPECTION FORM

Section 1: Background Data

Subwatershed: _____		Outfall ID: _____	
Today's date: _____		Time: _____	
Investigators: _____		Form completed by: _____	
Air Temperature (°F): _____	Rainfall (in.): Last 48 hours: _____ Last 72 hours: _____		
Latitude: _____	Longitude: _____	GPS Unit: _____	GPS LMK #: _____
Camera: _____		Photo #: _____	
Land Use in Drainage Area (Check all that apply): ☐ Industrial ☐ Ultra-Urban Residential ☐ Suburban Residential ☐ Commercial ☐ Open Space ☐ Institutional Other: _____ Known Industries: _____			
Notes (e.g., origin of outfall, if known): _____			

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
☐ Closed Pipe	☐ RCP ☐ CMP ☐ PVC ☐ HDPE ☐ Steel ☐ Other: _____	☐ Circular ☐ Elliptical ☐ Box ☐ Other: _____	Diameter, circular: _____ Dimensions, Triple Box: h - _____ w - _____ Elliptical: h - _____ w - _____	In Water: ☐ No ☐ Partially ☐ Fully With Sediment: ☐ No ☐ Partially ☐ Fully
	☐ Open drainage ☐ Concrete ☐ Earthen ☐ rip-rap ☐ Other: _____	☐ Trapezoid ☐ Parabolic ☐ Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____	
Flow Present? ☐ Yes ☐ No <i>If No, Skip to Section 5</i> Flow Description (If present) ☐ Trickle ☐ Moderate ☐ Substantial				

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
☐ Flow #1	Volume	_____	Liter	Bottle
	Time to fill	_____	Sec	Stopwatch
☐ Flow #2	Flow depth	1. _____ 2. _____ 3. _____ 4. _____	In	Tape measure
	Flow width	_____ " _____ "	Ft, In	Tape measure
	Measured length	_____ " _____ "	Ft, In	Tape measure
	Time of travel	1. _____ 2. _____ 3. _____ 4. _____	S	Stop watch
Water Temperature		_____	°F	Thermometer
Ammonia		_____	mg/L	Ammonia photometer
Salinity		_____ Dilution? _____ %	ppm	Refractometer
Conductivity		_____ Dilution? _____ %	µs	Conductivity meter
pH		_____	pH	pH meter
Potassium		_____	ppm	Potassium ion meter
Fluoride		_____	mg/L	Fluoride photometer
Detergents		_____	ppm	Colorimeter

DRY WEATHER FIELD SCREENING OUTFALL INSPECTION FORM

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? ☐ Yes ☐ No (If No, Skip to Section 5)

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
			1 - Faint	2 - Easily detected	3 - Noticeable from a distance
Odor	☐	☐ Sewage ☐ Sulfide ☐ Fancid/acid ☐ Petroleum gas ☐ Other: _____	☐	☐	☐
Color	☐	☐ Clear ☐ Green ☐ Brown ☐ Gray ☐ Orange ☐ Red ☐ Yellow ☐ Other: _____	☐	☐	☐
Turbidity	☐	See severity	☐	☐	☐
Foamables -Does Not Include Trash!!	☐	☐ Sewage (Toilet Paper, etc.) ☐ Petroleum (oil sheen) ☐ Suds ☐ Other: _____	☐	☐	☐

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? ☐ Yes ☐ No (If No, Skip to Section 6)

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	☐	☐ Spalling, Cracking or Chipping ☐ Corrosion ☐ Peeling Paint	
Deposits/Slimes	☐	☐ Oil ☐ Flow Line ☐ Paint ☐ Other: _____	
Abnormal Vegetation	☐	☐ Excessive ☐ Inhibited	
Poor pool quality	☐	☐ Odors ☐ Colors ☐ Suds ☐ Floorables ☐ Excessive Algae ☐ Oil Sheen ☐ Other: _____	
Pipe benthic growth	☐	☐ Brown ☐ Orange ☐ Green ☐ Other: _____	

Section 6: Overall Outfall Characterization

☐ Unlikely ☐ Potential (presence of two or more indicators) ☐ Suspect (one or more indicators with a severity of 3) ☐ Obvious

If box for Potential, Suspect or Obvious is checked, contact IDDE Administrator to begin investigation for illicit discharge.

Section 7: Data Collection

1. Sample for the lab? ☐	☐ Yes ☐ No	2. Sterile sample for bacteria analysis? ☐ Yes ☐ No
3. If yes, collected from: ☐	☐ Flow ☐ Pool	4. Sample for optical brightener? ☐ Yes ☐ No
5. Intermittent flow trap set? ☐	☐ Yes ☐ No	If Yes, type: ☐ OEM ☐ Caulk dam

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)? ☐ If yes, contact Public Works Street Superintendent

APPENDIX M

**STAUNTON'S SOLUTION FOR STORMWATER POLLUTION,
ISSUE NUMBER II**

Be the Solution for Staunton's Stormwater Pollution

Yards

- Don't sweep grass clippings or leaves into storm drains
- Use pesticides sparingly
- Don't overuse and be aware of when applying fertilizer

Vehicles

- Properly clean oil spills
- Do not dispose of fluids (oils, antifreeze, soap, etc.) into storm drains

Home or Business

- Dispose of grease in appropriate receptacles
- Collect litter and debris from sidewalks and parking lots & dispose of properly
- Plant trees, shrubs, and plants at your site to help reduce contaminants

Pets

- Put your pet's waste in a plastic bag and dispose of it properly

Remember - Only Rain Down the Storm Drain



Reminder to clean up after your pet in Gypsy Hill Park

Staunton's Solutions for Stormwater Pollution

This brochure is the first of an annual publication to inspire the citizens of Staunton to be more proactive to help prevent the stormwater runoff pollution of our local streams and watersheds.

