

Town of Vienna, Virginia

Municipal Separate Storm Sewer System (MS4) Program Plan



**2023 MS4 General Permit Update
April 30, 2024**

Town of Vienna
Department of Public Works
127 Center Street, South
Vienna, Virginia 22180



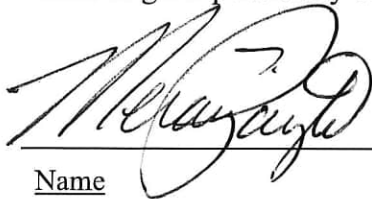
Prepared with assistance by:
WSP USA Earth & Environment, Inc.
Herndon, Virginia



Prepared in Compliance with Municipal Separate Storm Sewer System (MS4)
Permit No. VAR040066

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.”



Name

TOWN MANAGER

Title

05/02/24

Date

Town of Vienna
Municipal Separate Storm Sewer System (MS4)
Program Plan



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KEY MILESTONES

The following table shows key stormwater program milestones, including significant new requirements, under the 2023 MS4 permit. The table does not show routine or ongoing compliance activities.

Program Requirement	Permit Reference	Requirement Date
Review Town sites to determine if there are any new high priority facilities that require a SWPPP.	Part I E 6 k	June 30 of each year
Annual report to DEQ.	Part I D 1	October 1 of each year
Update the MS4 map and outfall information table to include new outfalls or TMDLs.	Part I E 3 a (5)	October 1 of each year
Electronic report of post-construction stormwater management facilities.	Part III B	October 1 of each year
Post most recent annual report to the stormwater web page.	Part I E 2 b (3)	November 1 of each year
Update stormwater webpage.	Part I E 2 b	February 1, 2024
Final Phase III Chesapeake Bay TMDL Action Plan.	Part II A 12 b	November 1, 2024
Update existing local TMDL action plans.	Part II B 2 a	May 1, 2025
Submit geodatabase or shapefiles containing required information about the MS4 to DEQ.	Part I E 3 a (3)	November 1, 2025
Update and implement procedures relating to the application of anti-icing and deicing agents.	Part I E 6 b (1) (a)	November 1, 2025
Develop and implement procedures relating to renovation and significant exterior maintenance activities.	Part I E 6 b (2)	November 1, 2026
Develop and maintain written inspection and maintenance procedures for ecosystem restoration projects implemented as part of TMDL compliance.	Part II C 1	November 1, 2026
Inspect ecosystem restoration projects	Part II C 2	November 1, 2028



Town of Vienna Municipal Separate Storm Sewer System (MS4) Program Plan

A. Introduction

This document represents the Town of Vienna’s plan to meet the requirements of the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 permit). The Town was originally issued an MS4 permit in 2003 (Permit VAR040066). The permit was re-issued in 2008, 2013, 2018, and 2023. This MS4 Program Plan supersedes earlier plans and addresses the permit under which the City was issued coverage effective November 1, 2023. The permit expires October 31, 2028.

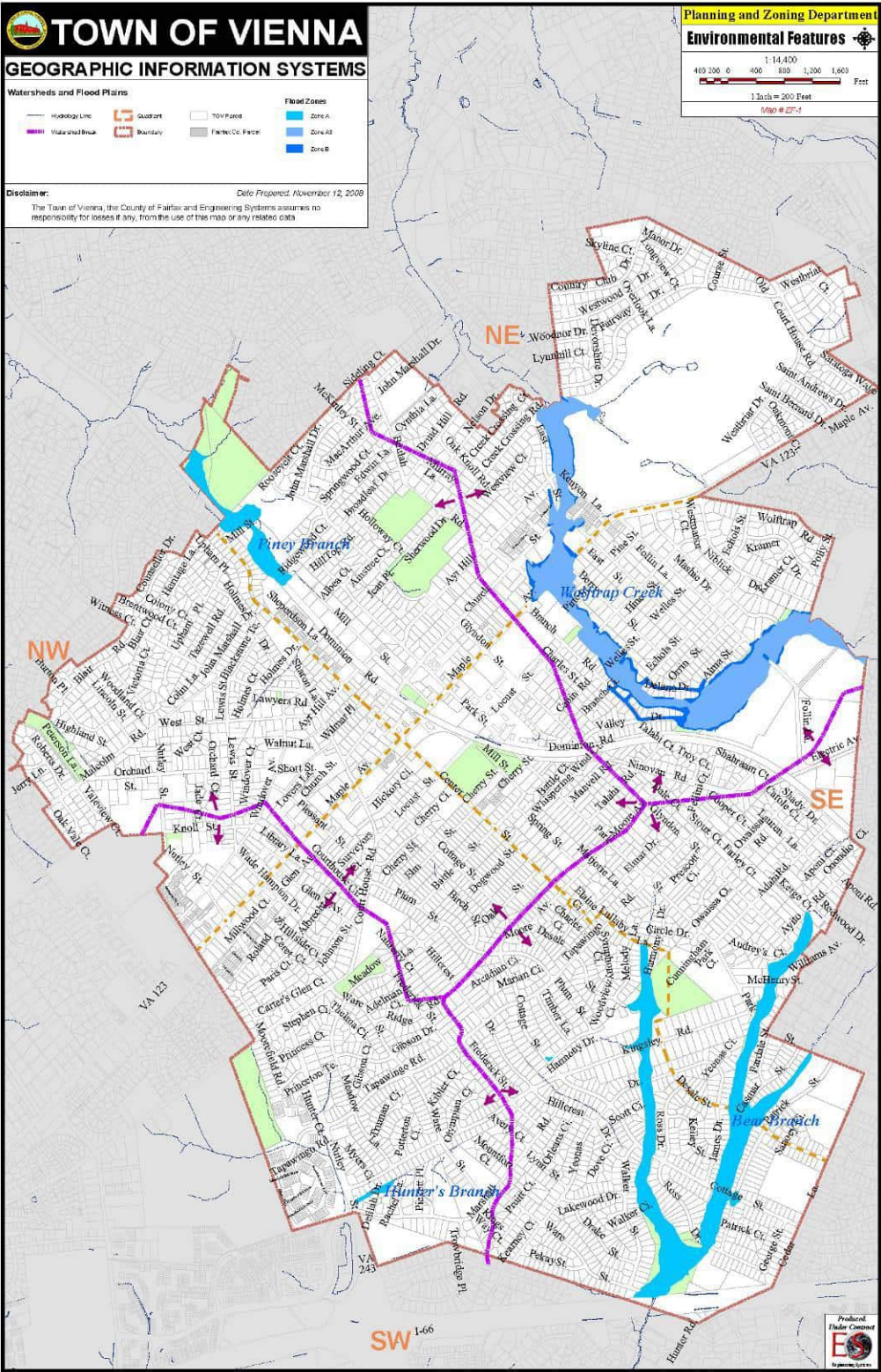
Stormwater in the Town flows to four local streams: Piney Branch, Wolftrap Creek, Hunters Branch, and Bear Branch (see Figure 1). Piney Branch and Wolftrap Creek are part of the Difficult Run watershed (PL22), while Hunters Branch and Bear Branch are part of the Accotink Creek watershed (PL30). The Town’s streams are important to the quality of life of Vienna residents and ultimately affect the health of the Potomac River and the Chesapeake Bay.

Mandated by Congress under the Clean Water Act and implemented in Virginia by the Department of Environmental Quality (DEQ), the purpose of the MS4 permit is to protect water quality from urban pollution carried by stormwater. Stormwater runoff from urban areas may contain sediments, fertilizers, pesticides, bacteria, motor oil, salts, and other pollutants generated by various land uses and human activities. When left uncontrolled, this pollution can result in the impairment or destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public safety and health.

To achieve these water quality goals, the permit requires the Town to control the discharge of pollutants to the maximum extent practicable (MEP) by addressing the following six minimum control measures (MCMs):

1. Public Education and Outreach on Stormwater Impacts	4. Construction Site Stormwater Runoff Control
2. Public Involvement/Participation	5. Post-Construction Stormwater Management
3. Illegal Discharge Detection and Elimination	6. Pollution Prevention/Good Housekeeping for Municipal Operations

Figure 1. Town of Vienna Streams and Watersheds



In addition to addressing the MCMs, the Town must develop and implement action plans to address pollutant loads allocated to Vienna in approved Total Maximum Daily Loads (TMDLs). A TMDL establishes the maximum amount of a pollutant that can enter a water body without violating water quality standards. The Town has been allocated pollutant loads associated with TMDLs for Accotink Creek, Difficult Run, and the Chesapeake Bay. These are further discussed in Section C.

The Town has successfully implemented its MS4 program for the past four permit cycles. As part of this plan update, the Town engaged in an extensive review and assessment of existing stormwater management operations, ordinances, protocols, and programming against the MS4 permit conditions. This MS4 plan builds on the Town's past success and meets the new MS4 permit requirements.

B. Stormwater Management Organization

MS4 permit compliance is coordinated through the Town's Department of Public Works (DPW). DPW is responsible for overall MS4 permit administration, stormwater facility design, erosion and sediment control, stormwater facility maintenance, and street sweeping. DPW operates the Northside Property Yard, which includes equipment and vehicle storage and maintenance, as well as bulk storage of items such as salt, mulch, sweeping spoils, and millings. In addition to DPW, several other agencies have important roles in implementing the permit. These include Parks and Recreation (which operates the Nutley Street Maintenance Yard), Planning and Zoning (including overall development plan review), Public Information, and Information Technology.

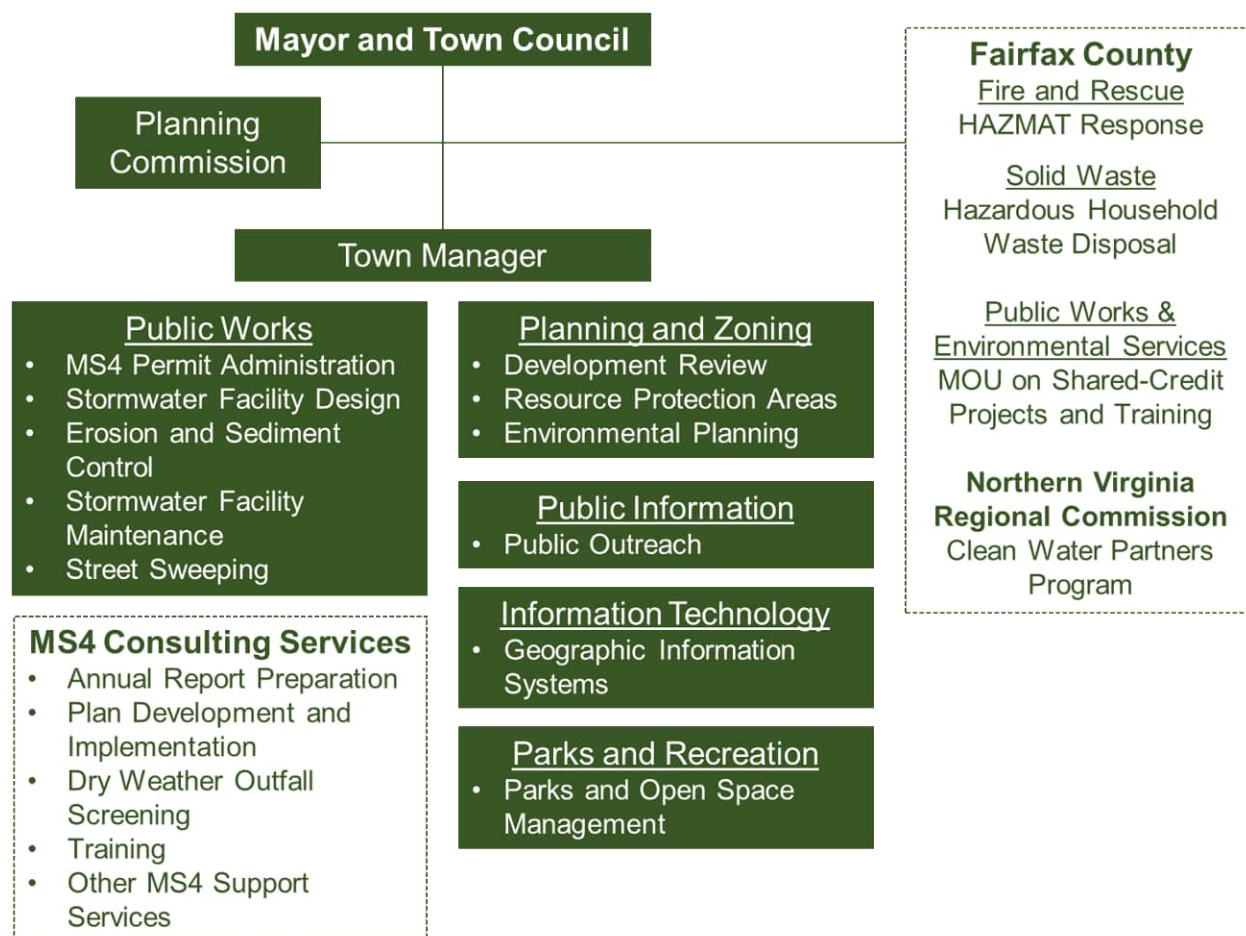
Since the Town is part of Fairfax County, the County is responsible for providing emergency response and hazardous household waste (HHW) disposal services. Roles and responsibilities are outlined in Figure 2.

C. Reliance on Other Government Entities

The MS4 permit requires that if the Town relies on another entity to implement portions of its MS4 program that the plan must include a description of each party's roles and responsibilities. The plan must also include copies of any written agreements.

The Town is engaged in two formal partnerships, which are further described in the plan. This includes regional education and outreach efforts coordinated through the Northern Virginia Clean Water Partners program and a memorandum of understanding (MOU) signed with Fairfax County and the Town of Herndon to share pollutant reduction credit for projects jointly implemented through the County's Stormwater Service District Fee. The MOU also allows the Town to utilize County stormwater-related training programs. The MOU was originally adopted by the Town Council on October 28, 2013 and amended on November 7, 2016. The agreements are included in Appendix A.

Figure 2. Town of Vienna Stormwater Management Organization



D. Special Conditions for Approved TMDLs

The permit contains special conditions that require the Town to develop clean-up “action plans” for impaired streams where a TMDL assigns a waste load allocation (WLA) to the Town that has been approved by the State Water Control Board (SWCB) prior to the issuance of this permit. The Town has been assigned WLAs associated with the Chesapeake Bay (nitrogen, phosphorus, and sediment), the Potomac River (PCBs), Difficult Run (bacteria and sediment), and Accotink Creek (bacteria, sediment, and chloride).

Based on the MS4 permit, the Town must achieve Chesapeake Bay TMDL pollutant reductions over three five-year permit cycles in accordance with the following: 5% by the end of the first permit cycle (2018); 40% by the end of the second permit cycle (2023); and, 100% by the end of the third permit cycle (2028). The Town submitted a draft Phase III Chesapeake Bay TMDL Action Plan to DEQ on September 27, 2023 demonstrating that it has met 100% of pollutant reduction targets. A final Phase III action plan must be submitted to DEQ no later than November 1, 2024.

Local TMDL action plans developed by the Town include the PCB TMDL Action Plan, the Sediment TMDL Action Plan for Difficult Run and Accotink Creek, the Bacteria TMDL Action Plan for Difficult Run and Accotink Creek, and the Chloride TMDL Action Plan for Accotink Creek. In accordance with the MS4 permit, these existing TMDL action plans must be updated no later than 18 months after the permit effective date (May 1, 2025).

Completed TMDL action plans are included in Appendix B.

TMDL	Pollutants	TMDL Action Plan	Current Plan Date	Updated Plan Due Date
Chesapeake Bay TMDL	Nitrogen and phosphorus	Draft Phase III Chesapeake Bay TMDL Action Plan	9/27/2023	11/1/2024
“Total Maximum Daily Loads of PCBs for Tidal Portions of the Potomac and Anacostia Rivers”	PCBs	PCB TMDL Action Plan	5/1/2020	5/1/2025
“Benthic TMDL Development for Difficult Run”	Sediment	Sediment TMDL Action Plan for Difficult Run and Accotink Creek	5/1/2020	5/1/2025
“Sediment TMDLs for the Accotink Creek Watershed”	Sediment			
“Bacteria TMDL for the Difficult Run Watershed”	E. coli bacteria	Bacteria TMDL Action Plan for Difficult Run and Accotink Creek	5/1/2020	5/1/2025
“Fecal Coliform TMDL for Accotink Creek”	Fecal coliform bacteria			
“Chloride TMDLs for the Accotink Creek Watershed”	Chloride	Chloride TMDL Action Plan for Accotink Creek	5/1/2021	5/1/2025

In addition to updating the TMDL action plans, the Town must develop and maintain written inspection and maintenance procedures for ecosystem restoration projects (i.e., stream restoration projects) that were implemented as part of TMDL compliance. The procedures must be developed by November 1, 2026 and the projects inspected no later than November 1, 2028.

E. Minimum Control Measures

This section outlines the specific BMPs and strategies for meeting the MCMs in Part I E of the MS4 permit. For each MCM, the following information is included:

- Each specific requirement as listed in Part I E for each MCM.
- A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions.
- All standard operating procedures (SOPs) or policies necessary to implement the BMPs.
- The measurable goal by which each BMP or strategy will be evaluated.
- The persons, positions, or departments responsible for implementing each BMP or strategy.

A table at the end of each section summarizes the schedule for implementing the BMPs.

MCM #1: Public Education and Outreach on Stormwater Impacts

Permit Reference: Part I E 1

a. The permittee shall implement a public education and outreach program designed to:

- (1) Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;
- (2) Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
- (3) Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

b. The permittee shall identify no fewer than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control, BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration projects, and illicit discharges from commercial sites.

c. The high-priority public education and outreach program, as a whole, shall:

- (1) Clearly identify the high-priority stormwater issues;
- (2) Explain the importance of the high-priority stormwater issues;
- (3) Include measures or actions the public can take to minimize the impact of the high priority stormwater issues; and
- (4) Provide a contact and telephone number, website, or location where the public can find out more information.

d. The permittee shall use two or more of the strategies listed in Table 1 per year to communicate to the target audience the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.

Table 1
Strategies for Public Education and Outreach

Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, television, movie theater, or newspaper
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens, trade organizations, or industrial officials.
Training materials	Materials developed to disseminate during workshops offered to local citizens,

	<i>trade organizations, or industrial officials.</i>
<i>Public education activities</i>	<i>Boat at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable Standards of Learning or curriculum requirements, or watershed walks.</i>
<i>Public meetings</i>	<i>Public meetings on proposed community stormwater management retrofits, green infrastructure development, ecosystem restoration projects, TMDL development, climate change's effects on stormwater management, voluntary residential low impact development, or other stormwater issues.</i>

e. The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.

f. The MS4 program plan shall include:

- (1) A list of the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;*
- (2) The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;*
- (3) Identification of the target audience to receive each high-priority stormwater message;*
- ...*
- (5) Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the audience;*
- (6) Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach;*
- (7) The strategies from Table 1 of Part I E 1 d to be used to communicate each high-priority stormwater message; and*
- (8) The anticipated time periods the messages will be communicated or made available to the public.*

g. The annual report shall include the following information:

- (1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;*
- (2) A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate identified high-priority issues;*
- (3) A description of any changes in high-priority stormwater issues, including strategies used to communicate high-priority stormwater issues or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of these changes; and,*
- (4) A description of public education and outreach activities conducted that included education regarding climate change.*



Public Education and Outreach Program Overview

Pollution Prevention Public Education and Outreach Plan

The Town has developed and implemented a general program designed to raise awareness of stormwater issues and the importance of preventing pollution. A focus of the general program is on youth education. According to 2022 U.S.

Census estimates, 28% of the Town's population is under the age of 18. Instilling a conservation ethic in children is the best long-term investment the Town can make to keep water resources protected for future generations.

The MS4 permit requires the Town to identify a minimum of three-high priority water quality issues that contribute to stormwater pollution and provide a rationale for their selection. The Town has identified the following high-priority water quality issues for the focus of the public education program during the permit cycle.

- *Nutrients.* The Town is subject to the Chesapeake Bay TMDL for nutrients (phosphorus and nitrogen) and must achieve specific reductions in accordance with a Chesapeake Bay TMDL Action Plan. Excess nutrients cause algae blooms, and when the algae die, they consume oxygen in the water, creating dead spots where aquatic life cannot survive. Property owners and managers can play a role in controlling nutrient pollution by reducing the amount of fertilizer that is misapplied to the urban landscape. Two target audiences are identified. The first is property owners that maintain lawns and therefore may apply fertilizers. Most of the land use in the Town is either single family or townhouse. The second is property managers for homeowner associations and condominiums. These organizations are responsible for hiring a company to manage large areas of landscaping.
- *Sediment and Other Illicit Discharges.* Streams in the Town are impaired because of excess sediment. Sediment deposited in stream beds can smother aquatic life and harm fish. Most of the sediment in urban areas comes from stream bank erosion and construction activities. In addition, commercial and light industrial areas can be sources of illicit discharges. Common sources observed in the Town include automotive service centers and restaurants (fats, oils, and grease). The public can play an important role by reporting construction activities where erosion and sediment controls may be malfunctioning and potential illicit discharges. In addition, the Town has targeted automotive service centers and restaurants for additional education and outreach on pollution prevention measures.
- *Bacteria.* Streams in the Town are impaired because of excess bacteria. The Difficult Run and Accotink Creek TMDLs note that pet waste from residential areas is a predominant source of bacteria. Public education can play an important role in reducing bacteria by educating pet owners about the human health and legal consequences of not picking up pet waste. Dog owners, who can be identified through dog license registrations and are the primary users of dog parks, have been identified as the target audience.