To report stormwater pollution or if you have a question concerning stormwater, please call the City's Stormwater Hot-line at **540-213-6517** or send an email to StauntonStormwater@ci.staunton.va.us

For more information on the City's ongoing efforts to reduce stormwater pollution, please find us on Facebook at: facebook.com/stauntonstormwater

GET INVOLVED!

There are many opportunities in Staunton offering public participation:

- Adopt-a-Street Program
- Adopt-a-Stream Program
- Regional Household Hazardous Waste Day
- Attend a monthly meeting of the Lewis Creek Watershed Advisory Committee

Call 540-332-3858 for details

Department of Engineering
116 West Beverley Street
3rd Floor

Staunton, VA 24401

Phone: (540) 332-3858

www.staunton.va.us

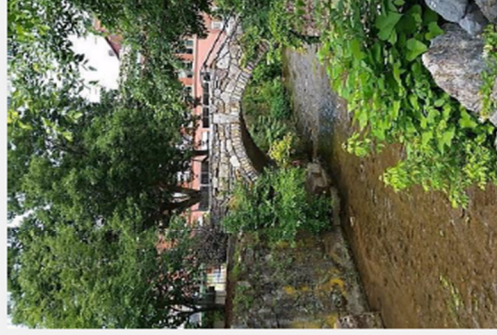
StauntonStormwater@ci.staunton.va.us



"City of Staunton – Stormwater Education"

Staunton's Solutions for Stormwater Pollution

Issue Number 1



January 2016

Staunton's IDDE Program

As part of the City's Municipal Separate Storm Sewer System (MS4) permit issued by the Virginia Department of Environmental Quality (DEQ), the City is mandated to develop and enforce an Illicit Discharge Detection and Elimination (IDDE) program. The IDDE program's goal is to seek out and respond to any unlawful act of disposing, dumping, spilling, or other discharge of any substance other than stormwater into the City's storm drain system. These types of discharges can be extremely harmful to our local streams and tributaries.

In July 2016, the City adopted an illicit discharge ordinance (Staunton City Code Title 13 - Environmental). This ordinance defines an illicit discharge and establishes enforcement methods, including legal actions, that the City may pursue to eliminate illicit discharges.

Storm sewer outfalls will be routinely inspected to detect an illicit discharge. If present, the City will attempt to identify its source to eliminate the discharge.

To report any suspected (non-emergency) illicit discharge, please call our Stormwater Hotline at 540-213-6517 or email StauntonStormwater@ci.staunton.va.us.

For more information on Staunton's IDDE Program, visit the City Engineering Department's website at www.staunton.va.us/directory/departments-a-g/city-engineer/illicit-discharge-detection-and-elimination-program

What is an illicit discharge?

An illicit discharge is any discharge to the City's storm sewer system or waterway that is not entirely composed of stormwater or snow/ice melt.

Common illicit discharges into storm drains include (but are not limited to) the following:

- Disposal of vehicle maintenance fluids into storm drains
- Pouring of paints or stains into storm drains
- Leaking dumpsters/trash into storm drains
- Allowing yard clippings and leaves in storm drains
- Allowing washwater with soaps and/or detergents into storm drains
- Washing of silt, sediment, concrete, cement, or gravel into storm drains
- Discharging of swimming pool water into storm drains
- Pouring of common household cleaners/chemicals into storm drains
- Sewer backups/overflows going into storm drains



Only Rain Down the Storm Drain!

Tips to use

For Car Washing:

- Wash in a grassy area or permeable surface
- Use non-toxic soaps
- Minimize water usage
- Limit amount of soap used
- Wash at a commercial car wash where water is properly treated

Charity car washes:

- Partner with a commercial car wash whenever possible
- Wash in areas where water is conveyed to a sanitary sewer system
- Use a plug, seal, or boom to prevent wash water from entering a storm drain
- Empty buckets of soapy water into a sanitary sewer via drain, sink, or toilet



Washing in the grass allows water to soak into the ground



Soapy water entering the storm drain ends up in waterways

APPENDIX N

PUBLIC WORKS DEPARTMENT DAILY OPERATIONAL PROCEDURES AND ANNUAL TRAINING PLAN

Street Department Daily Operating Procedures

Department of Public Works

The City operates by a set of standard operating procedures that seek to minimize or prevent discharge from certain municipal operations titled “Spill Prevention Control and Counter Measures”. The procedure covers road maintenance, vehicle maintenance, utility maintenance, storage of petroleum/chemical handling, spill response and clean up, general housekeeping and refuse collection. The plan is reviewed and updated on an annual basis. Employees have received and will continue to receive training on these procedures.

The City will:

- Maintain and update, as needed, a list of high-priority facilities.
- Maintain and update, as needed, a list of facilities with high potential of contributing pollution in stormwater runoff.

Annual Training Plan

Department of Public Works

All appropriate field employees are to participate in biennial training in the recognition and reporting of illicit discharges. The City will use power point and real life examples in the training. The training will educate the employees on what is an illicit discharge, how to identify them and how to report it to the proper authority.

First training was conducted on July 13th, 2016.

All appropriate employees are trained six time a year on any updates or changes to the MS4 permit.

APPENDIX O

PARKS AND RECREATION DEPARTMENT DAILY OPERATIONAL PROCEDURES AND ANNUAL TRAINING PLAN

Parks and Recreation Department Daily Operating Procedures

Stormwater Pollution Prevention SOP

Fertilizer and Pesticide Application

Parks Maintenance has employees certified as commercial pesticide applicators and certified fertilizer applicators. A full list of certified applicators and their expiration dates can be found here:

<http://www.vdacs.virginia.gov/pesticides/certification.shtml>.

Parks Maintenance Address:

Gypsy Hill Park Maintenance Shop
300 Park Blvd
Staunton, VA 22801

Contact Information:

Phone: 540-332-3945

Certified Applicators:

Steve DeVenny, Superintendent
Chase Dudley, Golf & Athletic Turf
Matthew Sensabaugh,
Horticulturist & Arborist

Nutrient Management Planner:

Chase Dudley, Golf & Athletic Turf

Application Guidelines:

- Take care when unloading fertilizers, pesticides & herbicides. Do not puncture bags or jugs.
- Use products only as directed. Follow all labels and instructions for use, storage, and disposal of fertilizers, pesticides & herbicides and chemicals.
- Provide cleanup supplies near designated maintenance areas to facilitate immediate cleanup. When making applications in the field bring the portable spill kit along.
- Avoid application over impervious surfaces; sweep granular fertilizer back onto the grass to prevent it from washing into the storm sewer system.
- Do not apply herbicides, fertilizers, or pesticides to eroding soil.
- Do not apply herbicides, fertilizers, or pesticides near open waters such as streams and creeks unless the product is specifically designed for use in shoreline or aquatic environments.
- Do not apply herbicides, fertilizers, or pesticides if temperatures are inadequate for them to work properly.
- Never apply chemicals before a rainfall event or during high wind speeds.

- Mix only what is needed in order to avoid excess pesticide or herbicide usage.
- Inspect, maintain, and calibrate equipment used for mixing and application. Including back pack & hand sprayers as well as the golf course spray rig. Also spreaders used to apply fertilizers.
- Ensure that all containers are watertight after each individual use.
- Ensure that any partially used bags of granular fertilizers are properly closed to avoid spills.
- Do not prepare herbicides, pesticides, or fertilizers for application near storm drains or streams.
- Document herbicide, pesticide, and fertilizer applications as required by Virginia Department of Ag & Consumer Services.

Storage Guidelines:

- Do not stockpile herbicides, pesticides & fertilizers.
- Store all pesticides & herbicides in the chemical locker located behind the golf cart shed in Gypsy Hill Park.
- Before entering the chemical locker turn on the ventilation fan from the external switch to vent the building.
- Store fertilizers on pallets off the ground in the golf equipment shed or the horticulture shed.
- Never store pesticides in cabinets with or near food, animal feed, or medical supplies.
- Always store pesticides in their original containers, which includes the label listing ingredients, directions for use, and first aid steps in case of accidental poisoning. *Never* transfer pesticides to other containers.
- Close the container tightly after using the product.
- Do not store pesticides in places where flooding is possible or in places where they might spill or leak into wells, storm sewer drains, ground water, or surface water.
- When transporting pesticides or herbicides keep them secure so that the public does not have access to them.
- When transporting pesticides or herbicides that are mixed and have a volume of 3 gal or more attach the proper identification label to the tank with the name of the chemical, EPA registration number, and mix rate.
- Do not reuse empty containers.
- Triple rinse empty containers, puncture & dispose of empty containers.
- Use rinse water from empty containers to fill sprayers.
- If you can't identify the contents of the container, store it in the chemical locker and contact Virginia Department of Ag and Consumer Services for disposal instructions.

Pesticide Disposal:

- Contact Virginia Department of Ag and Consumer Services for disposal options.
- Do not pour leftover pesticides, herbicides or fertilizers into storm drains.
- Do **not** pour leftover pesticides down the sink, into the toilet, or down a sewer or street drain.

Stormwater Pollution Prevention SOP

Staunton Parks Equipment Maintenance

The City of Staunton Parks & Recreation's department maintains a fleet of vehicles, buses, trucks, small & heavy equipment at the Gypsy Hill Park Maintenance facility. The Parks Maintenance facility is located at 300 Park Blvd in Gypsy Hill Park. Vehicle & equipment maintenance and repairs are done indoors, under cover see figure 1.

Address:

Gypsy Hill Park Maintenance Shop
330 Park Blvd
Staunton, VA 24401

Contact Information:

Phone: 540-332-3945
Fax: 540-851-4002
Monday - Friday 7:30AM to
4:00PM

Managers:

Steve DeVenny,
Superintendent
Randy Williamson,
Mechanic

Spills & Leaks: Any spills or leaks within the maintenance garage are cleaned up promptly. Spill cleanup supplies are located in the shop, see figure 2. A drain cover is located behind the shop on the red shed to cover the storm drain if needed, see figure 4. Personnel response procedures are as follows:

Any minor leaks are cleaned up with shop rags and rags are placed in marked, metal container and are picked up as needed by an outside contractor that launders the rags and returns them the following week. See figure 3.

- Any spills or more serious spills are cleaned up using absorbent, see figure 2 or absorbent pads (pig mats). Used pads & used absorbent are placed in a marked, metal container in the mechanic shop, and are picked up for disposal by an outside contractor, see figure 2.

Waste Storage and Disposal: None of the following materials are stored outside.

- Used Shop Rags: Used shop rags are stored indoors in the mechanic's shop in the marked container and are picked up weekly to be laundered by an outside contractor, see figure 3.

- Used Batteries: Used batteries are stored under cover in the golf shed on spill containment pallets before they are picked up for disposal by an outside contractor, see figure 5.
- Used Oil Filters: Used oil filters are stored in a metal container in the waste oil shed before being picked up for disposal by an outside contractor, see figure 6.
- Used Antifreeze: Used antifreeze is stored indoors in the waste oil shed over spill containment pallets before being picked up by an outside contractor for disposal, see figure 6.
- Used Motor Oil: Used motor oil is stored indoors in the waste oil shed in drums over spill containment pallets in the oil shed before being picked up by an outside contractor for disposal, see figure 6
- Used Absorbent & Pig Mats: Used absorbent & pig mats are stored indoors in the labeled drum in the mechanic's shop for pick up and disposal by an outside contractor, see figure 2
- Hydraulic Fluid: Used Hydraulic fluid is stored indoors in the waste oil shed on spill containment pallets before being picked up for disposal by an outside contractor, see figure 6



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6

General Equipment Maintenance

Since all Park Maintenance employees perform daily, small-scale maintenance on vehicles and equipment, the following are basic pollution prevention strategies to mitigate spills into waterways or the storm sewer system.