The following table summarizes the Town's high-priority issues, target audiences, messages, and selected strategies from Table 1 of the MS4 permit.

High Priority Issue	Target Audience	Messages	Permit Strategies (Table 1)
Nutrients	Residential property owners HOA and condominium associations	<ul style="list-style-type: none"> • Mowing high with a sharp blade can keep lawns greener without fertilizer. • Leaving grass clippings on the lawn reduces the need for fertilizer. • Fertilizer in the Fall or not at all. • The best way to determine if your lawn needs fertilizer is to test it. • Never apply fertilizers to sidewalks, driveways, or roadways. Sweep up or blow materials spilled on hard surfaces. 	Traditional written materials Media materials
Sediment and Other Illicit Discharges	General public Automotive service centers Restaurants	<ul style="list-style-type: none"> • Report illicit discharges. • Automotive fluids must be properly recycled – never down the storm drain. • All washing activities must be done inside – no washwater to the storm drain. • Fats, oils, and grease must be properly recycled – never down the storm drain. 	Traditional written materials Media materials Signage
Bacteria	Dog owners	<ul style="list-style-type: none"> • Pick up after your pet. • Pet waste goes to our drinking water supply and must be cleaned. That is gross. • Pet waste causes illness making streams unsafe for kids and pets. 	

Clean Water Partners Program

The Town participates in the NVRC Clean Water Partners program. This collaborative effort allows the Town to reach a broader audience through cable television and digital media. The program includes an annual assessment component conducted through a web-based survey of Northern Virginia residents. The specific focus areas, messages, and survey results are reviewed each year by the Clean Water Partners, including the Town.

TMDL Action Plans

The Town has developed TMDL action plans for nutrients, sediment, bacteria, chloride, and PCBs. Several of these plans have education and outreach components that have been incorporated into this MCM. The plans are included in Appendix B

Referenced Documents

- NVRC Clean Water Partners Program Memorandum of Agreement (Appendix A).
- Stormwater Webpage:
www.viennava.gov/residents/sustainability/protecting-the-chesapeake-bay



Best Management Practices

The following BMPs will be implemented in accordance with Part I E 1 of the permit and the Town's Stormwater Pollution Prevention Public Education and Outreach Plan. Selected communication strategies align with those in Table 1 of the MS4 permit.

BMP 1.1 – General Education and Outreach

Objective: The objective of this BMP is to increase general knowledge about the link between individual actions and stormwater pollution and to educate Town residents about how they can change their behavior to have a positive impact on local streams and the Chesapeake Bay.

Best Management Practices:

- Distribute giveaways such as magnets, rulers, and key chains with water quality messages at the Town Hall and during community events.
- At least once annually, include a general pollution prevention message linked to water quality in: (1) the Town Water Quality Report; (2) the Vienna Voice newsletter; or, (3) one of the quarterly residential water bills.
- Host the stormwater web page and update it with new information as appropriate.
- Participate in the NVRC Clean Water Partners program.

Standard Operating Procedures and Policies: This BMP is supported by the MOA between the Town of Vienna and Clean Water Partners.

Measurable Goals and Evaluation Criteria: The Town will include in each MS4 annual report: (1) the amount of materials distributed and an estimate of the number of individuals reached; (2) the message included in the Town Water Quality Report, Vienna Voice newsletter, or residential

water bill; (3) a snapshot of the stormwater web page; (4) a summary of the Clean Water Partners program and the results of any surveys or other mechanisms used to determine program effectiveness; and, (5) a description of any outreach activities that also include education regarding climate change.

Responsible Party: Public Works and Public Information. NVRC Clean Water Partners will act as the Town's regional partner.

BMP 1.2 – Youth-Focused Outreach

Objective: The objective of this BMP is to instill positive, pollution prevention behaviors in youth that will last a life-time.

Best Management Practices:

- Host an annual Public Works Day with a focus on activities of interest to school-age children.
- Use the Town's EnviroScape model at Town events to teach children about watersheds, stormwater, and pollution prevention.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each MS4 annual report documentation of efforts to educate youth, including an estimate of the number of youth engaged.

Responsible Party: Public Works.

BMP 1.3 – Chesapeake Bay Nutrients

Objective: The objective of this BMP is to inform property owners and managers about ways to reduce the impact of nutrients through proper use and application of fertilizers. The Town has identified all households as well as HOAs and condominium associations as the target audiences.

Best Management Practices:

- At least once annually, distribute information on proper fertilizing techniques using one of the following: (1) seasonally-appropriate press release; (2) article in the Vienna Voice newsletter; (3) message in the Town Calendar; or, (4) message in the quarterly residential water bill in addition to BMP 1.1.
- At least once annually, include a message about the proper use and application of fertilizers using a social media platform.
- In FY26, mail information to HOA and condominium contacts about proper use and application of fertilizers and how to ensure contractors are using water quality friendly practices.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each MS4 annual report: (1) documentation that information has been distributed on proper fertilizing techniques; and, (2) a snapshot of the social media post. In FY26, the Town will provide information mailed to HOA and condominiums.

Responsible Party: Public Works and Public Information.

BMP 1.4 – Sediment and Other Illicit Discharges

Objective: The objective of this BMP is to reduce illicit discharges, with a particular focus on sediment pollution, by educating residents on how to recognize and report a suspected illicit discharge. The Town has identified all households as the target audience for illicit discharge and sediment-related education.

Best Management Practices:

- At least once annually, promote the means by which the public can report a suspected illicit discharge using one of the following: (1) press release; (2) article in the Vienna Voice newsletter; (3) message in the Town Calendar; or, (4) message in the quarterly residential water bill in addition to BMP 1.1.
- At least once annually, include a message about how the public can report a suspected illicit discharge using a social media platform.
- At least once annually, promote the availability of the Fairfax County Hazardous Household Waste Program using one of the following: (1) article in the Vienna Voice newsletter; (2) message in the Town Calendar; or, (3) message using Vienna Happenings.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each MS4 annual report: (1) documentation that information has been distributed on how to report a suspected illicit discharge; (2) a snapshot of the social media post; and, (3) documentation of how the HHW program was promoted.

Responsible Party: Public Works and Public Information.

BMP 1.5 – Bacteria

Objective: The objective of this BMP is to reduce bacteria pollution by educating residents in general, and pet owners specifically, on the impacts of pet waste on water quality and the importance of picking up after pets. The Town has identified all residents as the target audience for pet waste-related education, with a specific focus on dog owners

Best Management Practices:

- At least once annually, distribute information about proper pet waste disposal using one of the following: (1) press release; (2) article in the Vienna Voice newsletter; (3) message in the Town Calendar; or, (4) message in the quarterly residential water bill in addition to BMP 1.1.

- At least once annually, include a message about the proper pet waste disposal using a social media platform.
- In FY25, mail information to Town residences holding dog licenses about the importance of picking up after pets.
- Maintain signage at medium risk and priority sites identified in the Difficult Run and Accotink Creek Bacteria TMDL Action Plan to encourage pet walkers to clean up pet waste and alert them to fines for non-compliance. Signage for newly identified sites will be installed within one year of identification.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each MS4 annual report: (1) documentation that information has been distributed on proper pet waste disposal; and, (2) a snapshot of the social media post. In FY25, the Town will provide information mailed to pet owners. The Town will confirm maintenance of existing signage and document any newly installed signage.

Responsible Party: Public Works and Parks and Recreation.

BMP 1.6 – Targeted Business Outreach for Illicit Discharges

Objective: The objective of this BMP is to engage businesses in general as partners in protecting water quality and preventing stormwater pollution. In addition, this BMP aims to reduce the discharge of fats, oils, and grease from restaurants and automotive fluids from automotive service centers.

Best Management Practices:

- No later than FY26, send a letter and any other information to all restaurants about the importance of pollution prevention and the legal ramifications for dumping or illicit discharges.
- No later than FY27, send a letter and any other information to all automotive service centers about the importance of pollution prevention and the legal ramifications for dumping or illicit discharges.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: No later than FY26 and FY27, the Town will provide information sent to restaurants and automotive service centers, respectively.

Responsible Party: Public Works and Public Information.

BMP 1.7 – Chloride

Objective: The objective of this BMP is to reduce the amount of salt entering local waterways while ensuring that public safety during winter weather events remains a priority. This BMP implements the education and outreach strategies contained in the Town’s Chloride TMDL Action Plan for Accotink Creek.

Best Management Practices:

- At least once annually, distribute information on proper use of deicing/anti-icing materials using one of the following: (1) seasonally-appropriate press release; (2) article in the Vienna Voice newsletter; (3) message in the Town Calendar; or, (4) message in the quarterly residential water bill in addition to BMP 1.1.
- At least once annually, include a message about the proper use and application of deicing/anti-icing materials using a social media platform.
- Once during the permit cycle (FY27 or FY28), distribute a deicing/anti-icing fact sheet to HOA/condominium associations.
- Be available to provide presentations on proper deicing/anti-icing techniques at HOA/condominium meetings (presentation developed last permit cycle).
- Once during the permit cycle (FY27 or FY28), distribute a deicing/anti-icing fact sheet to commercial/institutional property owners.
- Maintain information about chloride reduction strategies on the Town’s web site.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each MS4 annual report: (1) documentation that information has been distributed on proper use of deicing/anti-icing materials; (2) a snapshot of the social media post; (3) a summary of any presentations provided on proper deicing/anti-icing techniques; and, (4) a snapshot of the web site. In FY27 and/or FY28, the Town will document distribution of the deicing/anti-icing fact sheets.



MCM#1 Implementation Schedule

The Town will implement the BMPs for MCM #1 in accordance with the following schedule.

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
1.1	General Education and Outreach						
	Distribute giveaways with water quality messages at events.	►	►	►	►	►	Public Works
	Include general pollution prevention article in: (1) Town Water Quality Report; (2) Vienna Voice; or, (3) residential water bill.	►	►	►	►	►	Public Works; Public Information
	Host stormwater web page.	►	►	►	►	►	Public Works; Public Information
	Participate in Clean Water Partners regional program.	►	►	►	►	►	Public Works, NVRC
	Describe outreach activities involving climate change education.	►	►	►	►	►	Public Works
1.2	Youth-Focused Outreach						
	Host DPW Day with a focus on youth education.	►	►	►	►	►	Public Works
	Use the EnviroScape model at Town events.	►	►	►	►	►	Public Works
1.3	Chesapeake Bay Nutrients						
	Distribute information on proper fertilizing techniques through one of the following: (1) press release; (2) Vienna Voice; (3) Town Calendar; (4) water bill.	►	►	►	►	►	Public Works; Public Information
	Distribute nutrient-related message using a social media platform.	►	►	►	►	►	Public Works; Public Information
	Distribute nutrient-related message to HOAs/condominium associations.			■			Public Works; Public Information

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
1.4	Sediment and Other Illicit Discharges						
	Distribute information on illicit discharge reporting through one of the following: (1) press release; (2) Vienna Voice; (3) Town Calendar; (4) water bill.	►	►	►	►	►	Public Works; Public Information
	Distribute illicit discharge reporting message using a social media platform.	►	►	►	►	►	Public Works; Public Information
	Promote County HHW program through either; (1) the Vienna Voice; (2) Town Calendar; or, (3) Vienna Happenings.	►	►	►	►	►	Public Works; Public Information
1.5	Bacteria						
	Distribute information on proper pet waste through one of the following: (1) press release; (2) Vienna Voice; (3) Town Calendar; (4) water bill.	►	►	►	►	►	Public Works; Public Information
	Distribute one bacteria-related message using a social media platform.	►	►	►	►	►	Public Works; Public Information
	Distribute bacteria-related message to dog license holders.		■				Public Works; Public Information; Animal Control
	Maintain signage at medium risk and priority sites identified in the Difficult Run and Accotink Creek Bacteria TMDL Action Plan; install signage at newly identified sites within one year.	►	►	►	►	►	Public Works

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
1.6	Targeted Business Outreach						
	Distribute pollution prevention materials to restaurants.		▶	▶	■		Public Works
	Distribute pollution prevention materials to automotive service centers.		▶	▶	▶	■	Public Works
1.7	Chloride						
	Distribute information on illicit discharge reporting through one of the following: (1) press release; (2) Vienna Voice; (3) Town Calendar; (4) water bill.	▶	▶	▶	▶	▶	Public Works; Public Information
	Distribute message on proper use of deicing/anti-icing materials using a social media platform.	▶	▶	▶	▶	▶	Public Works; Public Information
	Distribute deicing/anti-icing fact sheet to HOAs/condominium associations.				■	■	Public Works; Public Information
	Be available for presentations to target audiences.	▶	▶	▶	▶	▶	Public Works
	Distribute deicing/anti-icing fact sheet to commercial/institutional property owners.				■	■	Public Works; Public Information
	Maintain chloride reduction strategies on web site.	■	■	■	■	■	Public Works; Public Information

MCM #2: Public Involvement and Participation

Permit Reference: Part I E 2

a. The permittee shall develop and implement procedures for the following:

- (1) The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;
- (2) The public to provide comments on the permittee's MS4 program plan;
- (3) Responding to public comments received on the MS4 program plan; and
- (4) Maintaining documentation of public comments received on the MS4 program and associated MS4 program plan and the permittee's response.

b. No later than three months after this permit's effective date, the existing permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:

- (1) The effective MS4 permit and coverage letter;
- (2) The most current MS4 program plan or location where the MS4 program plan can be obtained;
- (3) The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department;
- (4) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained;
- (5) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status report for each year of the term covered by this permit no later than 30 days after submittal to the department;
- (6) A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1);
- (7) Methods for how the public can provide comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13; and

...

c. Traditional permittees shall implement no less than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

...

Table 2
Public Involvement Opportunities

Public involvement opportunities	Examples (provided as examples and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoration	Stream, watershed, shoreline, beach, or park clean-up day, adopt-a-water way program, tree plantings, and riparian buffer plantings
Public education activities	Booth at community fair, demonstration of stormwater control projects, climate change's effects on stormwater management, presentation of

	<i>stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks</i>
<i>Public meetings</i>	<i>Public meetings on proposed community stormwater management retrofits, green infrastructure development, ecosystem restoration projects, TMDL development, voluntary residential low impact development, climate change's effects on stormwater management, and other stormwater issues</i>
<i>Disposal or collection events</i>	<i>Household hazardous chemicals collection, vehicle fluids collection</i>
<i>Pollution prevention</i>	<i>Adopt-a-storm drain program, implement a storm drain marking program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program</i>

e. The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.

f. The permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, groundskeeping, and maintenance duties in order for an event to qualify as a public participation event.

g. Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity solicits participation from target audiences beyond staff or contractors with stormwater, groundskeeping, and maintenance duties.

h. The MS4 program plan shall include:

(1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;

(2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and

(3) A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup or the number of participants in a hazardous waste collection event.

i. The annual report shall include the following information:

(1) A summary of any public comments on the MS4 program received and how the permittee responded;

(2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1), excluding natural flooding complaints, and how the permittee responded;

(3) A webpage address to the permittee's MS4 program and stormwater website;

...

(5) A description of the public involvement activities implemented by the permittee, including any efforts to reach out and engage all economic and ethnic groups;

(6) A description of public education and outreach activities conducted that also included education regarding climate change;

(7) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and

(8) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.



Public Involvement and Participation Overview

The Town's public involvement and participation program meets the requirements of Part I E 2 of the MS4 permit. The Town has developed an SOP for receiving and responding to comments on the MS4 program and associated MS4 Program Plan. The Town has a dedicated stormwater webpage that includes all information required in the MS4 permit.

Public Involvement Opportunities

The Town implements at least four activities from Table 2 of the MS4 permit each year to provide an opportunity for public involvement in water quality and local restoration and clean-up projects.

Referenced Documents

- Public Involvement and Participation SOP (Appendix C).
- Stormwater Webpage:
<https://www.viennava.gov/residents/sustainability/protecting-the-chesapeake-bay>
- Make a Service Request Function:
<https://www.viennava.gov/engagement-central/make-a-service-request>



Best Management Practices

The following BMPs will be implemented in accordance with Part I E 2 of the permit.

BMP 2.1 – Stormwater Web Page

Objective: The objective of the stormwater webpage is to ensure that residents and businesses have readily available access to all MS4 program documents and reporting mechanisms.

Best Management Practices:

- Post the effective MS4 permit and coverage letter.
- Post the most current MS4 Program Plan within 30 days of an update.
- Post each annual report within 30 days of submittal to DEQ.
- Post the most current Chesapeake Bay TMDL action plan.
- Post the Chesapeake Bay TMDL implementation annual status report for each year of the permit cycle within 30 days of submittal to DEQ.
- Provide links to reporting functions from BMPs 2.2 and 2.3.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a snapshot of the stormwater webpage documenting all required elements.

Responsible Party: Public Works and Public Information.

BMP 2.2 – Public Reporting of Potential Illicit Discharges

Objective: The objective of this BMP is to promote the ability of the public to report illicit discharges, illegal dumping, spills, complaints about land disturbing activities, and other stormwater pollution concerns.

Best Management Practices:

- Provide information on how to report a potential illicit discharge or illegal dumping (including phone, email, and online forms) on the stormwater webpage.

Standard Operating Procedures and Policies: This BMP is supported by the Public Involvement and Participation SOP. Complaint investigation, response, and tracking is conducted in accordance with BMP 3.5.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a snapshot of the reporting functions on the stormwater webpage.

Responsible Party: Public Works and Public Information.

BMP 2.3 – Public Comments

Objective: This objective of this BMP is to promote the ability of the public to provide comments on the MS4 program and the associated MS4 Program Plan.

Best Management Practices:

- Provide information on how to provide comments on the stormwater webpage.
- Implement the Public Involvement and Participation SOP to document how the Town receives, tracks, responds to, and maintains documentation on public comments.

Standard Operating Procedures and Policies: This BMP is supported by the Public Involvement and Participation SOP.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report: (1) a snapshot of the public comments reporting function; and, (2) a summary of any public comments on the MS4 Program Plan and the Town's response.

Responsible Party: Public Works and Public Information.

BMP 2.4 – Public Involvement Opportunities

Objective: The objective of this BMP is to increase the public's awareness and participation in the Town's water quality and pollution prevention efforts.

Best Management Practices:

- Implement no less than four public involvement activities per year from two or more categories in Table 2 of the MS4 permit. Planned activities include the following:

Description	Time Period	Metric	Permit Strategy
Town of Vienna Clean Up Days	Twice Annually	Number of Volunteers; Amount of Trash Collected	Restoration
Family Fishing Rodeo	Annually in March or April	Number of Participants; Materials Distributed	Public Education Activity
Storm Drain Marking Program	Ongoing	Number of Volunteers; Number Storm Drains Marked	Pollution Prevention
Green Expo	Annually in April	Number of Participants; Materials Distributed	Public Education Activity
Specific activities may vary by year.			

- Continue to include guidelines on the stormwater webpage for submitting a request for the Town to promote a volunteer activity.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a summary of the activities implemented and the metrics from the above table.

Responsible Parties: Public Works and Parks and Recreation.

BMP 2.5 – Town Council Updates

Objective: It is important for elected officials to have a thorough understanding of the MS4 Program Plan and to provide feedback on the effectiveness of the program.

Best Management Practices:

In FY27 or FY28, provide Town Council with an update on stormwater management program activities, including the Chesapeake Bay and local TMDLs.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will include in the FY27 or FY28 annual report any meeting materials and a summary of significant feedback, if any.

Responsible Parties: Public Works and Town Clerk.



MCM #2 Implementation Schedule

The Town will implement the BMPs for MCM #2 in accordance with the following schedule.

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
2.1	Stormwater Web Page						
	Host the stormwater webpage with information required by permit.	►	►	►	►	►	Public Works; Public Information
2.2	Public Reporting of Potential Illicit Discharges						
	Provide information on how to report a potential illicit discharge on the stormwater web page.	►	►	►	►	►	Public Works; Public Information
2.3	Public Comments						
	Provide information on how to register public comments on the stormwater web page.	►	►	►	►	►	Public Works; Public Information
	Implement the Public Involvement and Participation SOP to document comment tracking and response.	►	►	►	►	►	Public Works
2.4	Public Involvement Opportunities						
	Promote or implement four local watershed activities annually.	►	►	►	►	►	Public Works; Parks and Recreation; Public Information
2.5	Town Council Update						
	Provide MS4 program update to Town Council.				■	■	Public Works; Town Clerk

MCM #3: Illicit Discharge Detection and Elimination

Permit Reference: Part I E 3

a. The permittee shall develop and maintain an accurate MS4 map and information table as follows:

(1) An updated map of the MS4 owned or operated by the permittee within the MS4 regulated service area no later than 24 months after the permit effective date that includes, at a minimum:

(a) MS4 outfalls discharging to surface waters, except as follows:

....

(b) A unique identifier for each mapped item required in Part I E 3;

(c) The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;

(d) MS4 regulated service area; and

(e) Stormwater management facilities owned or operated by the permittee.

(2) The permittee shall maintain an outfall information table associated with the MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a). The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following:

(a) A unique identifier as specified on the MS4 map;

(b) The latitude and longitude of the outfall or point of discharge;

(c) The estimated regulated acreage draining to the outfall or point of discharge;

(d) The name of the receiving water;

(e) The 6th Order Hydrologic Unit Code of the receiving water;

(f) An indication as to whether the receiving water is listed as impaired in the Virginia 2022 305(b)/303(d) Water Quality Assessment Integrated Report; and

(g) The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.