Storage of Equipment:

- Whenever possible, store vehicles, equipment, and related fluids under covered areas to prevent exposure to precipitation.
- Provide cleanup supplies near designated maintenance areas to facilitate immediate cleanup.

Preventing Leaks:

- Do not dump any toxic substances or liquid waste on the pavement, the ground, or in adjacent areas draining to storm drains or storm sewer conveyances.
- Inspect vehicles and equipment regularly for leaks.
- Inspect vehicles and equipment and have faulty equipment replaced or repaired immediately once a leak is discovered.
- Perform vehicle and equipment maintenance inside under cover in the mechanic shop.
- When pouring liquids, use a funnel and place a tray underneath the vehicle to catch spills. *See Image 1.*
- When applicable, keep a drip pan under vehicles and equipment while performing maintenance.
- Promptly transfer used fluids to the proper waste or recycling drums. Do not leave full drip pans or other open containers containing used fluids open and exposed to precipitation.
- Recycle whenever possible. Store recyclable material in a non-leaking drum or covered container under a roofed area. This includes used motor oil, hydraulic oil, oil filters, and other vehicle fluids.
- Keep caps and covers on chemicals and storage materials and ensure all containers are properly labeled.
- Reduce the transportation of potential pollutants by only transporting the minimum amount of material required for maintenance.
- Use drip pans or absorbent material whenever grease containers are emptied.
- Never leave grease on the ground. Collect and properly dispose of as garbage in a sealed container.

Responding to Spills and Leaks:

- If possible, move leaking vehicles or equipment indoors or into a covered area.
- Use dry cleanup methods (e.g., rag, pig mat, absorbent material) rather than hosing down the area.
- If the spill or leak is non-hazardous, attempt to contain the spill using a broom and/or absorbent material, see figure 2.
- If the spill is in the area of the storm drain behind the shop cover the drain with the mat, see figure 4.

- Block any floor drains in the vicinity to prevent the spill from entering a floor drain.
- Properly dispose of all used cleaning supplies when cleanup procedures are complete.
- If the spill is large and suspected of being hazardous, call 911.



Specialized Equipment:

Park Maintenance maintains specialized equipment used on multiple sites for a variety of tasks. Because this equipment is often hydraulic, spill kits are kept with the equipment at all times.

- A spill kit is kept in the Horticulture Bucket truck, in the cab.
- A spill kit is mounted on both the Jacobson & Toro Greensmowers
- A spill kit is mounted on the Toro Groundsmaster mower used on the golf course.
- A spill kit is mounted on the Toro Groundsmaster mower used on the football field.
- Absorbent and Pig mats are kept in the battery box compartment of the Wood Chuck Chipper.
- Absorbent & Pig mats are kept in the Case 580 Back Hoe.

If you operate the above equipment be sure to review spill cleanup procedures for the above equipment with your supervisor or the mechanic.

Used Cooking oil & concessions waste

Park Maintenance employees are tasked with cleaning up the parks after multiple events & activities involving concessions by a third party. These concessions may lead to used cooking oil & grease.

- Used cooking oil & grease is collected in drums and stored on spill containment pallets, under cover in the golf shed, see figure 5.
- Used cooking oil & grease is removed by an outside contractor for recycling.
- Do not allow concessionaires to dump used cooking oil or grease on the ground or down storm drains.

- Do not allow concessionaires to dump used cooking oil or grease down sanitary sewer drains.
- Do not allow concessionaires to wash or rinse out frying equipment on site.

Annual Training Plan

Staunton Parks Equipment Maintenance

Spill Prevention Training

- Review common spill issues and what to do in reaction to them
- Review location of spill kits and listed new kits needed
- Look at various areas of compound and how spill issues can arise

Pollution Prevention training

- Look at different areas of work that can cause pollution
- Review BMPs for proper pesticide storage & usage
- Review fertilizer BMPs for usage, hauling & storage
- Discuss need to keep grass clippings, mulch, dirt etc. off hard surfaces and get them back into lawn areas
- Review proper procedure for cleaning out line painting machine
- Review basic housekeeping & clean up
- Review what to do when abandoned paint, solvents, chemicals are found