(3) No later than 24 months after permit issuance, the permittee shall submit to DEQ a format file geodatabase or two shapefiles that contain at a minimum:

(a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (2); and

(b) A polygon feature class or shapefile for the MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information:

...

(4) All file geodatabase feature classes or shapefiles shall be submitted in the following data format standards:

(a) Point data in NAD83 or WGS84 decimal degrees global positional system coordinates;

(b) Data projected in Virginia Lambert Conformal Conic format;

(c) Outfall location accuracy shall be presented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy; and

(d) Metadata that shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection.

(5) No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.

(6) The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.

b. The permittee shall prohibit, through ordinance, policy, standard operating procedures, or other legal mechanism, to the extent allowable under federal, state, or local law, regulations, or ordinances, unauthorized nonstormwater discharges into the MS4. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.

c. The permittee shall maintain, implement, and enforce illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping, to the MS4 to effectively eliminate the unauthorized discharge. Written procedures shall include:

(1) A description of the legal authorities, policies, standard operating procedures or other legal mechanisms available to the permittee to eliminate identified sources of ongoing illicit discharges including procedures for using legal enforcement authorities.

(2) Dry weather field screening protocols to detect, identify, and eliminate illicit discharges to the MS4. The protocol shall include:

(a) A prioritized schedule of field screening activities and rationale for prioritization determined by the permittee based on such criteria as age of the infrastructure, land use, historical illegal discharges, dumping or cross connections;

(b) If the total number of MS4 outfalls is equal to or less than 50, a schedule to screen all outfalls annually;

(c) If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years;

(d) The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges;

(e) Each observation point screened may be counted as one outfall screening activity equivalent and counted toward the requirements of Part I E 3 c (2) (b) or (2) (c); however, at least 50% of the minimum annual screening events must include outfall screening;

(f) Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however, once the resolution of the investigation and the date the investigation was closed as been documented, and observation point may be established for future screening events;

(g) A checklist or mechanism to track the following information for dry weather screening events:

...

(3) A timeframe upon which to conduct an investigation to identify and locate the source of any observed unauthorized nonstormwater discharge. Priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety. Discharges authorized under a separate VPDES or state permit require no further action under this permit.

(4) Methodologies to determine the source of all illicit discharges. If the permittee is unable to identify the source of an illicit discharge within six months of beginning the investigation then the permittee shall document that the source remains unidentified. If the observed discharge is intermittent, the permittee shall document that attempts to observe the discharge flowing were unsuccessful.

(5) Methodologies for conducting a follow-up investigation for illicit discharges that are continuous or that permittees expect to occur more frequently than a one-time discharge to verify that the discharge has been eliminated except as provided for in Part I E 3 c (4);

(6) A mechanism to track all illicit discharge investigations to document the following:

- (a) The dates that the illicit discharge was initially observed, reported, or both;*
- (b) The results of the investigation, including the source, if identified;*
- (c) Any follow-up to the investigation;*
- (d) Resolution of the investigation; and*
- (e) The date that the investigation was closed.*

d. The MS4 program plan shall include:

- (1) The MS4 map and information table required by Part I E 3 a. The map and information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;*
- (2) Copies of written notifications of new physical interconnections given by the permittee to other MS4s; and*
- (3) The IDDE procedures described in Part I E 3 c.*

e. The annual report shall include:

- (1) A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year;*
- (2) The total number of outfalls screened during the reporting period as part of the dry weather screening program; and*
- (3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:*
 - (a) The location and source of illicit discharge;*
 - (b) The dates that the discharge was observed, reported, or both;*
 - (c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);*
 - (d) How the investigation was resolved;*
 - (e) A description of any follow-up activities; and*
 - (f) The date the investigation was closed.*



Illicit Discharge Detection and Elimination Program Overview

The Town has developed a comprehensive program to maintain an accurate understanding of the storm sewer system and to identify and eliminate illicit discharges and illegal dumping.

A discharge is illicit if it is not covered by the MS4 permit or another VPDES permit issued by DEQ. The following non-stormwater discharges are authorized under the MS4 permit.

Storm Sewer System Map

The Town conducted a comprehensive update of its storm sewer system map as part of the development of the draft Phase III Chesapeake Bay TMDL Action Plan. The map is updated on a continuous basis. The map and outfall information table will be updated and submitted to DEQ as required in Part I E 3 a of the MS4 permit.

Authorized Non-stormwater Discharges	
Water line flushing, managed in a manner to avoid an instream impact	Landscape irrigation water
Diverted stream flows	Rising groundwaters
Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20)	Uncontaminated pumped groundwater
Discharges from potable water sources managed to avoid instream impact	Foundation drains
Airconditioning condensate	Irrigation water
Springs	Water from crawl space pumps
Footing drains	Lawn Watering
Individual residential car washing	Flows form riparian habitats and wetlands
Dechlorinated freshwater swimming pool discharges managed in a manner to avoid instream impact	Street and pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact
Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces to not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge	Discharges or flows from emergency firefighting activities
Discharges or flows of water for fire prevention or firefighting activities managed in a manner to avoid instream impact in accordance with 9.1-207.1 of the Code of Virginia	Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate free, water-based cleaners in accordance with 15.2-2114.1 of the Code of Virginia
Other activities generating discharges identified by DEQ as not requiring VPDES authorization	

Description of Legal Authorities

Adequate legal tools are needed to effectively prohibit illicit discharges to the storm sewer system and to conduct necessary enforcement in the case of an illicit discharge. The Town prohibits illicit discharges in Section 16.2.2 of the Town Code.

Illicit Discharge Detection and Elimination Plan

The Town has developed an Illicit Discharge Detection and Elimination Plan (IDDE plan) in accordance with the requirements of the MS4 permit.

TMDL Action Plans

The Town has developed TMDL action plans for nutrients, sediment, bacteria, chloride, and PCBs. Several of these plans have illicit discharge components that have been incorporated into this MCM.

Referenced Documents

- Storm Sewer System Map and Outfall Information Table (Appendix D).
- Vienna Town Code Section 16.2.2
https://library.municode.com/va/vienna/codes/code_of_ordinances?nodeId=PTIICOOR_CH16STSI_ART1INGE_S16-2.2STDRFAMACL
- Illicit Discharge Detection and Elimination Plan (Appendix E).
- TMDL Action Plans (Appendix B).



Best Management Practices

The following BMPs will be implemented in accordance with Part I E 3 of the permit, the Town's IDDE plan, and applicable elements of TMDL action plans.

BMP 3.1 – Storm Sewer System Map

Objective: The objective of this BMP is to ensure that the Town has a full understanding of the system so that the Town can quickly track and correct illicit discharges, identify physical interconnections between the Town and other MS4s, and accurately calculate baseline and target loads in the Chesapeake Bay TMDL Action Plan.

Best Management Practices:

- By November 1, 2025, update the MS4 map and submit to DEQ a geodatabase or shapefiles containing the information required in Part I E 3 a (3) of the MS4 permit.
- By October 1 of each year, update the storm sewer system map and outfall table to include any new outfalls and/or reflect any newly approved TMDLs.
- Each year, provide written notification to downstream MS4s of any new interconnection or newly discovered interconnection.

Standard Operating Procedures and Policies: All policies are reflected in the Storm Sewer System Map and Outfall Information Table.

Measurable Goals and Evaluation Criteria: The Town will provide DEQ with the geodatabase or shapefiles by November 1, 2025. The Town will include in each annual report: (1) documentation of updates to the storm sewer system map and outfall table; and, (2) copies of notifications to downstream MS4s, if any.

Responsible Party: Information Technology and Public Works.

BMP 3.2 – Prohibition on Illicit Discharges

Objective: The objective of this BMP is to ensure that the legal tools are in place to effectively prohibit illicit discharges to the storm sewer system and to conduct necessary enforcement in the case of an illicit discharge.

Best Management Practices:

- Enforce the provisions of Section 16.2.2 of the Town Code.

Standard Operating Procedures and Policies: This BMP is implemented through Section 16.2.2 of the Town Code.

Measurable Goals and Evaluation Criteria: The Town will annually assess whether any changes are necessary to the Town Code. The Town will document any changes in the appropriate annual report.

Responsible Party: Town Attorney and Public Works.

BMP 3.3 – Written Procedures for Illicit Discharges and Illegal Dumping

Objective: The objective of this BMP is to establish procedures to detect, identify, and address unauthorized nonstormwater discharges and illegal dumping into the storm sewer system. Standardized procedures ensure consistency in the Town's approach.

Best Management Practices:

- Implement the IDDE plan.
- Incorporate relevant portions of the IDDE plan into field personnel training in BMP 6.3.

Standard Operating Procedures and Policies: This BMP is implemented through the IDDE plan.

Measurable Goals and Evaluation Criteria: The Town will document any changes to the written procedures during the reporting period in the associated annual reports.

Responsible Party: Public Works and Town Attorney.

BMP 3.4 – Dry Weather Outfall Screening

Objective: The purpose of this BMP is to identify and eliminate illicit discharges as soon as possible to minimize impacts to water quality. The Town's IDDE plan includes dry weather outfall inspection procedures, written inspection and investigation protocols, and remedies for discovered discharges.

Best Management Practices:

- Perform dry weather outfall screening for at least 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The Town will consider implementation of a risk-based approach to outfall screening in accordance with Part I E 3 c (2) (d) of the MS4 permit.

Standard Operating Procedures and Policies: This BMP is implemented through the IDDE plan.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a summary of all dry weather outfall monitoring activities including the total number of outfalls screened, whether a risk-based approach was utilized, the screening results, and detail of any follow up actions. Tracking will be reported as part of BMP 3.5.

Responsible Party: Public Works.

BMP 3.5 – Track and Report Illicit Discharges

Objective: The MS4 permit requires that the Town track and process complaints about potential illicit discharges and coordinate the appropriate response. Potential illicit discharges are identified through complaints from Town residents (BMP 2.2), the Town’s dry weather outfall screening program (BMP 3.4), or by Town staff trained to identify illicit discharges (BMP 6.3).

Best Management Practices:

- Maintain a tracking database to record potential and actual illicit discharges.

Standard Operating Procedures and Policies: This BMP is implemented through the IDDE plan.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a summary of all potential and actual illicit discharges in the tracking database. For each case, the Town will provide: (1) the location and source of the illicit discharge; (2) the date the discharge was observed or reported; (3) the means of discovering the discharge; (4) how the investigation was resolved; (5) follow up activities; and, (6) closure date.

Responsible Party: Public Works.

BMP 3.6 – Site-Specific Illicit Discharge Assessment and Prevention

Objective: The TMDL action plans for bacteria and sediment identify specific sites that have a higher potential for the discharge of these pollutants. The objective of this BMP is to continually assess these sites and to implement strategies as necessary to reduce sources of bacteria and sediment.

Best Management Practices:

- Maintain pet waste stations identified in the Difficult Run and Accotink Creek Bacteria TMDL Action Plan to provide a convenient place to dispose of pet waste.
- Annually, conduct walk through of medium risk and priority sites for the presence of pet waste to determine whether medium risk sites should be re-classified as priority sites and to assess the effectiveness of implemented management strategies. To provide a consistent basis from which to measure the effectiveness of the Town’s efforts, the Town will use representative segments established in the previous permit cycle. The site assessments will be conducted between April 1 and June 30 of each year.

- Annually, assess the condition of Waters and Caffi Fields, Meadows Lane Park, and Southside Park, and take corrective action as necessary, to ensure that they are not a source of sediment pollution.

Standard Operating Procedures and Policies: This BMP is supported by the Town's TMDL action plans for bacteria and sediment.

Measurable Goals and Evaluation Criteria: The Town will provide a summary of any pet waste stations installed at priority sites and the results of the annual walk through of medium risk and priority sites. The Town will provide a summary of the results of the annual assessment of Waters and Caffi Fields, Meadows Lane Park, and Southside Park, and any corrective actions taken to address sediment pollution.

Responsible Party: Public Works and Parks and Recreation.



MCM #3 Implementation Schedule

The Town will implement the BMPs for MCM #3 in accordance with the following schedule.

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
3.1	Storm Sewer System Map						
	Maintain the MS4 map and outfall information table, no later than October 1.	▶	▶	▶	▶	▶	Public Works; Information Technology
	Update MS4 map and submit geodatabase or shapefiles to DEQ.			■			Public Works; Information Technology
	Notify downstream MS4s of any new interconnections, as applicable.	▶	▶	▶	▶	▶	Public Works
3.2	Prohibition of Illicit Discharges						
	Enforce the provisions of Section 16.2.2 of the Town Code.	▶	▶	▶	▶	▶	Town Attorney; Public Works
3.3	Written Procedures for Illicit Discharges and Dumping						
	Implement IDDE plan and incorporate into training	▶	▶	▶	▶	▶	Public Works
3.4	Dry Weather Outfall Screening						
	Annually perform dry weather screening on 50 outfalls.	▶	▶	▶	▶	▶	Public Works

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
3.5	Track and Report Illicit Discharges						
	Maintain tracking database.	►	►	►	►	►	Public Works
3.6	Site-Specific Illicit Discharge Assessment and Prevention						
	Maintain pet waste stations at priority sites.	►	►	►	►	►	Public Works; Parks and Recreation
	Conduct walk through of medium risk and priority sites for pet waste.	►	►	►	►	►	Public Works
	Assess condition of Waters and Caffi Fields, Meadows Lane Park, and Southside Park and take corrective action as necessary.	►	►	►	►	►	Public Works; Parks and Recreation

MCM #4: Construction Site Stormwater Runoff Control

Permit Reference: Part I E 4

a. The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The permittee shall control construction site stormwater runoff as follows:

(1) If the traditional permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);

....

b. The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.

c. Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;

d. The permittee's MS4 program plan shall include:

(1) If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program;

....

(4) A description of the legal authorities utilized to ensure compliance with Part I E 4 a for erosion and sediment control and construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

(5) For traditional permittees, written inspection procedures to ensure VESCP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60 B;

....

(9) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site stormwater runoff control requirements in Part I E 4.

e. The annual report shall include the following:

(1) Total number of erosion and sediment control inspections conducted;

(2) Total number of each type of compliance action and enforcement action implemented; and

....



Construction Site Stormwater Runoff Control Overview

The Town must ensure that construction activities minimize impacts to water quality and meet all applicable local, state, and federal requirements. The following provides an overview of the Town's program in accordance with the requirements of Part I E 4 of the permit.

Description of Legal Authorities

The Town's construction site stormwater runoff control program includes Town Code Chapter 23, Article 2 "Erosion and Sediment Control" and Article 3 "Stormwater Management." Article 2 implements the requirements of the Virginia Erosion and Sediment Control Law and attendant regulations. Article 3 implements the requirements of the Virginia Stormwater Management Act and attendant regulations.

In accordance with § 62.1-44.15:24 through § 62.1-44.15:50 of the Code of Virginia, the Town must consolidate erosion and sediment control and stormwater management requirements under the Virginia Erosion and Stormwater Management Act (VESMA) no later than July 1, 2024. The Town Council will update the Town Code accordingly.

Written Plan Review Procedures

The Department of Public Works is the Plan Approving Authority, and the Public Works Director maintains certification as a program administrator. The Town reviews erosion and sediment control plans and stormwater management plans for proposed land-disturbing activities that disturb 2,500 square feet or greater. Proposed land disturbing activities must receive plan approval or secure the appropriate agreement in lieu of a plan prior to the commencement of land-disturbing activities. The Town's "Land Disturbing Permit" and "Submittal and Review of Stormwater Management and Erosion and Sediment Control Plans Standard Operating Procedures" are used to ensure that plans meet the requirements adopted in the Town Code.

Written Inspection and Enforcement Procedures

The Town's inspectors maintain the required qualified personnel designation for erosion and sediment control, and the appropriate staff has received DEQ Stormwater Inspector Training, so that staff can perform comprehensive onsite stormwater pollution prevention plan (SWPPP) inspections. The inspector completes the appropriate inspection report and notes any applicable corrective actions, and changes to the SWPPP if necessary, along with a timetable for completing the corrective action. If there is a failure to comply with such measures within the time specified, the plan or revision may be revoked and the responsible party will be deemed to be in violation and upon conviction will be subject to the penalties provided in Town Code Section 23-10. The Town's "Stormwater Management Construction Inspection and Enforcement Standard Operating Procedures" is used to ensure compliance with the Town Code.

Certifications

All Town employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators are required to obtain the appropriate certifications required under the VESCP. The Town will include copies of applicable certifications with each annual report.

Roles and Responsibilities

Review of development plans for projects within the Town, including erosion and sediment control plans and stormwater management plans, is handled by the DPW Administration Division. Final approval of plans is the responsibility of the Director of DPW.

Inspection and enforcement is handled by the DPW Administration Division through periodic site inspections in accordance with the Town's approved VSMP. Enforcement actions are the

responsibility of the Director and Deputy Director of DWP in coordination with the Town Attorney.

Reference Documents

- Vienna Town Code Chapter 23, Article 2 “Erosion and Sediment Control”
https://library.municode.com/va/vienna/codes/code_of_ordinances?nodeId=PTIICOOR_CH23ENCO
- Land Disturbing Permit (Appendix F).
- Submittal and Review of Stormwater Management and Erosion and Sediment Control Plans Standard Operating Procedures (Appendix F).
- Stormwater Management Construction Inspection and Enforcement Standard Operating Procedures (Appendix F).



Best Management Practices

The following BMPs will be implemented in accordance with Section II.B.4 of the permit.

BMP 4.1 – Maintain Local Program Consistency

Objective: The objective of this BMP is to minimize impacts to water quality from construction activities by maintaining consistency with the Virginia Erosion and Sediment Control Law, the Virginia Stormwater Management Act, the Virginia Erosion and Stormwater Management Act, and their attendant regulations.

Best Management Practices:

- Implement a program consistent with state law and regulations.
- Train all plan review, inspection, and enforcement staff as required by state law and regulation.

Standard Operating Procedures and Policies: This BMP is implemented through Town Code Chapter 23 and the procedures cited in Reference Documents.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a summary of any changes in program consistency, if applicable, and copies of employee certifications. By July 1, 2024, update the Town Code in accordance with the VESMA.

Responsible Party: Public Works and Town Attorney.

BMP 4.2 – Land Disturbing Activities Tracking System

Objective: The objective of this BMP is to ensure that all required land disturbing activity data needed to be reported to DEQ is adequately and accurately tracked.

Best Management Practices:

- Track and submit to DEQ all land disturbing activities in accordance with permit requirements.

Standard Operating Procedures and Policies: Excel spreadsheet or other means to track land disturbing activities and erosion and sediment controls.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report: (1) the total number of inspections conducted; and, (2) the number and type of compliance action and enforcement actions implemented.

Responsible Party: Public Works.



MCM #4 Implementation Schedule

The Town will implement the BMPs for MCM #4 in accordance with the following schedule.

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
4.1	Maintain Local Program Consistency						
	Implement consistent construction site stormwater control program.	▶	▶	▶	▶	▶	Public Works; Town Attorney
	Update the Town Code in accordance with the VESMA.	■					Town Attorney
	Train all plan review, inspection, and enforcement staff and report certifications.	▶	▶	▶	▶	▶	Public Works
4.2	Land Disturbing Activities Tracking System						
	Track and report annually on land-disturbing activities.	▶	▶	▶	▶	▶	Public Works

MCM #5: Post-Construction Stormwater Management

Permit Reference: Part I E 5

a. The permittee shall address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program as follows:

(1) If the traditional permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as maintain an inspection and maintenance program in accordance with Part I E 5 b and c;

...

b. The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee as follows:

(1) Within six months of the permit effective date, the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities. The permittee may use inspection and maintenance specifications available from the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines;

(2) Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations;

(3) The permittee shall inspect stormwater management facilities owned or operated by the permittee no less frequently than once per year. The permittee may choose to implement an alternative schedule to inspect these stormwater management facilities based on facility type and expected maintenance needs provided that the alternative schedule and rationale is included in the MS4 program plan. The alternative inspection frequency shall be no less often than once per five years; and

(4) If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).

c. For traditional permittees described in Part I E 5 a (1), (2), or (3) the permittee shall:

(1) Implement an inspection and enforcement program for stormwater management facilities not owned by the permittee (i.e., privately owned) that includes:

(a) An inspection frequency of no less often than once per five years for all privately owned stormwater management facilities that discharge into the MS4; and

(b) Adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a maintenance agreement, including an inspection schedule to the extent allowable under state or local law or other legal mechanism;

(2) Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner;

(3) The permittee may develop and implement a progressive compliance and enforcement strategy provided that the strategy is included in the MS4 program plan; and

(4) The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114 C.

d. The MS4 program plan shall include:

(1) If the permittee implements a VSMP in accordance with Part I E 5 a (1), (2), or (3):

(a) A copy of the VSMP approval letter issued by the department;

(b) Written inspection procedures and all associated documents utilized in the inspection of privately

owned stormwater management facilities; and

(c) Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned stormwater management facilities.

....

(3) A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;

(4) Written inspection and maintenance procedures and other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and

(5) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program.

e. The annual report shall include the following information:

(1) If the traditional permittee implements a VSMP in accordance with Part I E 5 a (1), (2), or (3):

(a) The number of privately owned stormwater management facility inspections conducted; and

(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;

(2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;

(3) A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;

(4) For traditional permittees as specified in Part I E 5 a (1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities;

(5) A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and

(6) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5.



Post-Construction Site Stormwater Runoff Control Overview

The Town must ensure that post-construction controls minimize the long-term impacts to water quality caused by development and that the Town meets all applicable local, state, and federal requirements. The following provides an overview of the Town's program in accordance with the requirements of Part I E

5 of the permit.

Description of Legal Authorities

The Town's post-construction stormwater requirements are included in Town Code Chapter 23, Article 3 "Stormwater Management." Article 3 implements the requirements of the Virginia Stormwater Management Act and attendant regulations. The Town has been approved as a VSMP authority by DEQ.

In accordance with § 62.1-44.15:24 through § 62.1-44.15:50 of the Code of Virginia, the Town must consolidate erosion and sediment control and stormwater management requirements under the Virginia Erosion and Stormwater Management Act (VESMA) no later than July 1, 2024. The Town Council will update the Town Code accordingly.

Written Stormwater Facility Design and Installation Procedures

Stormwater management facilities must be designed and installed properly to ensure that pollutant reduction requirements are met and that the facility provides long-term water quality benefits. The Town reviews development plans to ensure that projects meet the appropriate water quality and water quantity design criteria contained in the VSMP regulations, DEQ-approved standards and specifications, the Virginia BMP Clearinghouse and Virginia Stormwater Management Handbook, and the Fairfax County Public Facilities Manual, as applicable. As built stormwater management plans must contain the signature and stamp of the licensed professional consultant and owner certification.

The Town's "Stormwater Management Plan Review Checklist" and any supplemental review materials in Appendix 3 of the Virginia Stormwater Management Handbook are used to verify that minimum standards are met in accordance with the Town Code. Public Works utilizes the Virginia Stormwater BMP Clearinghouse or the Fairfax County Public Facilities Manual, whichever is more stringent unless waived by the Director of Public Works in accordance with Town Code Section 23-17.A.1, to review stormwater management facility design.

Written Inspection, Compliance, and Enforcement Procedures

Maintenance of both public and private BMPs is essential to ensuring that these investments continue to provide their intended water quality benefits. The Town annually inspects all public and private stormwater management facilities. The Town's "Stormwater Facility Maintenance and Inspection Standard Operating Procedures" and "Private Stormwater Management Facility Inspection and Maintenance Report" establish the Town's protocols and procedures in accordance with the Town Code and the VSMP regulations. The Town requires the execution of a "Stormwater Management Facility Maintenance Agreement" for all private stormwater management facilities. The agreement is entered into the land records of Fairfax County.

Certifications

All Town employees and contractors implementing the stormwater program are required to obtain the appropriate certifications required under the VSMP. The Town will include copies of applicable certifications with each annual report.

Roles and Responsibilities

The DPW Administration Division conducts inspections of permanent public and private stormwater management facilities annually unless the Town develops an alternative maintenance schedule and updates the MS4 Program Plan accordingly. The Town Attorney, with support from the DPW Administration Division, institutes enforcement protocols to address determinations of non-compliance.

Reference Documents

- Vienna Town Code Chapter 23, Article 3 "Stormwater Management"
https://library.municode.com/va/vienna/codes/code_of_ordinances?nodeId=PTIICOOR_CH23ENCO

- VSMP Approval Letter (Appendix F).
- Fairfax County Public Facilities Manual Site Plan and Subdivision Site Plan Checklists
<https://www.fairfaxcounty.gov/landdevelopment/public-facilities-manual>
- Virginia Stormwater BMP Clearinghouse
<https://www.swbmp.vwrrc.vt.edu/>
- Stormwater Management Plan Review Checklist (Appendix F).
- Stormwater Facility Maintenance and Inspection Standard Operating Procedures (Appendix F)
- Private Stormwater Management Facility Inspection and Maintenance (Appendix F).
- Stormwater Management Facility Maintenance Agreement (Appendix F).



Best Management Practices

The following BMPs will be implemented in accordance with Section II.B.5 of the permit.

BMP 5.1 – Maintain Local Program Consistency

Objective: The objective of this BMP is to minimize the long-term impacts to water quality caused by development by maintaining consistency with the Virginia Stormwater Management Act, the Virginia Erosion and Stormwater Management Act, and their attendant regulations.

Best Management Practices:

- Implement a program consistent with state law and regulations.
- Train all plan review, inspection, and enforcement staff as required by state law and regulation.

Standard Operating Procedures and Policies: This BMP is implemented through Town Code Chapter 23 and the procedures cited in Reference Documents.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a summary of any changes in program consistency, if applicable, and copies of employee certifications. By July 1, 2024, update the Town Code in accordance with the VESMA.

Responsible Party: Public Works and Town Attorney.

BMP 5.2 – Stormwater Facility Maintenance, Inspection, and Enforcement

Objective: The objective of this BMP is to ensure that stormwater management facilities continue to provide their intended water quality benefits.

Best Management Practices:

- Require all new BMP facilities to enter into a maintenance agreement with the Town.
- Inspect each public stormwater facility at least once annually.

- Inspect each private stormwater facility at least once every five years and take follow-up and/or enforcement action as necessary.
- Report new facilities to the DEQ Construction Stormwater Database or the DEQ BMP Warehouse as appropriate.
- Report facility inspections to the DEQ BMP Warehouse.

Standard Operating Procedures and Policies: This BMP is implemented through Town Code Chapter 23 and the procedures cited in Reference Documents.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report: (1) the number of private facilities inspected each year; (2) the number and type of enforcement actions taken against private facilities, if applicable; (3) the number of public facilities inspected each year; (4) a description of significant maintenance, repair, or retrofit activities performed on public facilities; (5) confirmation that new facilities were reported either through the DEQ Construction Stormwater Database or the DEQ BMP Warehouse; and, (6) confirmation that inspections of facilities were electronically reported using the DEQ BMP Warehouse.

Responsible Party: Public Works.

BMP 5.3 – Stormwater Facility Tracking Database

Objective: The objective of this BMP is to ensure that all Town maintenance, inspection, and enforcement activities are properly tracked.

Best Management Practices:

- Maintain the Town's stormwater management facility tracking database in a manner that facilitates maintenance, inspection, and enforcement activities.

Standard Operating Procedures and Policies: No additional SOPs or policies are required to implement this BMP.

Measurable Goals and Evaluation Criteria: The Town will confirm ongoing maintenance of the database and submit a list of all new facilities brought online during the reporting period with the appropriate annual report. .

Responsible Party: Public Works.



MCM #5 Implementation Schedule

The Town will implement the BMPs for MCM #5 in accordance with the following schedule.

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
5.1	Maintain Local Program Consistency						
	Implement consistent post-construction site stormwater control program.	▶	▶	▶	▶	▶	Public Works; Town Attorney
	Update the Town Code in accordance with the VESMA.	■					Town Attorney
	Train all plan review, inspection, and enforcement staff and report certifications.	▶	▶	▶	▶	▶	Public Works
5.2	Stormwater Facility Maintenance, Inspection, and Enforcement						
	Require all new stormwater facilities to enter into a maintenance agreement with the Town.	▶	▶	▶	▶	▶	Public Works; Town Clerk
	Inspect private facilities at least once every five years.	▶	▶	▶	▶	▶	Public Works
	Inspect public facilities once annually or in accordance with an adopted alternative schedule.	▶	▶	▶	▶	▶	Public Works
	Report new facilities to the DEQ Construction Stormwater Database or the DEQ BMP Warehouse as appropriate.	▶	▶	▶	▶	▶	Public Works
	Report facility inspections to the DEQ BMP Warehouse	▶	▶	▶	▶	▶	Public Works
5.3	Stormwater Facility Tracking Database						
	Maintain the Town's stormwater facility database.	▶	▶	▶	▶	▶	Public Works

MCM #6: Pollution Prevention and Good Housekeeping

Permit Reference: Part I E 6

a. The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee, designed to meeting the following objectives:

- (1) Prevent illicit discharges;*
- (2) Ensure the permittee staff or contractors properly dispose of waste materials, including landscape wastes, and prevent waste materials from entering the MS4;*
- (3) Prevent the discharge of wastewater wash water not authorized in accordance with 9VAC25-890-20 D 3 u, into the MS4 without authorization under a separate VPDES permit; and*
- (4) Minimize the pollutants in stormwater runoff;*

b. The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities:

- (1) Road, street, sidewalk, and parking lot maintenance and cleaning;*
 - (a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with Part I E to include implementation of best practices for anti-icing and deicing agent application, transport, and storage;*
 - (b) Procedures developed in accordance with Part I E shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus;*
- (2) Renovation and significant exterior maintenance activities (e.g. painting, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months after permit issuance;*
- (3) Discharging water pumped from construction and maintenance activities not covered by another permit covering such activities;*
- (4) Temporary storage of landscaping materials;*
- (5) Maintenance of permittee owned or operated vehicles and equipment (i.e., prevent pollutant discharges from leaking permittee vehicles and equipment);*
- (6) Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations*

c. The permittee shall require through the use of contract language, training, written procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities described in Part I E 6 b follow established good housekeeping procedures and use appropriate control measures to minimize the discharge of pollutants to the MS4.

d. The written procedures established in accordance with Part I E 6 a and b shall be utilized as part of the employee training program, and the permittee shall develop a written training plan for applicable field personnel that ensures the following:

- (1) Applicable field personnel shall receive training in the prevention, recognition, and elimination of illicit discharges no less often than once per 24 months*
- (2) Employees performing road, street, sidewalk, and parking lot maintenance shall receive training in good housekeeping procedures required under Part I E 6 b (1) no less often than once per 24 months;*
- (3) Employees working in and around facility maintenance, public works, or recreational facilities shall receive training in applicable Part I E 6 a and b good housekeeping procedures required no less often than once per 24 months;*

(4) Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less often than once per 24 months;

(5) Employees whose duties include emergency spill control and response shall be trained in spill control and response. Emergency responders, such as firefighters and law-enforcement officers, trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan; and

(6) Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification.

e. The permittee shall maintain documentation of each training activity conducted by the permittee to fulfill the requirements of Part I E 6 d for a minimum of three years after training activity completion. The documentation shall include the following information:

(1) The date when applicable employees have completed the training activity;

(2) The number of employees who have completed the training activity; and

(3) The training objectives and good housekeeping procedures required under Part I E 6 a covered by training activity. f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.

f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.

....

i. The permittee shall maintain and implement a site specific SWPPP for each high-priority facility identified as defined in 9VAC25-890-1 that does not have or require separate VPDES permit coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff:

(1) Areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater;

(2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;

(3) Material handling equipment;

(4) Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);

(5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);

(6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;

(7) Waste material except waste in covered, nonleaking containers (e.g., dumpsters);

(8) Application or disposal of process wastewater (unless otherwise permitted); or

(9) Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

j. Each SWPPP as required in Part I E 6 g shall include the following:

(1) A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing

source controls, and receiving water bodies;

(2) A description and checklist of the potential pollutants and pollutant sources;

(3) A description of all potential nonstormwater discharges;

(4) A description of all structural control measures, such as stormwater management facilities and other pollutant source controls, applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to the SWPPP), such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4;

(5) A maintenance schedule for all stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4);

(6) Site specific written procedures designed to reduce and prevent pollutant discharge that incorporate by reference applicable good housekeeping procedures required under Part I E 6 a and b;

(7) A description of the applicable training as required in Part I E 6 d (4);

(8) An inspection frequency of no less often than once per year and maintenance requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP;

(9) A log of each unauthorized discharge, release, or spill incident reported in accordance with Part IV G including the following information:

(a) Date of incident;

(b) Material discharged, released, or spilled; and

(c) Estimated quantity discharged, released or spilled.

(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance with Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and

(11) The point of contact for SWPPP implementation.

k. No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which a SWPPP has not been developed to determine if the facility meets any of the conditions described in Part I E 6 g. If the facility is determined to need a SWPPP, the permittee shall develop a SWPPP meeting the requirements of Part I E 6 h no later than December 31 of that same year. The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain a SWPPP in accordance with Part I E 6 g and this list shall be available upon request.

l. The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part IV G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

m. The SWPPP shall be kept at the high-priority facility and utilized as part of employee SWPPP training required in Part I E 6 d (4). The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

n. If activities change at a facility such that the facility no longer meets the definition of a high-priority facility, the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.

o. If activities change at the facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage.

p. The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area

greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.

q. Within 12 months of permit coverage, the permittee shall identify contiguous areas greater than one acre located in expanded 2020 census urban areas with population of at least 50,000 and within the permittee's MS4 service area requiring turf and landscape nutrient management plans.

r. Within 36 months of permit coverage, the permittee shall implement turf and landscape nutrient management plans on contiguous areas greater than one acre located in expanded 2020 census urban areas with a population of least 50,000 and within the permittee's MS4 service area.

s. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization.

t. Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval.

u. Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal within six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee.

v. Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

....

x. The MS4 program plan shall include:

(1) A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I E 6 a and b;

(2) A list of all high-priority facilities owned or operated by the permittee required to maintain a SWPPP in accordance with Part I E 6 g that includes the facility name, facility location, and location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference;

(3) A list of locations for which turf and landscape nutrient management plans are required in accordance with Part I E 6 n and s, including the following information:

(a) The total acreage covered by each nutrient management plan;

(b) The DCR approval date and expiration date for each nutrient management plan; and

(c) The location of the nutrient management plan hardcopy or electronic document being maintained;

(4) A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate; and

(5) The written training plan as required in Part I E 6 d.

y. The annual report shall include the following:

(1) A summary of any written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period;

(2) A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period;

(3) A list of any new SWPPPs developed in accordance with Part I E 6 I during the reporting period;

- (4) A summary of any SWPPPs modified in accordance with Part I E 6 j, 6 l, or 6 m;
- (5) The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period;
- (6) The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired);
- (7) A list of the training activities conducted in accordance with Part I E 6 d, including the following information:
- (a) The completion date for the training activity;
 - (b) The number of employees who completed the training activity; and
 - (c) The objectives and good housekeeping procedures covered by the training activity.



Pollution Prevention and Good Housekeeping Overview

Written Good Housekeeping SOPs

Municipal employees engage in a variety of daily activities that have the potential to influence water quality. The Town has developed good housekeeping standard operating procedures (SOPs) in accordance with the requirements of Part I E 6 a and b of the permit. The SOPs include the following:

- Vehicle and Equipment Maintenance and Cleaning
- Outdoor Material Storage
- Pesticides, Herbicides, and Fertilizers
- Road, Street, Parking Lot, and Sidewalk Maintenance
- Snow and Deicing/Anti-icing Operations
- Utility Construction and Maintenance

The Snow and Deicing/Anti-icing Operations SOP includes a prohibition on agents containing urea or other forms of nitrogen or phosphorus. The Outdoor Material Storage SOP will be updated to address temporary storage of landscaping materials. The Utility Construction and Maintenance SOP will be updated to address water discharges from all construction and maintenance activities. A new SOP will be developed to cover renovation and significant exterior maintenance activities not covered by another permit.

Contractors

Part I E 6 c requires the Town to ensure that all contractors providing services to the Town are in full compliance with applicable licensing and certification requirements as well as the Town's pollution prevention SOPs. The Town includes the following language in all contracts to ensure that contractors abide by the Town's pollution prevention SOPs and applicable local, state, and federal stormwater management requirements:

"Town of Vienna standards and regulations including, but not limited to, all Storm Water Standard Operating Procedures, erosion and sediment control storm water regulations."

Training

The Town has developed a training schedule and program in accordance with Part I E 6 d of the permit. The overall training program reflects TMDL action plans for nutrients, sediment, bacteria, chloride, and PCBs. Fire and Rescue personnel are employees of Fairfax County and are subject to the County's training requirements. Town Police are provided initial training through the Fairfax County Criminal Justice Training Academy and refresher training by the Town once every five years. All employees and contractors who apply pesticides and herbicides are trained and properly certified by the Virginia Department of Agriculture and Consumer Services.

Stormwater Pollution Prevention Plans

The Town identified two locations (Northside Property Yard and Nutley Street Maintenance Yard) where a stormwater pollution prevention plan (SWPPP) is required in accordance with Part I E 6 i of the permit. The Northside Property Yard is operated by Public Works and the Nutley Street Maintenance Yard is operated by Parks and Recreation. High-priority facilities may include any of the following: composting; equipment storage, cleaning, and maintenance; long-term bulk materials storage; pesticide, herbicide, and fertilizer storage; recycling; anti-icing and deicing agent storage, handling, and transfer; solid waste handling and transfer, and Town owned or operated vehicle washing, maintenance, and salvage.

The Northside Property Yard SWPPP was initially developed in FY15 and updated in FY20. The Nutley Street Maintenance Yard SWPPP was developed in FY21. There are no high-priority facilities owned or operated by the Town for which a SWPPP has not been established.

Facility Name	Facility Location	SWPPP Location
Northside Property Yard	600 Mill Street NE Vienna, VA 22180	600 Mill Street NE Vienna, VA 22180
Nutley Street Maintenance Yard	247 Nutley Street, NW Vienna, VA 22180	120 Cherry Street SE Vienna, VA 22180

Nutrient Management Plans

The Town has assessed all of its owned and operated properties and has determined that nutrients are not applied to any contiguous areas greater than one acre. As a result, the Town does not need to develop nutrient management plans (NMPs). Should this change, the Town will develop a NMP development schedule and update the MS4 Program Plan accordingly.

Referenced Documents

- Good Housekeeping SOPs (Appendix G)
- Northside Property Yard SWPPP (Appendix G)
- Nutley Street Maintenance Yard SWPPP (Appendix G)



Best Management Practices

The following BMPs will be implemented in accordance with Section II.B.6 of the permit and applicable elements of TMDL action plans.

BMP 6.1 – Good Housekeeping SOPs

Objective: The objective of this BMP is to minimize or prevent the discharge of pollution from municipal operations through the implementation of written procedures.

Best Management Practices:

- Implement the Good Housekeeping SOPs.
- Continue to prohibit the application of any deicing agent containing urea or other forms of nutrients in accordance with the Pesticides, Herbicides, and Fertilizers SOP.
- During FY25, update the Outdoor Material Storage SOP and Utility Construction and Maintenance SOP to incorporate new MS4 permit requirements.
- During FY25, review Snow and Deicing/Anti-icing Operations SOP and amend, if necessary.
- During FY26, develop and implement a new SOP to cover renovation and significant exterior maintenance activities.
- Annually review, and if necessary update, the Good Housekeeping SOPs based on new best practices or observed deficiencies.
- Incorporate Good Housekeeping SOPs into staff training in BMP 6.3.

Standard Operating Procedures and Policies: This BMP is implemented through the Good Housekeeping SOPs.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report a confirmation that the SOPs have been reviewed and any necessary changes have been made. In FY25, the Town will include updated and new SOPs in the annual report.

Responsible Party: Public Works.

BMP 6.2 – Stormwater Pollution Prevention Plans for High-Priority Facilities

Objective: The objective of this BMP is to reduce and prevention the discharge of pollutants from high-priority facilities through the implementation of SWPPPs and other pollution prevention measures.

Best Management Practices:

- Implement the Town's existing SWPPP.
- During FY25, review and update the Northside Property Yard and Nutley Street Maintenance Yard SWPPPs to address new MS4 permit requirements.

- By June 30 of each year, review Town properties to determine whether there are additional sites that meet the definition of high-priority, and if so, whether any site meets the criteria for being required to develop a SWPPP. By December 31 of the same year, develop a SWPPP for any newly identified high priority site that meets the criteria for requiring a SWPPP.
- Review a SWPPP within 30 days of any unauthorized discharge, release, or spill reported in accordance with the MS4 permit. Update the SWPPP within 90 days if necessary to prevent future unauthorized discharge, release or spill.

Standard Operating Procedures and Policies: This BMP is implemented through Northside Property Yard SWPPP.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report: (1) confirmation that the SWPPP is being implemented, including a sample completed site inspection checklist; (2) confirmation of the review of high-priority sites; and, (3) a description of any changes to the SWPPP or any new SWPPPs. In FY25, the Town will include the updated SWPPPs in the annual report.

Responsible Party: Public Works.

BMP 6.3 – Employee Training

Objective: The objective of this BMP is to implement a training plan in accordance with Part I E 6 d of the MS4 permit. All Town employees should be aware of pollution prevention goals and be trained to recognize and correct potential sources of pollution. The training plan includes a focus on pollutants identified in TMDL action plans, including bacteria, sediment, nutrients, chloride, and PCBs.

To the extent practicable, training will be coordinated with the required training associated with the Northside Property Yard and Nutley Street Maintenance Yard SWPPPs. In addition, the Town has entered an MOU with Fairfax County that allows Town staff to utilize applicable County training programs. While site-specific training is required for the SWPPPs, the Town may engage in cooperative training for more specific areas such as training required for recreation center employees and employees engaged in road, street, and parking lot maintenance. Training for Town Police in spill response is initially provided through the Fairfax County Criminal Justice Training Academy. Refresher training will be provided once each five-year permit cycle.