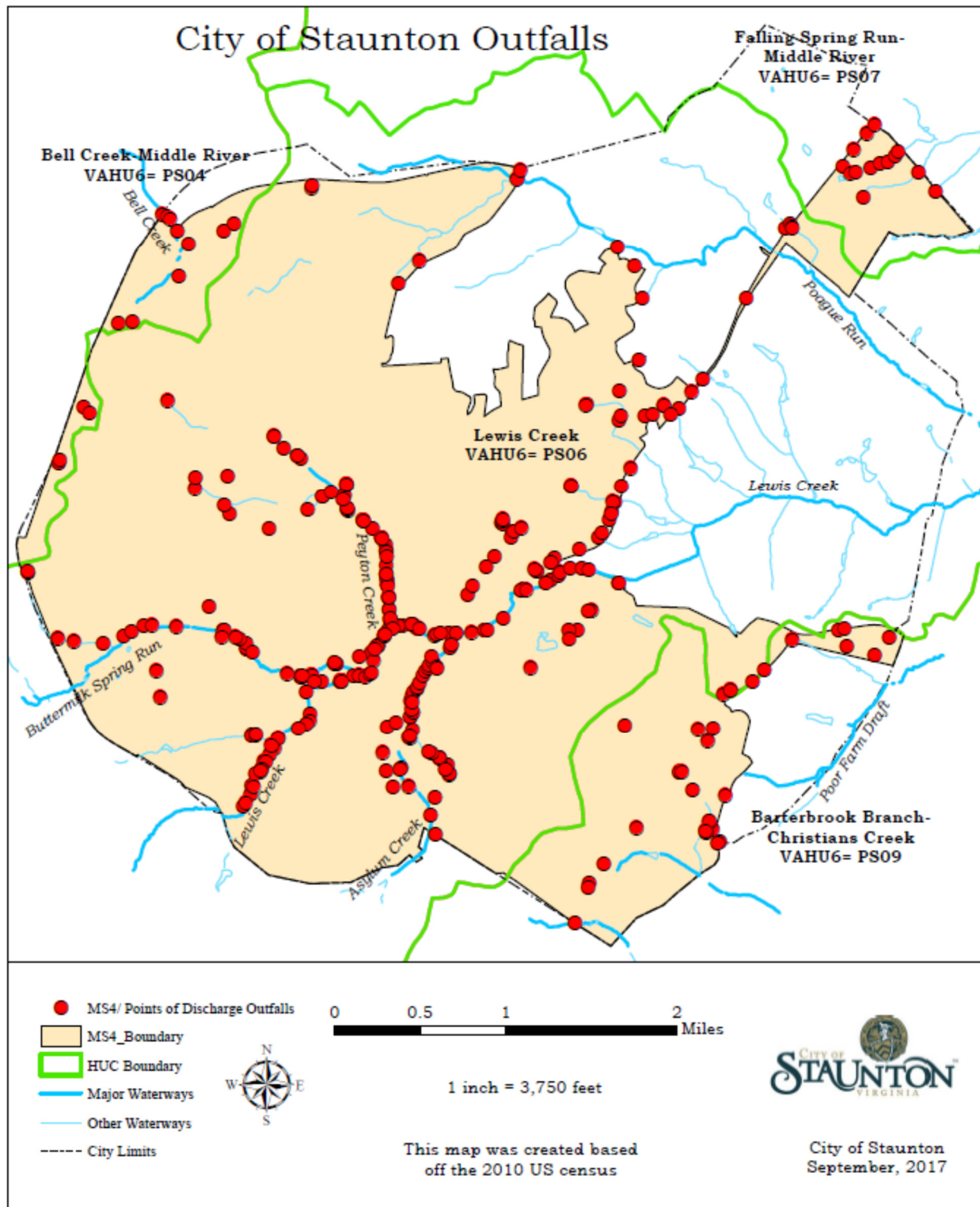
APPENDIX P

STORMWATER POLLUTION PREVENTION PLANS
(SWPPPs)

Municipal High-Priority Facilities with A High Potential for Pollutant Discharge			
Name of facility	Facility Address	Operator	Location of SWPPP
Public Works Operations Facility	1911 Craigmont Road	Public Works	1911 Craigmont Road
Parks and Recreation Maintenance Facilities	330 Park Boulevard	Parks and Recreation	330 Park Boulevard
Middlebrook Avenue Salt Storage Facility	866 Middlebrook Avenue	Public Works	1911 Craigmont Road
Recycle Center	600 Churchville Avenue	Public Works	1911 Craigmont Road
Parks and Recreation Pools	600 Churchville Avenue / 1000 Montgomery Avenue	Parks and Recreation	1000 Montgomery Avenue

APPENDIX Q

OUTFALL AND POINTS OF DISCHARGE MAP



APPENDIX R

STORM SEWER INSPECTION AND MAINTENANCE PROGRAM

INSPECTION:

The City will perform long-term inspection and maintenance on all City owned storm pipes and structures. Inspections will be performed using written procedures which will include a check list and list of potential issues and methods to address each issue. Necessary maintenance identified during inspection will be conducted in a timely manner as indicated on the check list or no later than the next scheduled inspection.

OBJECTIVE:

The objective is to ensure that the intended function of the City owned pipes and structures are maintained through a long term inspection and maintenance program to insure that the storm water system is functioning as designed. The expected result is completed inspection forms and timely repairs of the identified problems.

EFFECTIVENESS:

1. The completion of the required inspections.
2. The timely completion of repairs of the identified problems.

APPENDIX S

Assessment of the Appropriateness of Identified BMPs

The City of Staunton has determined that the best management practices included in the MS4 Program Plan that the City already had in place during Permit Year 2 and began implementing in Permit Year 3 and continued during Permit Year 4 represent an appropriate selection and implementation of a stormwater management program as defined by the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems.

No deficiencies have been found within the existing bmps or within the new bmps currently being developed for the Program.

APPENDIX T

STAUNTON'S SOLUTION FOR STORMWATER POLLUTION, ISSUE NUMBER III

How do I recycle?

The City collects items for recycling on the same days as residential trash. In the Central Business District, recycling is collected on Monday and Thursday. There is a \$25 service fee for the use of three recycling bins, which is refunded when you close your account and all bins are returned in good condition.

Items accepted by the City for recycling:

- Mixed paper; magazines, newspapers, phone books, hard and soft bound books, poster board, office paper, folders, envelopes, and brochures
- Cardboard
- Plastic #1 - #7, including plastic caps
- Glass that is clear, green, and brown
- Metal cans
- Aluminum cans



City crews pick up recycled items in downtown

The City also provides a recycling center for residents to drop off items seven days a week. The center is located in Gypsy Hill Park next to Lake Tams. (Pictured below)



Staunton's Solutions for Stormwater Pollution

This brochure is the third of an annual publication to inspire the citizens of Staunton to be more proactive to help prevent the stormwater runoff pollution of our local streams and watersheds.