Best Management Practices: Training will be provided in accordance with the following schedule:

Requirement	Agency	Training Type/ Notes	Schedule				
			FY24	FY25	FY26	FY27	FY28
Northside Property Yard SWPPP. Part I E 6 d (4)	DPW Administration	Purpose and contents of the SWPPP.					
	DPW Street Maintenance						
	DPW General Maintenance			■		■	
	DPW Sanitation/ Refuse						
	DPW Traffic Engineering						
Nutley Street Maintenance Yard SWPPP. Part I E 6 d (4)	Parks Maintenance	Purpose and contents of the SWPPP		■		■	
Field personnel recognition and reporting of illicit discharges. Part I E 6 d (1)	DPW Street Maintenance	Include specific training on pollutants identified in TMDL action plans (nutrients, sediment, chloride, and PCBs).					
	DPW General Maintenance						
	DPW Sanitation/ Refuse						
	DPW Traffic Engineering		■		■		■
	DPW Sanitary Sewer						
	DPW Water						
	DPW Meter Reading						
	Parks Maintenance						
Road, street, and parking lot maintenance good housekeeping. Part I E 6 d (2)	DPW Street Maintenance	Conducted as part of SWPPP training. Focus on road, street, and parking lot maintenance SOP developed in BMP 6.1.		■		■	

Requirement	Agency	Training Type/ Notes	Schedule				
			FY24	FY25	FY26	FY27	FY28
Maintenance and public work facility good housekeeping. Part I E 6 d (3)	DPW Administration	Conducted as part of SWPPP training. Focus on SOPs developed in BMP 6.1.					
	DPW Street Maintenance						
	DPW General Maintenance						
	DPW Sanitation/ Refuse			■		■	
	DPW Traffic Engineering						
	DPW Sanitary Sewer						
	DPW Water						
Recreational facility good housekeeping. Section II.B.6.d (3)	Parks Maintenance	Conducted as part of SWPPP training. Focus on SOPs developed in BMP 6.1.					
	Parks Community Center			■		■	
Application of pesticides and herbicides. Part I E 6 d (6)	Parks Maintenance	See BMP 6.5.		-	-	-	-
Emergency response employee spill response training. Part I E 6 d (5)	Police	Provided during initial training through Fairfax County Criminal Justice Training Academy. Refresher course provide internally in FY28.					■

Agency/Division	Training Type
DPW Administration	Northside Property Yard SWPPP
DPW Street Maintenance	Northside Property Yard SWPPP
	Illicit Discharges

Agency/Division	Training Type
	Roads, Streets, and Parking Lots
	Maintenance and Public Works
DPW General Maintenance	Northside Property Yard SWPPP
	Illicit Discharges
	Maintenance and Public Works
DPW Sanitation/Refuse	Northside Property Yard SWPPP
	Illicit Discharges
	Maintenance and Public Works
DPW Traffic Engineering	Northside Property Yard SWPPP
	Illicit Discharges
	Maintenance and Public Works
DPW Sanitary Sewer	Northside Property Yard SWPPP
	Illicit Discharges
	Maintenance and Public Works
DPW Water	Northside Property Yard SWPPP
	Illicit Discharges
	Maintenance and Public Works
DPW Meter Reading	Illicit Discharges
Parks Maintenance	Nutley Street SWPPP
	Illicit Discharges
	Recreation Facilities
Parks Community Center	Illicit Discharges
	Recreation Facilities
Police Patrol Division	Emergency Spill Response

Standard Operating Procedures and Policies: This BMP will be implemented through the schedule provided above.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report: (1) the completion date for each training activity; (2) the number of employees completing each training activity; and, (3) the objectives and good housekeeping procedures covered by each training activity.

Responsible Party: Public Works, with departments and divisions providing coordination for their respective personnel.

BMP 6.4 – Certification for Pesticide and Herbicide Applicators

Objective: The objective of this BMP is to ensure that pesticide and herbicide applicators are certified in accordance with Virginia law in proper handling, application, and disposal best practices. This will help to reduce the likelihood of potential impacts to water quality.

Best Management Practices:

- Require that all staff and contractors who apply pesticides or herbicides to Town-owned property receive the proper training or certification in accordance with the Virginia Pest Control Act (§ 3.2-3900 *et seq* Code of Virginia).

Standard Operating Procedures and Policies: This BMP is enforced through the Virginia Pest Control Act. This BMP is also supported by contract language requiring contractors to be properly certified.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report verification that all employees that handle or apply pesticides and herbicides are certified by the Virginia Department of Agriculture and Consumer Services. The Town will retain the training and certification records and report this information in the annual report.

Responsible Party: Parks and Recreation.

BMP 6.5 – Contractor Oversight Procedures

Objective: The objective of this BMP is to ensure that Town contractors are held to the same standards as Town employees with regard to protecting water resources.

Best Management Practices:

- Implement contract language requiring contractors to follow all control measures and procedures required by the Town, including applicable SOPs.

Standard Operating Procedures and Policies: This BMP is implemented through standard language in all Town contracts.

Measurable Goals and Evaluation Criteria: The Town will include in each annual report verification that the contract language is being implemented.

Responsible Party: Public Works.

BMP 6.6 – Street Sweeping

Objective: The objective of this BMP is to reduce trash, particulates, and organic matter from entering the storm system through an effective street sweeping program.

Best Management Practices:

- Continue to conduct Town-wide street sweeping operations at least once a year, and sweep after major outdoor special events.

Standard Operating Procedures and Policies: This BMP is implemented through the Town's street sweeping schedule.

Documentation and Measure of Effectiveness: The Town will include in each annual report a summary of street sweeping activities, including curb miles swept and sweeping frequency.

Responsible Party: Public Works.



MCM #6 Implementation Schedule

The Town will implement the BMPs for MCM #6 in accordance with the following schedule.

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
6.1	Operation and Maintenance Pollution Prevention SOPs						
	Implement good housekeeping SOPs.	▶	▶	▶	▶	▶	Public Works; Parks and Recreation
	Prohibit the application of deicing agents containing urea or nutrients.	▶	▶	▶	▶	▶	Public Works; Parks and Recreation
	Update Outdoor Material Storage and Utility Construction SOPs.		■				
	Review, and amend if necessary, Snow and Deicing/Anti-icing Operations SOP.		■				
	Develop new SOP to cover renovation and significant exterior maintenance activities.			■			
	Annually review, and update if necessary, good housekeeping SOPs.	▶	▶	▶	▶	▶	Public Works
	Incorporate SOPs into employee training.	▶	▶	▶	▶	▶	Public Works
6.2	Stormwater Pollution Prevention Plans for High-Priority Facilities						
	Implement Northside and Nutley Street SWPPPs.	▶	▶	▶	▶	▶	Public Works
	Review, and update as needed, Northside and Nutley SWPPPs.		■				Public Works

BMP	Task	FY24	FY25	FY26	FY27	FY28	Responsibility
	Review Town sites and develop SWPPPs for any newly identified high-priority sites, if necessary.	▶	▶	▶	▶	▶	Public Works
	Review high-priority sites after incidents and update SWPPPs, if necessary.	▶	▶	▶	▶	▶	Public Works
6.3	Employee Training						
	Implement employee training plan with focus on SWPPPs and TMDL pollutants of concern.	▶	▶	▶	▶	▶	Public Works; Parks and Recreation
6.4	Certification for Pesticide and Herbicide Applicators						
	Maintain and report certifications.	▶	▶	▶	▶	▶	Parks and Recreation
6.5	Contractor Oversight Procedures						
	Implement contract language contractors will abide by all SOPs.	▶	▶	▶	▶	▶	Public Works; Town Attorney, Finance
6.6	Street Sweeping						
	Operate street sweeping program.	▶	▶	▶	▶	▶	Public Works

F. Annual Report

Annual Report

The Town will submit annual reports to DEQ each year covering the period of July 1 through June 30. The reports will be submitted to DEQ no later than October 1 of each year. The information provided to DEQ will be in accordance with the provisions of Part I D of the MS4 permit, which includes the following:

- a) General information:
 - i) The permittee, system name, and permit number.
 - ii) The reporting period for which the annual report is being submitted.
 - iii) A signed certification as per Part III K.
 - iv) Each annual reporting item as specified in an MCM in Part I E.
 - v) An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program's effectiveness and whether or not changes to the MS4 Program Plan are necessary.
- b) A status report on the implementation of the Chesapeake Bay TMDL Action Plan in accordance with Part II A of the permit, including any revisions to the plan.
- c) A status report on the implementation of any local TMDL action plans in accordance with Part II B of the permit, including any revisions to the plan

Annual Reporting Checklist

The following are the specific annual reporting items specified in Part I E for each MCM.

MCM #1	
✓	A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program.
✓	A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high- priority issues.
✓	A description of any changes in high-priority stormwater issues, including, strategies used to communicate high-priority stormwater issues or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of these changes.
✓	A description of public education and outreach activities conducted that included education regarding climate change.

MCM #2	
✓	A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded.
✓	A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1), excluding natural flooding complaints, and how the permittee responded.
✓	A webpage address to the permittee's MS4 program and stormwater website.
✓	A description of the public involvement activities implemented by the permittee, including any efforts to reach out and engage all economic and ethnic groups.
✓	A description of public education and outreach activities conducted that also included education regarding climate change.
✓	A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality.
✓	The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.
MCM #3	
✓	A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year.
✓	The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program.
✓	<p>A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:</p> <ul style="list-style-type: none"> (a) The location and source of illicit discharge; (b) The dates that the discharge was observed, reported, or both; (c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe); (d) How the investigation was resolved; (e) A description of any follow-up activities; and (f) The date the investigation was closed.

MCM #4	
✓	Total number of erosion and sediment control inspections conducted.
✓	Total number of each type of compliance action and enforcement action.
MCM #5	
✓	<p>If the permittee implements a Virginia Stormwater Management Program in accordance with Part I E 5 a (1) and (2):</p> <p>(a) The number of privately owned stormwater management facility inspections conducted; and,</p> <p>(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action.</p>
✓	Total number of inspections conducted on stormwater management facilities owned or operated by the permittee.
✓	A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection.
✓	A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880).
✓	A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2.
✓	A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

MCM #6	
✓	A summary of any written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period.
✓	A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period.
✓	A list of any new SWPPPs developed in accordance Part I E 6 i during the reporting period.
✓	A summary of any SWPPPs modified in accordance with Part I E 6j, 6l, or 6m.
✓	The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period.
✓	The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired).
✓	<p>A list of the training activities conducted in accordance with Part I E 6 d, including the following information:</p> <ul style="list-style-type: none"> (a) The completion date for the training activity; (b) The number of employees who completed the training activity; and, (c) The objectives and good housekeeping procedures covered by the training activity.

Appendix A

Agreements with Other Government Entities

COOPERATIVE AGREEMENT BETWEEN THE FAIRFAX COUNTY BOARD OF SUPERVISORS, THE TOWN OF VIENNA, and TOWN OF HERNDON TO SHARE CERTAIN STORMWATER SERVICE DISTRICT FEES AND RESPONSIBILITY FOR RELATED SERVICES

This Agreement ("Agreement") is entered into on this 8th day of MARCH, 2017, by and between the BOARD OF SUPERVISORS OF FAIRFAX COUNTY, VIRGINIA ("FAIRFAX"), the TOWN COUNCIL OF VIENNA, VIRGINIA ("VIENNA"), and the TOWN COUNCIL OF HERNDON, VIRGINIA ("HERNDON") (referenced collectively as the "Parties" or "the Governing Bodies", and individually as the "Party").

WITNESSETH:

WHEREAS the Towns of Vienna and Herndon (also referenced herein as "the Towns") are located within Fairfax County (also referenced herein as "the County"); and

WHEREAS Fairfax County, the Town of Vienna, and the Town of Herndon each maintain, operate, and improve stormwater systems that affect one another; and

WHEREAS Fairfax County and the Towns are each subject to a Municipal Separate Storm Sewer System ("MS4") permit issued by the Virginia Department of Environmental Quality ("DEQ"); and

WHEREAS FAIRFAX has cooperated with VIENNA and HERNDON to maintain, operate, and improve their respective stormwater systems and wish to continue such cooperation in the future in the best interests of their residents; and

WHEREAS pursuant to Va. Code Ann. § 15.2-2400 (2012), FAIRFAX has established a Stormwater Service District ("Service District"), and is authorized, pursuant to Va. Code Ann. § 15.2403(6) (Supp. 2016) to levy and collect an annual fee upon any property located within such Service District ("the Service District Fee"); and

WHEREAS the Towns of Vienna and Herndon are located within Fairfax County's Service District; and

WHEREAS, pursuant to Va. Code Ann. § 15.2-2403(6), Fairfax County collects revenues from properties located within the Towns of Vienna and Herndon; and

WHEREAS, pursuant to Va. Code Ann. § 15.2-2403.3 (Supp. 2016), by virtue of the Towns' maintenance of separate MS4 permits and their location within the Service District, the Towns are entitled to the Service District Fee revenues collected by Fairfax County within their respective jurisdictions; and

WHEREAS, the actual amount of revenues collected from the Service District Fee will vary from year to year; and

WHEREAS, each MS4 permit, among other things, assigns jurisdiction-specific, pollutant load reduction requirements for nitrogen, phosphorus, and sediment to address the Chesapeake Bay Total Maximum Daily Load (referred to herein as "TMDL"), and requires each MS4-permit jurisdiction to develop a Chesapeake Bay TMDL Action Plan that identifies the practices, means, and methods that are to be implemented by the permittee to achieve the required pollutant reductions; and

WHEREAS, the Commonwealth's Chesapeake Bay TMDL Watershed Implementation Plan (referred to herein as "the WIP") establishes the total pollutant reduction loads required to achieve the Chesapeake Bay TMDL and the timeframe for MS4-permit jurisdictions to achieve their assigned pollutant reductions; and

WHEREAS, each MS4 permit also requires the development of action plans for other pollutants where a TMDL assigns a wasteload allocation ("WLA") to the permittee; and

WHEREAS, pursuant to their respective MS4 permits, the Towns submitted their initial Chesapeake Bay TMDL Action Plans to DEQ prior to the deadline of October 1, 2015 while the County's initial Chesapeake Bay TMDL Action Plan will be submitted to DEQ prior to the deadline of April 1, 2017. Action plans for other TMDLs are submitted in accordance with the schedule contained in each MS4 permit; and

WHEREAS, while each MS4-permit jurisdiction is ultimately responsible for compliance with its MS4 permit, MS4 permits allow and encourage cooperation and coordination among permit holders, and such cooperation and coordination can mutually benefit MS4-permit jurisdictions through more effective and cost-efficient protection of water resources in each jurisdiction; and

WHEREAS, the purpose this Agreement, in part, is for the Parties to work cooperatively to satisfy the pollutant load reduction requirements of their current and future MS4 permits by implementing stormwater management practices within the Parties' jurisdiction that reduce the discharge of pollutants; and

WHEREAS, FAIRFAX, VIENNA, or HERNDON may terminate this Agreement as set forth by the terms herein if, pursuant to applicable law, either locality chooses not to participate under this Agreement or chooses not to share the Stormwater Service District Fees; and

WHEREAS FAIRFAX, VIENNA, and HERNDON have determined and agreed that the best interests of each locality's residents are fulfilled if FAIRFAX utilizes a portion of the Service District Fees collected by FAIRFAX from properties within the Towns to assist the Towns in maintaining, operating, and improving their respective stormwater systems to achieve the goals of effective regional water quality improvement and local initiatives in these localities and to satisfy certain MS4 permit requirements;

NOW, THEREFORE, in consideration of the mutual obligations set forth herein and other good and valuable consideration, so long as FAIRFAX continues to administer the Service District in FAIRFAX that encompasses VIENNA and HERNDON, and so long as VIENNA and HERNDON qualify to receive the Service District Fees collected by FAIRFAX from properties within the Towns, FAIRFAX, VIENNA, and HERNDON agree as follows:

1. FAIRFAX will continue to engage in a coordinated approach with VIENNA, and HERNDON to maintain and operate their respective stormwater systems throughout the incorporated and unincorporated parts of FAIRFAX. Moreover, FAIRFAX, VIENNA, and HERNDON will engage in a coordinated approach for future improvements to their respective stormwater systems.

2. This Agreement's duration shall be for one fiscal year and shall renew at the beginning of each fiscal year thereafter unless terminated pursuant to the terms set forth herein below. For the purposes of this Agreement, "fiscal year" shall mean Fairfax County's fiscal year, which, at the time of the execution of this agreement, ends on June 30.

3. This Agreement's purpose is to set forth how the Parties shall share revenues to be collected pursuant to the Service District Fee, including revenues collected from properties within VIENNA and HERNDON, and the respective obligations of the Parties with respect to the stormwater management services described herein.

STORMWATER FEE REVENUE SHARING

4. FAIRFAX shall collect all revenues to be collected pursuant to the Service District Fee, including revenues collected from properties within the Towns.

5. Revenues actually collected throughout the Service District are referred to herein as "STORMWATER FEE REVENUES."

6. At the end of each fiscal year, FAIRFAX shall calculate separately the total amount of stormwater fee revenues that were actually collected from properties within VIENNA and HERNDON from the amount of stormwater fee revenues collected elsewhere in FAIRFAX (the "VIENNA STORMWATER FEE" and "HERNDON STORMWATER FEE").

7. On or before October 30th of each fiscal year, FAIRFAX shall estimate the anticipated VIENNA STORMWATER FEE and HERNDON STORMWATER FEE for that year, and shall pay to VIENNA and HERNDON an amount equal to twenty-five percent (25%) of the estimated VIENNA STORMWATER FEE and HERNDON STORMWATER FEE, respectively, for that fiscal year, rounded to the nearest penny (the "PAID VIENNA REVENUES" and "PAID HERNDON REVENUES").

8. The Parties acknowledge and agree that PAID VIENNA REVENUES and/or PAID HERNDON REVENUES may be more or less than the amount that is actually due and owing to either or both of the Towns, and which amount is calculated at the end of each fiscal year.

9. If the PAID VIENNA REVENUES for a particular fiscal year are determined to have been less than 25% of the actual VIENNA STORMWATER FEE actually collected for that fiscal year, then FAIRFAX shall pay VIENNA the difference between the PAID VIENNA REVENUES and 25% of the VIENNA STORMWATER FEE actually collected for that fiscal year. FAIRFAX shall pay this difference at the same time as it pays the next fiscal year's PAID VIENNA REVENUES.

10. If the PAID HERNDON REVENUES for a particular fiscal year are determined to have been less than 25% of the actual stormwater fee actually collected for that fiscal year in HERNDON, then FAIRFAX shall pay HERNDON the difference between the PAID

HERNDON REVENUES and 25% of the HERNDON STORMWATER FEE actually collected for that fiscal year in HERNDON. FAIRFAX shall pay this difference at the same time as it pays the next fiscal year's PAID HERNDON REVENUES.

11. If the PAID VIENNA REVENUES for a particular fiscal year are determined to have been more than 25% of the actual VIENNA STORMWATER FEE actually collected for that fiscal year, then FAIRFAX shall deduct the difference between the PAID VIENNA REVENUES and 25% of the VIENNA STORMWATER FEE actually collected for that fiscal year from the amount that FAIRFAX pays for the next fiscal year's PAID VIENNA REVENUES.

12. If the PAID HERNDON REVENUES for a particular fiscal year are determined to have been more than 25% of the actual HERNDON STORMWATER FEE actually collected for that fiscal year, then FAIRFAX shall deduct the difference between the PAID HERNDON REVENUES and 25% of the HERNDON STORMWATER FEE actually collected for that fiscal year from the amount that FAIRFAX pays for the next fiscal year's PAID HERNDON REVENUES.

13. Once FAIRFAX has determined the amount of the actual VIENNA STORMWATER FEE and HERNDON STORMWATER FEE, which shall occur within 90 days of the fiscal year end, FAIRFAX shall forward the respective amounts to the Towns' Mayors in writing ("FINAL ACCOUNTING"). If VIENNA and/or HERNDON disputes the amount of the FINAL ACCOUNTING, then within 30 days of the Mayors' receipt of this FINAL ACCOUNTING, VIENNA and/or HERNDON, shall state the complete factual basis for any such dispute in writing to the Fairfax County Executive, and the Parties shall endeavor in good faith to resolve any such dispute. Upon the resolution of any such dispute, or if VIENNA and/or

HERNDON fails to dispute the amount of the FINAL ACCOUNTING within 30 days of either Mayor's receipt thereof, then VIENNA and/or HERNDON shall be deemed to have accepted payment of the respective fiscal year's PAID VIENNA REVENUES or PAID HERNDON REVENUES, which shall result in the waiver of any right to request from FAIRFAX any additional amount of the collected STORMWATER FEE REVENUES. VIENNA's and/or HERNDON's waiver of any such balance, however, is conditioned upon FAIRFAX's obligations to VIENNA and/or HERNDON pursuant to this Agreement.

14. Pursuant to Va. Code Ann. § 15.2-2403.3 VIENNA and HERNDON shall expend the PAID VIENNA REVENUES and PAID HERNDON REVENUES, respectively, only for costs directly related to the Towns' stormwater systems and not for non-stormwater-system costs, such as public safety, schools, or road maintenance.

15. Under this Agreement, neither VIENNA nor HERNDON is required to expend any of the paid revenues within any specific amount of time. This Agreement does not affect any other authority that VIENNA or HERNDON might have to carry over revenues from year-to-year or to expend revenues in one fiscal year when the revenues were collected in a previous fiscal year.

16. If, at any time in the future, either VIENNA or HERNDON becomes unincorporated or ceases to qualify to receive paid revenues for any reason or terminates its stormwater program or ceases to maintain its stormwater systems, none of the previously paid revenues shall be expended for anything other than the maintenance, operation, and improvement of such Town's stormwater systems. If any such amounts are returned to FAIRFAX they may be used for other qualified uses in the Service District as FAIRFAX, or its designee, in its or his sole discretion, deems appropriate.

TMDL COMPLIANCE AND THE TMDL ADVISORY COMMITTEE

17. Fairfax, Vienna, and Herndon agree that Fairfax will implement stormwater management practices throughout the County and in the Towns sufficient to achieve the TMDL pollutant load reduction requirements that are incorporated into each Party's respective current and future MS4 permit.

18. A TMDL Compliance Advisory Committee (hereinafter referred to as the "Advisory Committee") shall be established and shall be comprised of one or more representatives from each governing body.

19. Regardless of the number of representatives appointed by each governing body, each locality will have one vote on the Advisory Committee.

20. The Advisory Committee shall:

- a. establish, pursuant to each Party's respective MS4 permit, the nitrogen, phosphorus, and sediment (referred to as "pollutants of concern" or "POCs") load reductions necessary for each individual Party to achieve full compliance with the Chesapeake Bay TMDL and the WIP (referred to herein as "the Chesapeake Bay TMDL Endpoint").
- b. establish the "TOTAL POLLUTANT REDUCTION," which is the total amount of each POC that the Parties must reduce in order to reach the Chesapeake Bay TMDL Endpoint.
- c. establish the percentage of the TOTAL POLLUTANT REDUCTION for which each locality is responsible. That percentage assigned to each Party shall hereinafter be referred to, respectively, as the "FAIRFAX PERCENTAGE," "VIENNA PERCENTAGE," and "HERNDON PERCENTAGE."

- d. as determined by the Advisory Committee, the FAIRFAX PERCENTAGE, VIENNA PERCENTAGE, and the HERNDON PERCENTAGE may be established for each POC, an average of POCs, or by another mutually agreed upon methodology that will allocate pollutant reduction credits for projects completed under this Agreement as provided for in paragraph 27 below, in a manner necessary to meet the Chesapeake Bay TMDL Endpoint.
- e. establish a watershed-specific FAIRFAX PERCENTAGE, VIENNA PERCENTAGE, and HERNDON PERCENTAGE to allocate pollutant reduction credits for projects implemented within a watershed to meet a non-Chesapeake Bay TMDL Endpoint.

21. VIENNA and HERNDON may at any time provide FAIRFAX with a list of stormwater management projects to be considered for implementation. Before submitting any such project, the submitting Town must thoroughly investigate and analyze each project to ensure that any such project is feasible. Any project submitted before June 30 of each year will be considered by FAIRFAX for implementation during the following fiscal year. If a project is not implemented, it will continue to be considered for implementation in subsequent fiscal years until such time that the project is determined to be infeasible. Selection of projects for implementation and determination of final feasibility are at the sole discretion of the Director of the Fairfax County Department of Public Works and Environmental Services ("Director").

22. By April 1 of each year, the Director will send to the Towns of VIENNA and HERNDON and/or their designees a proposed list of projects within their jurisdiction.

23. Within 30 days after each Mayors' receipt of this list, the Towns shall provide comments and suggestions regarding each project, its timing, and its costs for implementation,

lifetime maintenance, and replacement. If the Towns provide any comments or suggestions, the Director shall fully consider any such comments, and may, but shall not be obligated to implement or adhere to them. In the event that a dispute exists regarding implementation of any project on the list sent by the Director, the Director and the disputing Town shall endeavor in good faith to resolve any such dispute, but final authority for the implementation of any such projects rests solely with Fairfax County and the Director.

24. FAIRFAX will pay for the development of the updated Chesapeake Bay TMDL Action Plan for each Town that is due at the beginning of each new MS4 permit cycle. Each Town will be responsible for routine annual updates as required in the MS4 permits. FAIRFAX will also pay for the initial development of other TMDL action plans necessary for compliance with each Town's MS4 permit and any substantial updates to these action plans required in future permit cycles. The action plans will include all information necessary to demonstrate compliance with MS4 permit requirements. Changes or additions to projects identified in the action plans will be reported to each Town annually in accordance with paragraph 31.

25. FAIRFAX shall be solely responsible for implementing projects under this Agreement, excluding the acquisition of any permanent or temporary land rights necessary to construct and maintain a project located within a Town. The Parties may, as necessary, have agreements that are separate from this Agreement that address the Parties' responsibilities over specific projects, facilities, and other funding.

26. A project is subject to this Agreement if it is funded in whole or in part by the Service District Fee and substantially completed on or after July 1, 2009.

27. For each project substantially completed under this Agreement on or after July 1, 2009, whether the project or facility is located within VIENNA, HERNDON, or elsewhere

within Fairfax County, the Parties will receive a pollutant reduction credit for each POC. The reduction credit is determined by applying the VIENNA PERCENTAGE and the HERNDON PERCENTAGE to the estimated total POC load reductions for each project that is substantially completed pursuant to this Agreement (the "VIENNA CREDIT," "HERNDON CREDIT," "FAIRFAX CREDIT," and collectively "REDUCTION CREDITS"). For completed projects and facilities, the REDUCTION CREDITS shall survive any termination of this Agreement unless otherwise agreed to by the Parties or in the event that a constructed facility or improvement is not maintained in accordance with paragraph 28 of this Agreement.

28. The Party in whose jurisdiction any stormwater management facility or improvement is constructed under this Agreement shall ensure that the long-term maintenance of such facility or improvement is performed as necessary to maintain the functionality and performance thereof. Each party shall ensure long-term maintenance in accordance with Va. Code Ann. § 62.1-44.15.15:27(E)(2) and 9 Va. Admin. Code §§ 25-870-58 and 112. In the event that a Party's failure to maintain a project completed under this Agreement results in a decrease in the amount of POCs removed therefrom, as determined by DEQ, then that Party shall, at its sole cost, maintain or improve the facility to restore the facility to its original functionality.

29. In the event that a Party is unable to meet its load reduction requirement for a specific reporting period, and another Party has exceeded its load reduction requirement, the Director may, with written notification to the Parties, transfer credit from shared credit projects among Parties in a manner to ensure that each Party is able to meet its load reduction requirement. Any such transfer shall be temporary and last only as long as it is needed to address the immediate shortfall. Further, no transfer will occur or stay in force that would result in a donating Party being in non-compliance with an MS4 permit condition.

30. Any Party that completes a stormwater management project from funds not generated by or transferred through Fairfax County shall be entitled to claim all resulting load reduction credits for purposes of satisfying its MS4 permit requirements.

31. FAIRFAX will prepare an annual report that details the activities performed under this Agreement. The report will provide sufficient detail so that each locality may use it to meet their respective MS4 permit reporting obligations to DEQ. Fairfax will provide the report annually no later than one month before the date the annual report is due to DEQ.

STAFF TRAINING

32. Without any additional invitation or payment, VIENNA's and/or HERNDON's staff may attend MS4 permit-related training programs that are conducted or hosted by FAIRFAX. FAIRFAX will provide VIENNA and HERNDON with at least one-month's advance notice of such training opportunities.

TERMINATION

33. Any Party may terminate this Agreement by resolution of that Party's governing body. Any such resolution shall be at a public meeting with notice in writing to the non-terminating Parties. Notice shall be made at least three weeks in advance of any such meeting to the Mayor(s) or, as applicable, the County Executive, of Fairfax County. After adoption of any such resolution, the terminating Party shall notify the remaining Parties. The termination shall be effective no earlier than the end of the fiscal year in which the governing body's vote for the resolution for the termination occurs.

34. If this Agreement is terminated by any party other than FAIRFAX, the Agreement shall remain in force as to the remaining parties. The terminating Town shall have responsibility to maintain and replace, as necessary, any facility constructed under this Agreement that is

located within its boundaries and shall assume all liability for such facility. Unless otherwise agreed to by the Parties, neither Town shall have any liability or responsibility for any facility that is located outside of its jurisdictional boundaries and was developed and implemented under this Agreement.

ADDITIONAL PROVISIONS

35. This Agreement is integrated and contains all provisions of the Agreement between the Parties.

36. In the event of a conflict between any term(s) of this Agreement and either of the Parties' MS4 permits or other permit requirements, either Party's respective permit provision(s), shall control.

37. Any provision or term of this Agreement may be modified only by a writing that is approved by resolution at a public meeting of each of the localities' respective governing bodies.

38. This Agreement shall be binding on the Parties' respective agencies, employees, agents, and successors-in-interests.

39. This Agreement shall not be assigned by either of the Parties unless both of the Parties agree to such an assignment in writing.

40. Nothing in this Agreement otherwise limits the respective regulatory and police powers of the Parties.

41. The Parties agree that nothing in this Agreement creates a third-party beneficiary. The Parties also agree that this Agreement does not confer any standing or right to sue or to enforce any provision of this Agreement or any other right or benefit to any person who is not a

party to this Agreement, including but not limited to a citizen, resident, private entity, or local, state, or federal governmental or public body.

42. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one in the same Agreement.

43. This Agreement shall be governed by Virginia law, and any litigation relating to this Agreement shall be brought and/or maintained only in the Circuit Court of Fairfax County, Virginia.

IN WITNESS WHEREOF, the Parties have executed this Agreement, as verified by their signatures below.

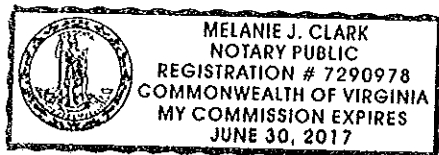
[Signatures appear on the following pages.]

TOWN OF VIENNA

By: Laurie A. DiRocco
Laurie A. DiRocco
Mayor
Town of Vienna, VA

STATE OF VIRGINIA :
: to-wit
COUNTY OF FAIRFAX :

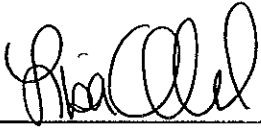
The foregoing Agreement was acknowledged before me by Laurie A. DiRocco
of the Town of VIENNA, this 21st day of February 2018 on behalf of the Town of
VIENNA.



Melanie J. Clark
Notary Public


My commission expires: June 30, 2017
Notary Registration Number: 7290978

TOWN OF HERNDON

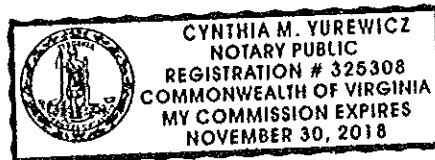
By: 
(Name and Title)
Lisa C. Merkel
Mayor

STATE OF VIRGINIA :
: to-wit
COUNTY OF FAIRFAX :

The foregoing Agreement was acknowledged before me by Lisa C. Merkel
of the Town of HERNDON, this 2nd day of March 2017 on behalf of the Town
of HERNDON.


Notary Public

My commission expires: 11/30/2018
Notary Registration Number: 325308



APPROVED AS TO FORM:

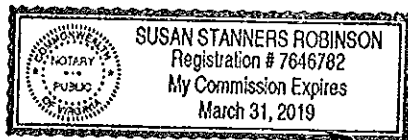

Lesa J. Yeatts
Town Attorney

BOARD OF SUPERVISORS OF
FAIRFAX COUNTY, VIRGINIA

By: Edward L. Long Jr.
Edward L. Long Jr.
County Executive
Fairfax County, Virginia

STATE OF VIRGINIA :
: to-wit
COUNTY OF FAIRFAX :

The foregoing Agreement was acknowledged before me by Edward L. Long Jr., of the
County Executive, on behalf of the Board of Supervisors of Fairfax County, Virginia this
9th day of March 2016
2017



Susan Stanners Robinson
Notary Public

My commission expires: March 31, 2019
Notary Registration Number: 7642019

Approved as to form: _____
Office of the County Attorney
Fairfax, Virginia

NORTHERN VIRGINIA
CLEAN WATER PARTNERS PROGRAM
MEMORANDUM OF AGREEMENT

In order to establish an effectively coordinated stormwater education and outreach program, the parties whose authorized agents are signatories to the Memorandum of Agreement do hereby enter into the following Memorandum of Agreement.

SECTION I PURPOSE OF MEMORANDUM

The purpose of this Memorandum is to establish and maintain a coordinated stormwater education program in the Northern Virginia region, hereinafter referred to as the "Program". The signatories, hereinafter referred to as the "Northern Virginia Clean Water Partners," or "Partners," comprise a group of local governments, public school systems, institutions of higher education, drinking water and sanitation authorities, and businesses that choose to work together to inform individuals about the pollution potential of common activities, so that individuals can take direct action to reduce stormwater pollution. To meet this goal, the Partners work together to:

- Identify high priority water quality issues for the region;
- Identify the target audience(s) for outreach;
- Educate the region's residents on simple ways to reduce pollution around their homes;
- Monitor changes in behavior through surveys and other data collection techniques; and
- Pilot new cost-effective opportunities for public outreach and education.

By working together the Partners are able to leverage their funds and services to develop and place English and Spanish bilingual educational products with common messages and themes, thereby extending the campaign's reach.

SECTION II GENERAL DEFINITIONS

The term "Northern Virginia" refers, at a minimum, to the area comprising the Northern Virginia planning district, as specified in Section III.

The terms "Clean Water Partners," "Partners," "Participants," and "Partnership" refer to all entities which enter into this Agreement and abide by its terms.

"Contributing Partners" refers to those partners who contribute direct funds to the Program.

SECTION III AREA OF COVERAGE

Contribution and Participation in this Agreement and Program is available to any local government, public authority or institution of higher education within the confines of the Northern Virginia planning district, or adjacent planning districts.

SECTION IV OPERATIONAL ARRANGEMENTS

A. Staff Services

NVRC shall provide staff support for the Program, to the extent that funds are available. This may include procuring multi-media advertising services, procuring behavior change surveys, coordinating and hosting meetings, and maintaining website hosting and domain services. All contracts and administrative agreements approved by the Partnership shall be submitted to the NVRC Board for review and execution. The Executive Director of NVRC shall be the chief administrative agent of the Partnership and in this capacity shall be responsible to the Partnership for managing its staff support.

Upon the conclusion of each fiscal year NVRC shall prepare an annual report summarizing the status, progress and effectiveness, to the extent possible, of all significant outreach efforts during the previous fiscal year. This report shall include a preliminary work program for the upcoming fiscal year, and it shall be presented to the Partnership for approval. The report will be prepared so that it can be used to support individual permit requirements.

B. Meeting Space

NVRC shall provide adequate space and facilities for the meeting of the Program participants.

C. Budget

An annual budget for the Program shall be developed and funded through a special assessment of the Contributing Partners for inclusion in the annual NVRC budget. The annual operating budget shall be submitted by the NVRC staff to each Participant for its approval. Prior to the assessment of a participating local government, the allocation of program costs must be approved by its governing body.

The funding formula for the Program is as follows: \$ 0.05 per capita based on the most recent decennial census unless more current population estimates are available from the Weldon Cooper Center for Public Service of the University of Virginia.

SECTION V TERMS

This Memorandum shall exist subject to amendment or dissolution in accordance with the following provisions:

A. Amendments

This Agreement may be amended at any time by the concurrence of all Participants. Proposed amendments shall be presented in writing to the NVRC staff and must be approved unanimously by all Participants.

The acceptance of additional Parties to this Agreement shall not require an amendment to this Agreement, but shall require the consent of a simple majority of the Partner participants. Each new Participant shall be bound to the terms of this Agreement as evidenced by the signature of its authorized agent.

B. Severability

Each paragraph and provision of this Agreement is severable from the entire Agreement and if any provision is declared invalid or unenforceable the remaining provisions shall nevertheless remain in effect.

C. Dissolution

This Agreement may be dissolved at any time by majority agreement of all participant Partners.

If a single Partner unit wishes to withdraw from the Agreement, notice of intent to withdraw must be provided at least six months prior to the end of the fiscal year, in order to provide the remaining parties with an opportunity to make any necessary budget adjustments.

This Agreement shall take effect after appropriate action by ordinance, resolution or otherwise pursuant to the law of the governing body of each participating political subdivision.

IN WITNESS WHEREOF, the Town of Vienna and NVRC have caused this document to be executed as of the date of the last signature shown:

Town of Vienna
, VIRGINIA

By: _____

, Town Manager

Date: _____

9/27/23

Approved as to Form:

By: _____

, Town Attorney

Date: _____

NORTHERN VIRGINIA REGIONAL COMMISSION

By: _____

Title: Executive Director

Date: 9/27/2023

Appendix B

TMDL Action Plans

Chesapeake Bay TMDL Action Plan

Bacteria TMDL Action Plan for Difficult Run and Accotink Creek

Sediment TMDL Action Plan for Difficult Run and Accotink Creek

Chloride TMDL Action Plan for Accotink Creek

PCB TMDL Action Plan

The most recent TMDL action plans can be accessed online using the following links:

- [Draft Phase III Chesapeake Bay Action Plan](#)
- [Bacteria TMDL Action Plan for Accotink Creek and Difficult Run](#)
- [Sediment TMDL Action Plan for Accotink Creek and Difficult Run](#)
- [Chloride TMDL Action Plan for Accotink Creek](#)
- [PCB TMDL Action Plan](#)

Hard copies of TMDL action plans are located at the administrative office of the Vienna Department of Public Works and may be accessed by contacting the following:

Town of Vienna, DPW
127 Center Street, S, Vienna, VA 22180
dpw.viennava.gov
(703) 255-6380

Appendix C

Public Involvement and Participation SOP



Town of Vienna, Virginia

Public Involvement and Participation Standard Operating Procedure (SOP)

Public Input and Comments	
Date:	April 8, 2019
Purpose of SOP:	<p>To implement procedures for the following:</p> <ul style="list-style-type: none">• The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;• The public to provide input on the Town's MS4 Program Plan;• Receiving public input or complaints;• Responding to public input received on the MS4 Program Plan or complaints; and,• Maintaining documentation of public input received on the MS4 program and associated MS4 Program Plan and the Town's response
MS4 Permit Reference	Part I E 2 a.
Responsible Party	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

The purpose of this SOP is to foster public input and comment on the Town's MS4 program and to provide a means for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns.

1) Responsible Parties

The Department of Public Works (DPW) is responsible for implementing this SOP.

2) Reporting Stormwater Pollution Concerns

The following mechanisms will be maintained for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns:

DPW Email:.....DPW@viennava.gov
DPW Phone: (703) 255-6343
On-Line Report a Concern:.....<https://www.viennava.gov/index.aspx?nid=1272>
Emergency: 911

The phone, email, and “Report a Concern” function will be prominently displayed on the DPW stormwater webpage.

The Department of Public Works will receive, track, and respond to reports in accordance with MCM #3 of the MS4 Program Plan and the Town’s Illicit Discharge Detection and Elimination (IDDE) Plan.

3) Public Input on the MS4 Program Plan and Complaints

Mechanisms for Input

The Town will provide on its stormwater webpage instructions for how to provide public input on the MS4 Program Plan and/or to register stormwater program-related complaints. This will include the DPW phone number and email, as well as the DPW’s mailing address at 127 Center Street, South, Vienna, Virginia 22180.

Public Notice

The Town will notify the public any time that substantive changes are proposed to the MS4 Program Plan through a social media post. The social media post will include a link to the plan and the directions for providing input. To the extent practical, notification will be provided 30 days before the Town finalizes changes.

Receiving, Tracking, and Responding to Complaints

The Department of Public Works will receive, track, and respond to comments and complaints. Comments and complaints made by Town residents will be answered in writing within 30 days of receipt where the Town has an email or address.

The Department of Public Works will track in an Excel spreadsheet, or similar mechanism, the following for each comment/complaint:

- Details of the complaint (verbatim if by writing or summary if by phone)
- Individual making the comment/complaint
- Date of the comment/complaint
- Date of the Town’s response
- Town response
- Changes to the MS4 Program Plan as a result of the comment/complaint, if any

Documentation

Letters, emails, or other documents associated with tracking complaints and comments will be maintained by the Town for a minimum of three years.

The Town's annual report to the Department of Environmental Quality will include a summary of any public input on the MS4 program received (including stormwater complaints) and how the Town responded.

Appendix D

Storm Sewer System Map and Outfall Information Table

Appendix E

Illicit Discharge Detection and Elimination Plan

Town of Vienna Illicit Discharge Detection and Elimination (IDDE) Plan



Department of Public Works

127 Center Street, South
Vienna, Virginia 22180

Original – August 13, 2014

Revised – April 16, 2019

Town of Vienna

Illicit Discharge Detection and Elimination (IDDE) Plan

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Attachments

Attachment A: Storm Sewer System Map

Attachment B: Water Quality Incident Report Form

Attachment C: Field Equipment Checklist

Attachment D: Outfall Screening Field Sheet

1. Overview

The Town of Vienna is committed to protecting its water resources and aquatic habitats. The objective of this Illicit Discharge Detection and Elimination Plan (IDDE Plan) is to find, eliminate, and prevent illicit discharges of pollutants to the Town stormwater drain system that could degrade water quality. An illicit discharge is defined as any discharge to the storm drain system that is not composed entirely of stormwater, except for discharges allowed under a separate permit or otherwise authorized by state or federal laws and regulations.

According to the US EPA's 2000 National Water Quality Inventory, 39 percent of assessed river and stream miles, 46 percent of assessed lake acres, and 51 percent of assessed estuarine square miles do not meet water quality standards. Polluted stormwater runoff, including runoff from urban/suburban areas and construction sites, is a leading source of this impairment. Locally, streams in Vienna are impaired for sediment, bacteria, chlorides, and PCBs. The Town is also part of the larger Chesapeake Bay watershed. The Chesapeake Bay is impaired for nitrogen, phosphorus, and sediment. To address this problem, the EPA established the National Pollutant Discharge Elimination System (NPDES) program as part of the federal Clean Water Act to regulate stormwater discharges.

In the Commonwealth of Virginia, EPA has delegated NPDES program administration to the Department of Environmental Quality (DEQ). DEQ originally issued a General Virginia National Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 permit) to the Town of Vienna on July 1, 2013. The permit was re-issued July 2008, July 2013, and November 2018. The current five-year permit will expire October 31, 2023. The MS4 permit requires the Town to implement an MS4 Program Plan establishing how it will meet six minimum control measures (MCMs). One of these MCMs is Illicit Discharge Detection and Elimination.