To report stormwater pollution or if you have a question concerning stormwater, please call the City's Stormwater Hotline at **540-213-6517** or send an email to StauntonStormwater@cjstaunton.va.us.

For more information on the City's ongoing efforts to reduce stormwater pollution, please find us on Facebook at: facebook.com/stauntonstormwater

GET INVOLVED!

There are many opportunities in Staunton offering public participation:

- Adopt-a-Street Program
- Adopt-a-Stream Program
- Regional Household Hazardous Waste Collection Day

Community Development Department
Engineering Division

116 West Beverley Street
3rd Floor

Staunton, VA 24401

Phone: (540) 332-3858

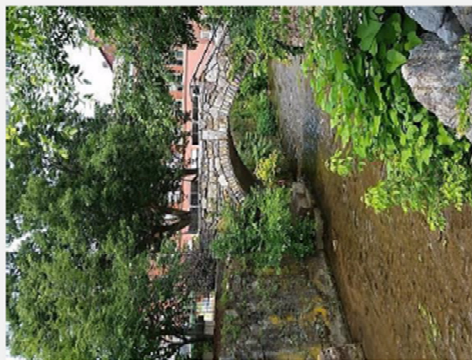
www.staunton.va.us



"City of Staunton - Watershed Awareness"

Staunton's Solutions for Stormwater Pollution

Issue Number III



March 2018

Where does litter go?

Trash and waste that is misplaced and enter a body of water is considered aquatic litter and debris. These items are usually highly visible and have extremely negative impacts on wildlife and our own health.

Our local streams and rivers as well as the Chesapeake Bay are all under a lot of stress due to human activities, such as littering and improper waste management. We need to be aware of how much litter we create, how we dispose of it, and what we can do to prevent it from reaching our waterways.

Trash and debris located in the streets, curbs, sidewalks, and even our yards can make its way into a stream, river, or the Chesapeake Bay. During storm events, stormwater can pick up the litter and carry it into the city's storm drain system. All city storm drains eventually discharge into the nearest creek or stream, taking the litter directly into our water bodies, harming the environment, aquatic life, and human health.



Litter swept away by stormwater gathers along stream banks

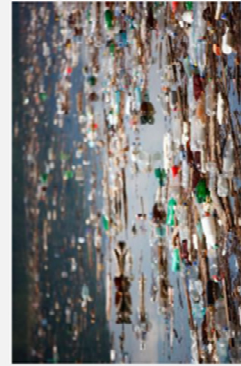
Common Litter Items

- Cigarette butts
- Bags/food wrappers
- Drink bottles/cans
- Plastic cups, plates, plastic-ware
- Styrofoam
- Straws/stirrers
- Tobacco packaging



Cigarette butts tossed in the streets find their way into streams

Plastic is a major issue when it comes to pollution, particularly stream pollution. Plastic is an extremely common material used and unfortunately found too often in water bodies. Plastic can take hundreds of years to break down, so when not disposed of correctly, it can kill animals and threaten the environment. Study shows that nearly 90 percent of debris floating in the ocean is plastic!



Other types of waste

Pet waste- Bacteria in pet feces can infiltrate into water sources or be swept away into the storm drain system during rain events.

- Bag it and trash it
- Scoop and trash
- Scoop and flush (most recommended)
- Scoop & bury/ compost

Hazardous materials- Augusta County hosts an event at the county Government Center in the fall. Residents of Staunton may bring materials to the event for proper disposal and recycling. Items include:

- Antifreeze
- Oil
- Gas
- Solvents
- Oil based paint
- Acids
- Pesticides and herbicides

Heavy trash- During one week each spring (usually April), the City collects large and bulky items not picked up during routine trash collection. Items include:

- Yard waste (brush and limbs)
- Old appliances (refrigerators, lawn mowers, microwaves, etc.)
- Furniture (mattresses, sofas, dressers, etc.)

For tires and electronics, drop off is available at the Gypsy Hill Football parking lot for disposal on Saturday of heavy trash collection week.

For more information on hazardous and heavy material pick up days, please visit: <https://www.ci.staunton.va.us/departments/public-works/trash-recycling-collection>