The Town's IDDE program is managed by the Department of Public Works (DPW). Maintenance staff and construction site inspectors also play an important role identifying illicit discharge problems and responding to clean-up requests. However, all Public Works, Parks and Recreation, Police, and other staff play a role in locating, identifying and reporting potential illicit discharges.

1.1 Drainage System

The Town of Vienna is located in Fairfax County, Virginia. The primary land use in the Town is residential with a commercial core and some industrial and institutional land uses. Stormwater in the Town flows to four local streams: Piney Branch, Wolftrap Creek, Hunters Branch, and Bear Branch. Piney Branch and Wolftrap Creek are part of the Difficult Run watershed, while Hunters Branch and Bear Branch are part of the Accotink Creek watershed.

1.2 New Requirements

The current MS4 permit includes new requirements affecting the Town's IDDE program. These include: (1) describe the legal authorities available to eliminate ongoing discharges, including enforcement authorities; and, (2) include a unique outfall identifier in dry weather screening data tracking. The MS4 permit also qualifies the minimum of 50 outfalls to be screened annually so that no more than 50% are screened in the previous 12-month period except if all outfalls have been screened in the previous three years. This revised IDDE Plan is compliant with the Town's current MS4 permit.

1.3 Plan Overview

The MS4 permit requires the Town to develop an IDDE program encompassing the elements listed below. Each element is addressed in the sections of this IDDE Plan as noted:

Section of Part I E 3	Requirement	Plan Section
c (1)	Description of legal authorities	Section 3
c (2)	Dry weather field screening protocols	Section 4.4
c (2) (a)	Prioritization schedule	Section 4.4.1
c (2) (b)(c)	Outfalls to be screened annually	Section 4
c (2) (d)	Tracking mechanism	Sections 4.4.4 and 7.1
c (3)	Timeframe for investigations	Section 5.1
c (4)	Methods to determine sources	Section 5.2
c (5)	Methods for conducting follow up investigations	Section 5.2
c (6)	Tracking investigations	Section 7
e	Annual reporting	Section 7

This IDDE Plan is intended to assist Town staff in implementing the IDDE program. It is to be used as a guidance document for staff in their day-to-day activities related to IDDE. This document can also be used as a training tool for IDDE training as required by the IDDE MCM to ensure that staff are following the same procedures in responding to illicit discharge concerns.

The Center for Watershed Protection's "Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessment" (2004) was used in the preparation of this plan and will serve as a reference by Town staff in implementing the program. The manual can be downloaded at the following link:

https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf

2. Storm Sewer System Mapping

An accurate storm sewer map and associated outfall information table ensures that the Town has a full understanding of the storm drain system and is essential to an effective IDDE program. A copy of the most recent map is included in Attachment A.

When used in reference to an MS4, an outfall is defined as “a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters.” In cases where the outfall is located outside of the MS4 operator's legal responsibility, the operator may elect to map the known point of discharge location closest to the actual outfall.

2.1 Map and Outfall Table Components

The Town conducted a comprehensive update of the storm sewer system map and created the associated outfall table during the last permit cycle. The Town has reviewed and verified that the map and outfall table is in compliance with Part III E 3 (a) of the current MS4 permit. The Town currently has the following stormwater-related information in its GIS:

- Outfalls or applicable points of discharge, with unique identifier
- Receiving waters
- Catch basins and manholes
- Pipes, ditches, and other conduits
- Public stormwater quality management facilities
- Private stormwater quality management facilities

The MS4 permit requires an outfall information table to be maintained with details on each stormwater outfall. The 2018 MS4 permit requires the following components:

- Unique identifier
- Lat/long coordinates
- Estimated MS4 acreage served
- HUC6 Code of the receiving water
- Name of the receiving surface water and indication of impairment per the 2016 303(d)/305(b) Water Quality Assessment and Integrated Report
- Predominant land use for each outfall discharging to an impaired water
- Name of applicable TMDL(s)

New components include the lat/long of each outfall, the HUC6 Code of the receiving water, whether the receiving water is on the 2016 impaired waters list (as opposed to the 2010 list), and the predominant land use. The Town must update the outfall table to include these items by July 1, 2019.

2.2 Map Maintenance

The map is maintained on a continuous basis, and includes updates to account for any new outfalls as a result of development or the identification of previously unknown outfalls during field work. In accordance with the permit, by October 1 of each year the Town is required to update the map and outfall table to include any new outfalls constructed and/or TMDLs approved during the immediate preceding period.

3. Illicit Discharge Prohibition

The MS4 permit requires that the Town prohibit, through ordinance, policy, standard operating procedure, or other mechanism unauthorized non-stormwater discharges into the storm sewer system.

3.1 What is an Illicit Discharge?

An illicit discharge is defined as any discharge that is not composed entirely of stormwater, except discharges pursuant to a separate VPDES or state permit (other than the state permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with other state and federal regulations.

Examples of illicit discharges include (but are not limited to) the following:

- Disposal of vehicle fluids into a storm drain
- Hosing or washing loading areas in the vicinity of storm drain inlets
- Leaking or overflowing dumpsters
- Leaks or discharges from a sanitary sewer line
- Pouring paints or stains into a storm drain
- Allowing wash water with soaps or detergents into a storm drain inlet
- Washing silt, sediment, concrete, cement, or gravel into a storm drain
- Discharging pool water that has not been properly de-chlorinated
- Applying fertilizers and pesticides on impervious areas
- Improper disposal of pet waste
- Washing restaurant equipment outside
- Spills of used cooking grease or leaking containers

The following allowable exceptions found in 9VAC25-890-20 D may not be considered an illicit discharge unless the Town identifies such discharges as sources of pollutants:

- Water line flushing, managed in a manner to avoid an instream impact;
- Landscape irrigation;
- Diverted stream flows;
- Rising groundwater;
- Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20);
- Uncontaminated pumped groundwater;
- Discharges from potable water sources;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water;
- Springs;
- Water from crawl space pumps;
- Footing drains;

- Lawn watering;
- Individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Street wash water;
- Discharges or flows from firefighting activities;
- Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners; or
- Other activities generating discharges identified by the department as not requiring VPDES authorization.

3.2 What is an Illicit Connection?

An illicit connection is defined by DEQ as “Any man-made conveyance that is connected to a municipal separate storm sewer without a permit....” Examples of illicit connections include (but are not limited to) the following:

- Sanitary sewer piping that is connected directly from a building to the stormwater system
- A basement or shop floor drain that is connected to the stormwater system
- A cross connection between the municipal sanitary sewer and the stormwater system

3.3 Town IDDE Ordinance

Town Code Section 16-2.2 prohibits illicit discharges to the MS4:

Sec. 16-2.2. Storm drainage facilities; maintenance and cleanliness.

It shall be unlawful for any person to deposit, or cause to be deposited, in any public storm drainage facility, including gutters, ditches and watercourses, any substance including, but not limited to, trash, accumulations of grass clippings, petroleum products, petroleum waste, or other noxious or flammable substance; provided, however, that leaves may be piled at curbs during such seasons and in such areas as may now or in the future be furnished mechanical leaf collection service.

4. Illicit Discharge Detection and Elimination Program

4.1 Program Resources

The Town DPW performs or coordinates most of the duties associated with the IDDE program. Fairfax County performs emergency spill response (Fairfax County Fire and Rescue) and household hazardous waste (HHW) services for the Town.

4.2 Incident Reporting and Documentation

The public is often an excellent source of information regarding illicit connections and discharges. Likewise, Town employees whose normal responsibilities require a considerable amount of time in the field are an important part of the Town's efforts to identify and correct potential illicit discharges. Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months.

The Town has established the following mechanisms for the public and Town staff to report a suspected illicit discharge or illegal dumping.

DPW Email:DPW@viennava.gov

DPW Phone:(703) 255-6343

On-Line Report a Concern:<https://www.viennava.gov/index.aspx?nid=1272>

Emergency:911

When a water quality incident report is received, the staff person receiving the information will complete a Water Quality Incident Report Form (Attachment B). Staff will follow-up on after-hours calls during the following business day. Once recorded, incident information is referred to the appropriate Town department and/or staff person for follow-up. In most cases, IDDE problems will be referred to the DPW Water Quality Engineer for further investigation. Staff will follow the investigation procedures in Section 5 to identify the source of the problem.

4.3 Hazardous Materials

If a substance discovered or reported is suspected to be hazardous, Fairfax County Fire and Rescue will be notified immediately by dialing 911. Town staff will remain onsite at a safe distance to receive the HAZMAT team and transfer site operations

4.4 Dry Weather Outfall Screening

The MS4 general permit requires the Town to perform dry weather screening on a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period except if all outfalls have been screened in the previous three years. Outfall inspections conducted during dry weather are used to identify potential illicit discharges when flow is observed or when visual, olfactory, or other indicators are observed.

The Field Equipment Check List (Attachment C) will be used to ensure that field staff have the equipment necessary to conduct dry weather screening safely and efficiently. The Outfall Screening Field Sheet (Attachment D) will be used to document screening results.

4.4.1 Prioritization Schedule

The permit requires the Town to develop a prioritization schedule based on criteria such as age of infrastructure, land use, historical illegal discharges, dumping, or cross connections. The Town's stormwater conveyance system has 88 regulated outfall points as of April 2019. This means that each outfall can be inspected at least once every two years.

Outfalls that will be prioritized for annual inspection will be those along the Mill Street corridor, which includes the most commercially and industrially dense area of the Town, as well as any outfall identified from the previous year with a confirmed illicit discharge or a suspected illicit discharge where the source has not been identified.

4.4.2 Timing

Timing is important when scheduling dry weather outfall screening. The preferred conditions for outfall inspections include periods without any antecedent storm events within the previous 72 hours, or seasons with little vegetation or drier weather. These preferred conditions minimize the chance of observing base-flow, and maximize the potential for capturing concentrated, actionable samples if flow is observed.

4.4.3 General Field Assessment Procedures

Prior to conducting field work, crews should assemble all necessary equipment and review records from prior inspections in the same area to become familiar with the outfall locations and any potential inspection challenges. The following general recommendations apply to the dry weather field inspection and water sampling work:

- Notify the public in the vicinity
- Perform field work in teams
- Conduct safety meetings prior to deployment
- Perform biennial training for field staff in identifying potential illicit discharges
- Develop safety protocols and conduct periodic training for field staff
- Utilize GIS and hard copy mapping information
- Perform QA/QC of field data and ensure promptly entered into database

4.4.4 Information Collection for Dry Weather Screening

Field observations and general information shall be collected for routine dry weather screening using the Outfall Screening Field Sheet in Attachment D. General information collected on the Outfall Screening Field Sheet includes:

- Facility ID (unique identifier for the outfall)
- Outfall location

- HUC
- Local Watershed
- Date/time of screening
- Person performing the screening
- Weather conditions
- Time since last precipitation
- Quantity of last precipitation
- Local land use
- Outfall description (material, shape, number of pipes, diameter)
- Visual field observations
 - Observed dry weather flow (Yes or No)
 - Physical indicators for flowing outfalls: odor, color, turbidity, water surface/floatables
 - Physical indicators for both flowing and non-flowing outfalls: structural condition/outfall damage, deposits or stains, and pipe benthic growth
- Flow description (qualitative observation: trickle, moderate or substantial)
- Estimated discharge rate (if flow observed during field screening)

4.4.5 Field Observations for Flowing Outfalls

If screening reveals dry weather flow, the discharge from the outfall and the area around the outfall must be inspected visually for color, turbidity, sheen, floating or submerged solids, adverse effects on plants or animals in proximity to the outfall, and odor. The flow will also be field tested for common parameters that may indicate potential pollution sources. These will typically include pH, chlorine, and detergents.

Staff should then perform source investigation measures in the outfall drainage area to identify and eliminate the source. Field observations are recorded during the initial screening process and used in the investigation to determine and eliminate the source of the dry weather flow. These recorded field observations should be taken in consideration and will assist in focusing on possible sources during the investigative techniques described in Section 5.

4.4.5.1 Estimated Discharge Rate

The estimated discharge rate, or flow rate, of the observed dry weather flow, can be discerned through a simple field method by measuring and recording field measurements of the flow on the Outfall Screening Field Sheet, and performing a simple calculation. Upon identifying a possible source for the illicit discharge, this measurement can be compared to the estimated discharge rate for the source.

- Measure and record the approximate width of the water surface.
- Measure and record the approximate average depth of the discharge.
- Multiply the width of the water surface times the approximate average depth to get the flow area.
- Measure flow velocity by recording the travel time for an object floating near the surface over a known length. If the observed does not contain any observable floating object,

then a leaf or other organic detritus may be introduced.

- Multiply the computed flow area by the flow velocity and record the flow rate.

Additionally, if the duration of the observed illicit discharge is known, then an estimated volume of discharge can be computed (flow rate x duration). The estimated volume of discharge may also comprise a portion of the reporting requirements pursuant to MS4 permit Part III G "Reports of unauthorized discharges."

4.4.6 Physical Indicators

The Outfall Screening Field Sheet requires the field crew to list physical indicators for flowing and non-flowing outfalls and rank the relative sensitivity index for each. At flowing outfalls this includes flow, odor, color, turbidity, and floatables. The information that is observed and documented related to these physical characteristics are helpful in determining the possible source, but cannot be fully relied upon by themselves.

4.4.6.1 Odor

An odor can be helpful in identifying the source of the flow or narrowing the area of focus, but not every illicit flow will have a smell. Since smell can be somewhat subjective, given the variability of sensitivities among individuals, the field crew should reach a consensus about the presence and severity. An investigator's ability to detect odors may change during the time of exposure, so odors should be noted when first approaching an outfall or storm drain opening during the screening, since investigators can become de-sensitized to a particular odor within minutes of exposure. For investigations involving checking manholes, presence and severity of odor should be assessed immediately upon opening the manhole before de-sensitized, and before the odor is able to dissipate and become more diffuse with the manhole cover removed.

Documenting the severity score is also a group effort. A severity score of one means the odor is faint or the crew cannot agree on its presence or origin. A score of two indicates a moderate odor within the pipe. A score of three is assigned if the odor is so strong that the crew smells it a considerable distance from the outfall. Table 1 shows a list of odors that may be associated with dry weather discharges and their possible sources. This table should be used in conjunction with other field observations and activities (i.e., physical characteristics, investigations and indicator monitoring) in identifying the source of the discharge.

Table 1: Odors and Their Possible Sources

Odor	Possible Sources
Musty	Raw or partially treated sewage, pet waste, or algal growth
Rotten egg / hydrogen sulfide	Raw sewage, sulfuric acid, anaerobic water conditions
Sewage/fecal	Raw sewage
Chlorine	Broken potable water line, sprinkler/irrigation runoff, swimming pool, wastewater treatment plant discharge, industrial process water (including cooling tower discharge)
Sharp, pungent	Chemicals or pesticides
Gasoline, spent petroleum	Industrial discharge, illegal dumping of wastes or waste water, fuel spill/leak

4.4.6.2 Color

The color is a visual assessment that is a measure of the tint or intensity of color observed in the discharge. The color can be clear, slightly tinted, or intense. To measure color, a sample of the discharge is collected in a clear bottle and held up to the light. Field crews should also look for downstream plumes that may be associated with the observed discharge. Color is influenced by the presence or absence of substances in the water. However, the presence of color in the water may not necessarily be an indicator of a water quality problem or illicit discharge and not every illicit discharge will have a color. The color severity should also be documented as faint, clearly visible, or clearly visible in outfall flow. Table 2 provides common discharge colors and their possible sources. This is a helpful guide in determining whether the discharge is potentially illicit, and from what source it may originate.

Table 2: Discharge Colors and Possible Sources

Color	Possible Sources
Tan to brown	Construction or soil erosion
Blue green/brown green	Plankton bloom, sewage, fertilizer (irrigation) runoff, vehicular wash water
Milky white	Paint, grease, milk, lime, excavation dewatering (clayey soils)
Milky or dirty dishwater gray	Gray water or wastewater (coupled with musty odor)
Black	Septic wastewater or a turnover of oxygen depleted water (organics)
Orange-red	Leachate from iron deposits or iron bacteria (oily sheen that breaks into clumps may be present)
Bright yellow green	Anti-freeze, tire cleaner, tracing dye or algal bloom

4.4.6.3 Turbidity

Turbidity is a measure of the cloudiness of the discharge or how easily light can pass through the water. Like color, turbidity is best observed by collecting the sample in a clear bottle and holding it up to the light. Turbidity should also be looked for in the plunge pool below the outfall, and crews should note turbidity plumes below the outfall that may be associated with the discharge.

4.4.6.4 Field Tests for Water Quality

Inspection teams will characterize the samples for pH, chlorine, and detergents, recording these values on the Outfall Screening Field Sheet. Concentration of hydrogen ions (pH) is an indicator of wash water or industrial or commercial liquid waste. Chlorine is an indicator of pool water discharge or industrial or commercial liquid waste. Detergents are an indicator of sewage, wash water, or industrial or commercial liquid waste.

4.4.6.5 Documentation and Next Steps

All observations made in the field during screening are documented on the Outfall Screening Field Sheet. Pictures should be taken, whether it is during routine dry weather screening or during an investigation in response to a complaint. Further investigation must be conducted if the results deem that the observed dry weather flow is potential, suspect, or obvious. Table 3 summarizes the results that will necessitate a follow up investigation. A full illicit discharge investigation must then be performed to determine and eliminate the source.

Table 3: Further Investigation Triggers

Measure	Unlikely	Potential	Suspect	Obvious
Physical Indicators	Non-flowing outfalls with no physical indicators of an illicit discharge	Flowing or non-flowing outfalls with presence of two or more physical indicators	Flowing or non-flowing outfalls with any severity rating of 2 or greater	Outfalls where there is an illicit discharge that doesn't even require sample collection for confirmation
Measure	Unlikely	Trigger for Follow-Up Investigation		
pH	<6.5 and >7.2	<6.0 or >9.0 ¹		
Chlorine	Non-detected	>0.02 mg/L		
Detergents	<0.25 mg/L	>0.25 mg/L ²		

¹ Industrial Stormwater Monitoring and Sampling Guide, USEPA, 2009. Table 3 "Parameter Benchmark Values"

² Illicit Discharge Detection and Elimination – A Guidance Manual for Program Development and Technical Assessment, Center for Watershed Protection, 2004

5. Illicit Discharge Investigations

Once an illicit discharge is detected through field observations (either through a report or dry weather outfall screening) the Town will perform an investigation to identify and eliminate the source. Some sources will be easily identified through field investigation techniques discussed below. Other sources may require a combination of field investigations and indicator sampling data for identification.

5.1 Prioritization for Follow Up

Contact Fairfax County HAZMAT immediately if the discharge poses a threat to human health or the environment.

Illicit discharges suspected of being sanitary sewage or significantly contaminated will be prioritized and investigated first, while those suspected of being less hazardous to human health and safety may be delayed until the former has been resolved. Timeframes for initiating an investigation after identifying an actual or suspected illicit discharge are established as follows:

Observed Flow.....	Immediately
Obvious.....	Begin inspection within two business days of report or identification
Suspected	Begin inspection within one week of report or identification
Potential.....	Begin inspection within two weeks of report or identification

5.2 Investigation Techniques

The following investigatory techniques should be considered when a possible illicit discharge is detected either during dry weather screening or during the investigation performed in response to a complaint. Four investigation techniques are recommended:

- Drainage area investigations
- Storm drain network investigations
- On-site investigations
- Indicator monitoring

5.2.1 Drainage Area Investigations

The Town will employ its mapping and land use data to identify potential dischargers in the drainage area based on the characteristics of the illicit discharge detected. This type of investigation is most appropriate when the drainage area is large or complex and will help to allocate resources for further investigation. This involves a parcel by parcel analysis of potential generating sites within the drainage area of the problem outfall. Physical indicators observed in the field should be closely considered alongside land uses and types of possible generating sites in the drainage area.

The drainage area investigation may be done in the field using hard copy maps, but is most effectively done in the office. This may also be accomplished by contacting staff in the office to

do a review in conjunction with review of mapping documents in the field. Office staff and field staff are then able to confer on the best approach to take in identifying the source. Once the probable dischargers have been identified, resources can hone in on specific storm drain networks to investigate, or perform on-site investigations rule out possibilities and verify the source.

5.2.2 Storm Drain Network Investigations

The Town can also perform an investigation of the storm drain network to identify the source of the illicit discharge. At outfalls with a simple drainage network it is recommended that inspectors move upstream from the outfall and test manholes along the way to locate the source of the discharge. However, much of the Town's storm drain network is complex or located in traffic areas. In these cases the Town will split the upstream network into equal segments and test manholes at strategic junctions in the storm drain system. The method for splitting the storm drain network is outlined in the Center for Watershed Protection IDDE manual and is summarized below:

1. Review the system map leading to the suspect outfall.
2. Identify smaller pipes that are major contributors to the trunk line.
3. Identify the manhole immediately upstream from the outfall and manholes at the farthest downstream node of each contributing smaller pipe branch.
4. Working up the network, investigate manholes on each contributing branch and the trunk, until the source is narrowed to a specific section.
5. If discharge is narrowed to a specific section of the trunk, select the appropriate onsite investigation method(s) to determine the source.
6. If discharge is narrowed to a contributing branch, move up or split the branch until a specific pipe segment is isolated, and commence the appropriate investigation to determine the source.