APPENDIX U

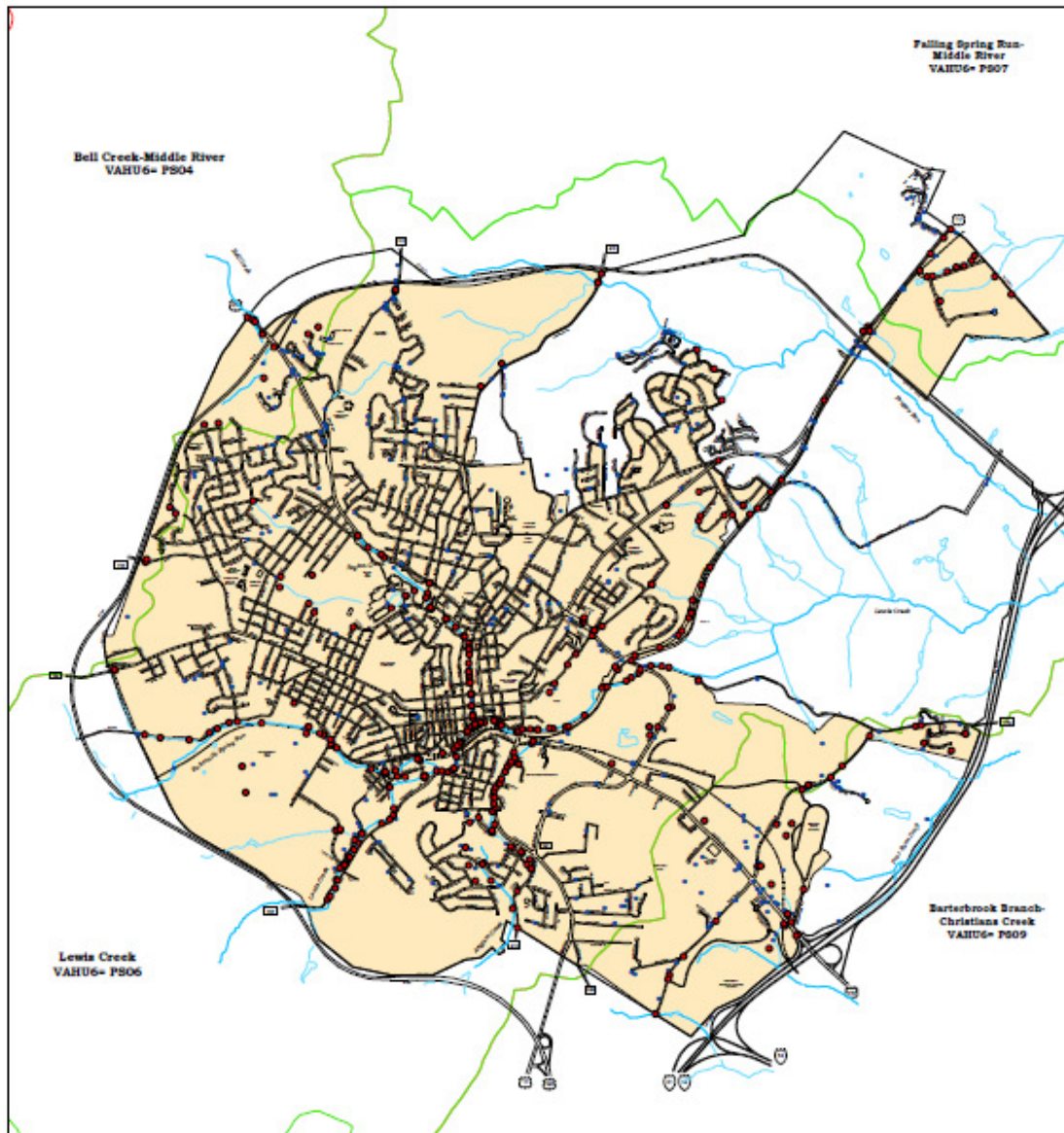
ILLCIT DISCHARGE DETECTION & ELIMINATION PROGRAM DATABASE

Illicit Discharge Detection and Elimination (IDDE) Database - FY18							July 1, 2017 thru June 30, 2018	
NUMBER	NOTIFICATION TYPE	DATE POTENTIAL ILICIT DISCHARGE OBSERVED	DATE POTENTIAL ILICIT DISCHARGE REPORTED	DESCRIPTION OF THE INVESTIGATION INCLUDING ANY FOLLOW-UP	RESOLUTION OF THE INVESTIGATION	DATE CLOSED		
1	Email from Fire Department	7/25/2017	7/26/2017	A truck hit a power pole, knocking it over and damaging the 3 transformers attached to it. Each transformer held about 50 gallons of mineral oil that was released into and adjacent drop inlet	Fire Dept. followed their normal procedures, contained the fuel spill and notified hazmat and DEQ	7/26/2017		
2	Call from Public Works	8/1/2017	8/1/2017	Public Works crew noticed water being discharged into the street from 325 W Frederick St	Stormwater technician made a site visit and determined the discharge to be potable water being pumped from a basement due to an internal water leak. The property owner was notified of the City's IDDE ordinance and moved the discharge to a grassy area	8/1/2017		
3	Call/Email from Fire Department	8/29/2017	8/29/2017	Fire Department received a call regarding diesel fuel leaking from a pickup truck in the Walmart parking lot	Fire Dept. followed their normal procedures, contained the fuel spill and notified hazmat and DEQ	8/29/2017		
4	Call / email from Public Works, Police Department, and Fire Department	11/7/2017	11/7/2017	Police Department was notified that diesel fuel had been spilled along Hampton St. Upon site visit, it was determined that a pickup truck leaking diesel fuel had driven from Seth Dr to Greenville Ave	Fire Dept., and Public works responded to the site. Fire Dept. followed their normal procedures, with assistance from Public Works to contain the fuel spill and notified hazmat and DEQ. Fire Dept will be pursuing charges for incurred clean up fees.	11/7/2017		
5	Email from Public Works	2/16/2018	2/16/2018	Public works discovered a County manhole overflowing and entering an adjacent SWM pond at 1403 Greenville Ave	Public Works notified the Augusta County Service Authority, which responded and followed up with their standard protocol to address the stoppage, clean up the overflow, and notify DEQ	2/16/2018		
6	Call from Fire Department	5/16/2018	5/16/2018	Fire Department received a call regarding diesel truck incident lead diesel fuel leaking onto parking lot and into drop inlet.	Fire Dept. followed their normal procedures, contained the fuel spill.			

APPENDIX V

OUTFALL AND POINTS OF DISCHARGE MAP

City of Staunton Outfall Map



- Urbanized (MS4)
Outfalls
- Non-Urbanized (MS4)
Outfalls
- Urbanized Area Boundary
- HUC Boundary
- Streams
- Tributaries
- City Limits

1 in = 1,500 ft

This map was created based
off the 2010 US census

City of Staunton
July, 2018

STAUNTON
VIRGINIA



APPENDIX W
BMP DATABASE ADDITIONS

BMP DATABASE PUBLICLY OWNED BMPs BROUGHT ONLINE FROM July 1, 2017 thru June 30, 2018																
BMP NO.	SITE NAME	SITE ADDRESS	OWNER	SITE LOCATION		FACILITY TYPE	ACRES TREATED		ONLINE DATE		VA HU6	RECEIVING WATERS	IMPAIRED WATERS	SWM AGREEMENT	LAST INSPECTION	
				LATITUDE	LONGITUDE		TOTAL	PERVIOUS	IMPERVIOUS	MONTH						YEAR
BLC3P	Wharf Parking Lot	2 West Johnson St	City of Staunton	38.1475	-79.0733	Permeable Pavers	1.25	0.09	1.16	4	2018	PS06	Lewis Creek	Yes	No	4/6/2018

BMP DATABASE PRIVATELY OWNED BMPs BROUGHT ONLINE FROM July 1, 2017 thru June 30, 2018																
BMP NO.	SITE NAME	SITE ADDRESS	OWNER	SITE LOCATION		FACILITY TYPE	ACRES TREATED		ONLINE DATE		VA HU6	RECEIVING WATERS	IMPAIRED WATERS	SWM AGREEMENT	LAST INSPECTION	
				LATITUDE	LONGITUDE		TOTAL	PERVIOUS	IMPERVIOUS	MONTH						YEAR
BPC31	Barrington Section 2	1211 Stocker Street	Par Four, LLC	38.1699	-79.0869	Bioretention filter	0.19	0.02	0.17	11	2017	PS06	Peyton Creek	No	2/17/2017	11/22/2017
BPF30	Big Sky Apartments Phase II	106 Community Way	Bluestone Land, LLC	38.137	-79.049	Underground hdpe pipes	4.38	1.45	2.93	8	2017	PS09	Poor Farm Draft	No	8/17/2017	4/16/2018
BPF29	Big Sky Apartments Phase II	106 Community Way	Bluestone Land, LLC	38.113	-79.032	Bioretention filter w/ detention	0.52	0.38	0.14	8	2017	PS09	Poor Farm Draft	No	8/17/2017	4/16/2018
BPF28	Big Sky Apartments Phase II	106 Community Way	Bluestone Land, LLC	38.134	-79.032	Bioretention filter w/ detention	0.42	0.28	0.14	8	2017	PS09	Poor Farm Draft	No	8/17/2017	4/16/2018
BPF27	Big Sky Apartments Phase II	106 Community Way	Bluestone Land, LLC	38.135	-79.035	Bioretention filter w/ detention	0.20	0.02	0.18	8	2017	PS09	Poor Farm Draft	No	8/17/2017	4/16/2018
BPF26	Big Sky Apartments Phase II	106 Community Way	Bluestone Land, LLC	38.136	-79.035	Bioretention filter w/ detention	0.23	0.03	0.20	8	2017	PS09	Poor Farm Draft	No	8/17/2017	4/16/2018
BPF25	Big Sky Apartments Phase II	106 Community Way	Bluestone Land, LLC	38.137	-79.049	Bioretention filter w/ detention	4.38	2.11	2.27	8	2017	PS09	Poor Farm Draft	No	8/17/2017	4/16/2018
BCN7	Frontier Center (swm located on American Frontier Culture Foundation)	1274 Richmond Avenue	Staunton Frontier LLC American Frontier Culture Foundation	38.133	-79.0436	Wet pond 1	25.50	7.72	17.78	10	2017	PS09	Christian Creek Trib (N)	No	10/24/2017	1/31/2018
BPC34	Mary Baldwin University	101 E Frederick St	Mary Baldwin College	38.150867	-79.069983	Filterra Unit (2)	0.27	0.08	0.19	4	2018	PS06	Peyton creek	No	4/26/2018	4/9/2018
BPC33	Mary Baldwin University	101 E Frederick St	Mary Baldwin College	38.150818	-79.070498	Filterra Unit (1)	0.27	0.09	0.18	4	2018	PS06	Peyton creek	No	43216	4/9/2018

APPENDIX X

Assessment of the Appropriateness of Identified BMPs

The City of Staunton has determined that the best management practices included in the MS4 Program Plan that the City already had in place during Permit Year 2 and began implementing in Permit Year 3 and continued during Permit Year 5 represent an appropriate selection and implementation of a stormwater management program as defined by the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems.

No deficiencies have been found within the existing bmps or within the new bmps currently being developed for the Program.

APPENDIX Y
VSMP Certification Letter



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

Fax: 804-698-4019 - TDD (804) 698-4021

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4020
1-800-592-5482

May 28, 2014

Steve Owen, City Manager
City of Staunton
P.O. Box 58
Staunton, VA 24402

Dear Mr. Owen:

In accordance with §62.1-44.15:27 G of the Virginia Stormwater Management Act (Act), the Department of Environmental Quality (DEQ) has completed the review of the City of Staunton's Virginia Stormwater Management Program (VSMP) application package submitted on January 15, 2014. Based on this review, DEQ has determined that the City's VSMP is consistent with the Act, the VSMP Regulation and the General VPDES Permit for Discharges of Stormwater from Construction Activities.

In light of this determination, DEQ approves the City of Staunton's VSMP; and the City is authorized to operate a VSMP beginning on July 1, 2014. Please note that this approval is based on the content of the application package. Any changes made to the documents in the package after the approval date, including changes to the adopted ordinance, may necessitate DEQ evaluation as part of its compliance review of your approved VSMP.

Thank you for your cooperation in developing a VSMP. We look forward to continuing to assist the City with the implementation of its VSMP.

Sincerely,

A handwritten signature in black ink, appearing to read "David K. Paylor".

David K. Paylor

cc: Melanie Davenport, Director, Water Division
Frederick Cunningham, Director, Office of Water Permits
Joan Salvati, Manager, Local Government Stormwater Programs