5.2.2.1 Manhole Inspections

Manhole inspections can consist of visual observations and/or indicator sampling. Safety precautions should be taken during manhole inspections to ensure the safety of the field crew. Safety factors to consider in manhole inspections are: diversion of road and foot traffic, proper lifting of the manhole covers and testing to determine whether any toxic or flammable fumes exist within the manhole. Manholes may only be entered by properly trained and equipped personnel following all Occupational Safety and Health Administration (OSHA) requirements. In most circumstances, it is not necessary for the field crew to enter the manhole.

5.2.3 Onsite Investigations

Once the location of the illicit discharge has been isolated, yet the source remains undetermined, there are three techniques that are useful to identify the exact source.

1. Dye testing
2. Video testing
3. Smoke testing

The most commonsense approach for the Town will likely be to rely upon visual inspections of the drainage area and the storm drain network. Additional follow-up investigations must be performed for undetermined sources.

5.2.4 Indicator Monitoring

Indicator monitoring in addition to that conducted in accordance with Section 4.4.6.4 may be warranted when other field tests are inconclusive about the potential presence or source of stormwater pollutants. The exact parameters to be tested will depend on other physical indicators. Common parameters include:

- Ammonia
- Boron
- Conductivity
- Bacteria
- Fluorescence
- Fluoride
- Hardness
- Petroleum hydrocarbons
- Potassium
- Turbidity

In these cases, a sample may be collected and tested at a certified laboratory to confirm the presence of contaminants. The Town will utilize the IDDE Flow Chart from the Center for Watershed Protection when considering results from field and laboratory analytical tests.

5.2.5 Additional Follow-Up for Undetermined Sources

If, after performing an investigation, the source of the discharge has not been identified and the discharge has not been detected again after six months, efforts will be documented and the discharge identified as “non-recurring/source not found.” At least one additional dry weather screening must occur during the six month period.

If, after performing an investigation, the source of the illicit discharge has not been identified and the discharge occurs on an intermittent basis, efforts will be documented and the discharge identified as “non-recurring/source not found.” At least three additional dry weather screenings must occur during the six month period in an attempt to observe the discharge when it is flowing.

Any outfall with a discharge documented as “non-recurring/source not found” will be added to the list of outfalls for dry weather screening during the next year.

6. Eliminating Illicit Discharges

6.1 Purpose

The Town will respond to identified illicit discharges, illicit connections, or illegal dumping activities using progressive enforcement actions. Corrective actions will focus first on education to promote voluntary compliance and subsequently escalate to more severe enforcement actions if necessary.

6.2 Voluntary Compliance

The preferred approach to address illicit discharge problems is to pursue voluntary compliance through property owner or responsible party education. Business operators and property owners are often unaware of connections or activities on their properties that may constitute an illicit discharge. In these cases, providing the responsible party with information about the offending issue, the environmental consequences, and suggested remedies may be enough to secure voluntary compliance.

Education begins during the site investigation when the operation or connection is first confirmed. Property owners and operators should be notified that the problems must be corrected in a timely manner and that the Town will be conducting a follow-up site visit to verify compliance. Field staff should also provide the property operator with an educational brochure describing illicit discharge violations and a copy of the applicable Town code. Field staff should also remind property owners of their obligation to report discharges to the proper agencies.

6.2.1 Operational Problems

Property owners are responsible for correcting operational problems that produce illicit discharges. This includes moving washing activities indoors or undercover, covering material storage areas, locating an appropriate discharge location for liquid wastes, or other operational modifications. Through site visits and education, the Town can provide technical assistance to aid property owners in achieving compliance.

6.2.2 Structural Problems

Most illicit connection problems will require a structural modification. Structural repairs can redirect discharges such as sewage, industrial, and commercial cross-connections. Cross-connections must be re-routed to an approved sanitary sewer system. Structural problems are the responsibility of the property owner, though the Town may provide technical assistance throughout the process.

6.3 Enforcement Actions

When voluntary compliance does not produce the desired result, the Town is required to pursue follow-up enforcement action. The following steps will be taken to ensure the elimination of an illicit discharge.

Table 4: Illicit Discharge Enforcement Steps

Enforcement Step	Details	Responsibility
Step 1 – Initial Actions	Provide educational materials Encourage voluntary compliance Provide summary letter setting expected compliance date Additional staff support or technical assistance Request evidence of corrected problem (if applicable) Site visit to verify compliance	DPW
Step 2 – Follow-up Actions	Send “notice of violation” letter to property owner regarding unresolved issues Set second compliance date (determined on individual incident basis) Site visit to verify compliance	DPW; Code Enforcement
Step 3 – Final Actions	Send second “notice of violation” letter indicating that unresolved issues will be referred to prosecutor Town may correct problems and send bill to property owner Levy fines as authorized in Town Code	Code Enforcement

7. Reporting and Recordkeeping

An important and required part of the IDDE program is a tracking and reporting system. The Town uses GIS to track dry weather screening and an Excel spreadsheet to track the results of investigations of suspected illicit discharges. Completed forms will be kept on file for the permit cycle and no less than three years.

7.1 Dry Weather Outfall Screening

The MS4 permit requires the following minimum information to be tracked for each outfall screened in Section 4.4. Additional information is collected on the Outfall Inspection Report Form.

- The unique outfall identifier
- Time since last precipitation event
- Estimated quantity of last precipitation event
- Site description (conveyance type and dominant watershed land uses)
- If a discharge was observed:
 - Estimated discharge rate (width and depth of discharge flow rate)
 - Visual characteristics of the discharge (odor, color, clarity, floatables, deposits or stains, vegetation condition, structural condition, and biology)

7.2 Illicit Discharge Investigation Tracking

The MS4 permit requires the Town to track all illicit discharge investigations and document the following:

- The dates that the illicit discharge was initially observed, reported, or both
- The results of the investigation, including the source, if identified
- Any follow up to the investigation
- Resolution of the investigation
- The date that the investigation was closed

7.3 Annual Reporting

The MS4 permit requires the Town to provide in its annual report to DEQ the following:

- Confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year.
- Total number of outfalls screened during the reporting period as part of the dry weather screening program.
- A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:
 - The source of the illicit discharge.
 - The dates that the discharge was observed, reported, or both.
 - Whether the discharge was discovered by the permittee during dry weather

- screening, reported by the public, or other method.
- How the investigation was resolved.
- A description of follow-up activities.
- The date the investigation was closed.

7.4 Reports of Unauthorized Discharges

In accordance with Part III G of the MS4 permit, the Town must notify DEQ immediately upon discovery, but in no case later than within 24 hours, any discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, or § 62.1-44.34:19 of the Code of Virginia that occurs during a 24-hour period into or upon surface waters or who discharges or causes or allows a discharge that may reasonably be expected to enter surface waters.

Table 5: Spill Reporting

Regular Business Hours (8:15 a.m. to 4:30 p.m. M-F)	
DEQ Northern Virginia Region Office	(703) 583-3800
	DEQ Pollution Reporting Form https://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx
Nights, Holidays, and Weekends	
Virginia Department of Emergency Management	1 (800) 468-8892

A written report of the unauthorized discharge shall be submitted to DEQ within five days of discovery of the discharge by mail to 13901 Crown Court, Woodbridge, Virginia 22193 or by sending an email to the Pollution Response Program (PREP) coordinator. The email for the current PREP is located at <https://www.deq.virginia.gov/Locations/NorthernRegionalOffice.aspx>. The written report shall contain:

- A description of the nature and location of the discharge;
- The cause of the discharge;
- The date on which the discharge occurred;
- The length of time that the discharge continued;
- The volume of the discharge;
- If the discharge is continuing, how long it is expected to continue;
- If the discharge is continuing, what the expected total volume of the discharge will be; and,
- Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by a permit.

8. Staff Training

Town employees whose normal responsibilities require a considerable amount of time in the field are an important part of the Town's efforts to identify and correct potential illicit discharges. Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months. The schedule for delivering training is located in the Town's MS4 Program Plan.

9. Contacts

The following is a list of contacts for the IDDE program:

Michael Gallagher, PE, Director of Public Works

Phone: 703-255-6380

Email: mgallagher@viennava.gov

Christine Horner, PE, Water Quality Engineer

Phone: 703-319-8630

Email: christine.horner@viennava.gov

Attachment A: Storm Sewer System Map

Attachment B: Water Quality Incident Report Form

Town of Vienna

IDDE Reporting Form/Water Quality Incident Report Form

Reference: MS4 General Permit Section III G. Reports of Unauthorized Discharges



1.	Name of the person making the report:			
2.	Title of the person making the report:			
3.	Phone and email contact:			
4.	Today's date:			
5.	Current weather conditions:			
6.	Date and time staff became aware of the discharge:			
7.	Description and nature of the discharge:			
8.	Location of the discharge:			
9.	Cause of the discharge:			
10.	Estimated date/time discharge started:		Estimated date/time discharge ended:	
11.	Estimated volume (gallons):			
12.	If the discharge is continuing, how long is it expected to continue?			
13.	If the discharge is continuing, what is the expected total volume?			
14.	Did the discharge enter the storm system (MS4)?		Did the discharge enter surface water?	
15.	Corrective action taken, or to be taken, to reduce, eliminate, or prevent a recurrence:			
16.	Other information:			

Attachment C: Field Equipment Checklist

Town of Vienna

IDDE Field Equipment Checklist



Field crews should work in no smaller a group than two for safety reasons. In addition to safety gear required for all field operations (including PPE), field crews should bring the following equipment to conduct dry weather outfall screening.

All Dry Weather Screening Activities

- Machete/clippers
- Flashlight or headlamp
- Field notebook and clipboard
- Outfall Screening Field Sheet (digital or hard copy)
- MS4 maps or aerial imagery (digital or hard copy)
- Tool box – hammer, duct tape, zip ties
- Tape measure
- Spray paint or other marker
- First aid kit
- GPS unit
- Clear sample bottles
- Wide mouth container
- Cell phone (fully charged)
- Digital camera (fully charged and with sufficient memory available)
- Rubber boots or waders (optional)

Additional Equipment for Sample Collection and Field Measurements

- Watch with second hand (or stopwatch)
- Latex gloves
- Protective glasses or goggles
- Cooler and ice
- Paper towels
- Sample bottles with preservatives
- Single Analyte Meter for measuring detergents
- Multi-parameter probe to measure temperature, electrical conductivity, and pH
- pH strips or other pH monitor
- Chlorine strips or other chlorine monitor
- Extra batteries for all meters
- Flow measurement equipment (required equipment will depend on method used)
- De-ionized or distilled water in squeeze bottles for rinsing, dilutions, etc. (depending on methods used)
- Waste disposal bottles

Attachment D: Outfall Screening Field Sheet



Town of Vienna Outfall Screening Field Sheet

Outfall ID:		Site Visit Date:		Time of Visit:	
Inspector's Name:					Last Rainfall:
Nearest Address or Street Intersection:					Temperature:
Outfall Description:		Watershed:		Current Weather Conditions:	
Land Use Area:		<input type="checkbox"/> Commercial	<input type="checkbox"/> Industrial	<input type="checkbox"/> Open Space	<input type="checkbox"/> High Residential <input type="checkbox"/> Low Residential
Outfall Physical Indicators					
Outfall Information	Diameter/# of Pipes:	<input type="checkbox"/> Circular		<input type="checkbox"/> Elliptical	<input type="checkbox"/> Box <input type="checkbox"/> Other:
	Pipe Condition:	<input type="checkbox"/> Good		<input type="checkbox"/> Average	<input type="checkbox"/> Poor <input type="checkbox"/> Non-Functional
	Pipe End Composition:	<input type="checkbox"/> End Section		<input type="checkbox"/> End Wall	<input type="checkbox"/> Projecting Pipe
	Pipe End Material:	<input type="checkbox"/> RCP <input type="checkbox"/> PVC	<input type="checkbox"/> CMP <input type="checkbox"/> HDPE	<input type="checkbox"/> Steel <input type="checkbox"/> Other:	
Downstream Receiving Channel	<input type="checkbox"/> Concrete	<input type="checkbox"/> Rip-Rap	<input type="checkbox"/> Grass	<input type="checkbox"/> Bed/Bank	<input type="checkbox"/> V-Ditch
	<input type="checkbox"/> Trapezoid	<input type="checkbox"/> Parabolic	<input type="checkbox"/> Other:		
	Notes:				
Illicit Discharge Indicators for Flowing and Non-Flowing Outfalls					Relative Severity Index
Deposits/Stains: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Flow Line	<input type="checkbox"/> Paint	<input type="checkbox"/> Sediment	<input type="checkbox"/> 1 – Faint/old	
	<input type="checkbox"/> Oily	<input type="checkbox"/> Rust	<input type="checkbox"/> Other:	<input type="checkbox"/> 2 – Easily detected/old	
Vegetation: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Normal	<input type="checkbox"/> Inhibited	<input type="checkbox"/> Other:	<input type="checkbox"/> 3 – Easily detected/recent	
				<input type="checkbox"/> 1 – Possible inhibited growth	
Poor Pool Quality <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Suds	<input type="checkbox"/> Excessive Algae	<input type="checkbox"/> Floatables	<input type="checkbox"/> 2 – Clearly inhibited	
	<input type="checkbox"/> Oil Sheen	<input type="checkbox"/> Color	<input type="checkbox"/> Other:	<input type="checkbox"/> 3 – Clearly inhibited by other indicator	
Odor Present: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Sewage	<input type="checkbox"/> Rancid/Sour	<input type="checkbox"/> Sulfur/Rotten Eggs	<input type="checkbox"/> 1 – Faint	
	<input type="checkbox"/> Petroleum/Gas	<input type="checkbox"/> Laundry/Wash	<input type="checkbox"/> Other:	<input type="checkbox"/> 2 – Easily detected	
Pipe Benthic Growth: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Brown	<input type="checkbox"/> Orange	<input type="checkbox"/> Green	<input type="checkbox"/> 3 – Noticeable from a distance	
	<input type="checkbox"/> Other:			<input type="checkbox"/> 1 – Faint	
Illicit Discharge Indicators for Flowing Outfalls (Complete if Flow Present)					
Is Flow Present? <input type="checkbox"/> No <input type="checkbox"/> Yes		<input type="checkbox"/> Trickle/Light	<input type="checkbox"/> Moderate	<input type="checkbox"/> Heavy	
Estimated Discharge Rate:		A. Width of Water:	B. Approx. Avg. Depth:	A x B = C Flow:	C x D = E Est. Flow Rate:
Color: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Brown	<input type="checkbox"/> Gray	<input type="checkbox"/> Yellow	<input type="checkbox"/> Green	<input type="checkbox"/> 1 – Faint colors
	<input type="checkbox"/> Orange	<input type="checkbox"/> Red	<input type="checkbox"/> Other:		<input type="checkbox"/> 2 – Clearly visible
Turbidity: <input type="checkbox"/> Yes <input type="checkbox"/> No	See Severity				<input type="checkbox"/> 3 – Clearly visible in flow
					<input type="checkbox"/> 1 – Slight Cloudiness
Floatables: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Suds	<input type="checkbox"/> Sewage (toilet paper, etc.)	<input type="checkbox"/> Petroleum (oil sheen)	<input type="checkbox"/> Dead Fish	<input type="checkbox"/> 2 – Cloudy
	<input type="checkbox"/> Trash	<input type="checkbox"/> Other:			<input type="checkbox"/> 3 – Opaque
Field Test Results:	<input type="checkbox"/> pH:	<input type="checkbox"/> Chlorine:	<input type="checkbox"/> Detergents:	<input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight – origin not obvious
					<input type="checkbox"/> 2 – Some – indications of origin
					<input type="checkbox"/> 3 – Some – origins clear (e.g., obvious oil sheen, floating sanitary materials)
Further investigation required if: • pH <6.0 or >9.0 s.u. • Chlorine >0.02 mg/L • Detergents >0.25 mg/L					
Overall Outfall Illicit Discharge Characterization					
<input type="checkbox"/> Unlikely	<input type="checkbox"/> Potential (presence of two or more indicators)		<input type="checkbox"/> Suspect (one or more indicators with a severity rating of 2 or higher)		<input type="checkbox"/> Obvious
Notes and Site Observations:					
Follow-up Actions Required:					
Signature of Inspector:				Date:	

Appendix F

Construction and Post-Construction Stormwater Management Procedures



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

June 13, 2014

Mercury Payton, Town Manager
Town of Vienna
127 Center Street, S.
Vienna, VA 22180

Dear Mr. Payton:

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 Town of Vienna's final Virginia Stormwater Management Program (VSMP) application package submitted on April 24, 2014. Based on this review, DEQ has determined that the Town of Vienna'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 Town of Vienna's VSMP; and the Town 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 Town with the implementation of its VSMP.

Sincerely,

A handwritten signature in black ink, appearing to read "David K. Paylor", written over a horizontal line.

David K. Paylor

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

Town of Vienna, Virginia
LAND DISTURBING PERMIT

APPLICANT INFORMATION		
<div></div>		
(Full Name)		
<div></div>		
(Address)		
<div></div>		
(Email)		
<div></div>		
(Business Phone)	(Cell Phone)	(Fax Number)

LANDOWNER INFORMATION		
<div></div>		
(Full Name)		
<div></div>		
(Address)		
<div></div>		
(Email)		
<div></div>		
(Business Phone)	(Cell Phone)	(Fax Number)

LAND DISTURBER CERTIFICATION/CERFICATE OF COMPETENCE		
<div></div>		
Name: <div></div> License: <div></div> Expires: <div></div>		
Phone: <div></div> Cell: <div></div> Fax: <div></div>		
Land Disturber Email: <div></div>		

PROJECT DESCRIPTION		
<div></div>		
Project (Name and Description): <div></div>		
<div></div>		
<div></div>		
<div></div>		
Location: <div></div>		
Plan Prepared By: <div></div>		
Tax Map: <div></div> Parcel: <div></div> Area (SF): <div></div>		

The following must be submitted with the permit application and approved by the Town of Vienna:

Submitted	Approved	
<div></div>	<div></div>	A stormwater management plan that meets the requirements of Town Code Chapter 23, Article 3, including a maintenance agreement in accordance with Section 23-18.
<div></div>	<div></div>	An erosion and sediment control plan that meets the requirements of Town Code Chapter 23, Article 2

Upon approval of the above items, the following must be provided by the applicant:

- \$2,000 performance bond for erosion and sediment control (Section 23-7 of the Town Code).
- \$2,500 performance bond for stormwater management (Section 23-23 of the Town Code).
- Fees in accordance with Section 1-13 of the Town Code.

After submittal of the performance bonds and fees, the following must be submitted to the Town prior to final approval of the Land Disturbing Permit Application:

- ____ Registration Statement for General Permit for Discharges from Construction Activities in accordance with 9VAC25-880.
- ____ Proof of General Permit coverage.

The following statements apply to all Town of Vienna Land Disturbing Permits:

- _____ The Land Disturbing Permit must be kept on the work site and shown when requested.
- _____ A Stormwater Pollution Prevention Plan (SWPPP) in conformance with 9VAC25-870-54 and Town Code Section 23-13 must be maintained at a central location on the site. If an on-site location is unavailable, notice of the SWPPP's location must be posted near the main entrance of the construction site. The SWPPP shall be made available for public review in accordance with the General Permit either electronically or in hard copy.
- _____ The Town of Vienna Department of Public Works must be notified by telephone (703-255-6380) when work is to commence and when the project is completed. Prior to commencement of work, the applicant or contractor agrees to contact and meet with the Department to identify significant stormwater control installation points were the contractor MUST contact the Town for inspection either during or immediately after installation. The Department shall be notified at least 48 hours in advance of these installation points.
- _____ No land disturbing activity shall commence until all erosion and sediment controls are in place as specified in the erosion and sediment control plan and a pre-construction meeting with Town staff is held.
- _____ The applicant agrees to be responsible for any and all damages to any other installation, already in place, as a result of work covered by this permit.
- _____ The Town reserves the right to order a developer or contractor to cease and desist all work activity in the event that the developer or contractor is unable to meet the requirements of the stormwater management plan, erosion and sediment control plan, or the SWPPP. This includes keeping all streets and rights-of-way free of mud and dirt.
- _____ The applicant agrees to maintain the work in the manner approved upon its completion.
- _____ A permit may be denied any applicant, and all permits issued by the Town may be revoked, whenever, in the opinion of the Director of Public Works, the safety, use or maintenance of the property so requires. Performance bonds required under Section 23-7 and Section 23-23 of the Town Code will stand forfeited and work shall not be recommenced until a replacement bond is posted.
- _____ Performance bonds shall be conditioned to conform any work to approved standards, specifications, and criteria as set out in the approved erosion and sediment control plan and stormwater management plan.
- _____ Release of erosion and sediment control performance bond. Upon completion of adequate stabilization of an approved erosion and sediment control plan, the permittee shall notify the Director of Public Works of such completion. Following inspection of the work and planting and a determination that they are in compliance with the approved plan, the Director of Public Works shall issue a letter of preliminary acceptance. The permittee shall guarantee all erosion and sediment control work for a period of one year from the date of the preliminary acceptance, or for a period of one year from any repair or replanting ordered by the Director of Public Works, or until such time that all control structures and a minimum of 90% of all plantings have survived for a year without need for further replanting and repair. Final acceptance shall occur when preliminary acceptance has remained unrevoked for a period of one year, or when all control structures and a minimum of 90% of all plants have survived for a period of one year without need for further replanting or repair. The release of the bond is contingent upon final inspection by the Director of Public Works or his designee.
- _____ Stormwater management performance bond. The stormwater management performance bond will be released upon all stormwater management facilities in the stormwater management plan passing final construction inspection by the Director of Public Works or his designee. A construction record drawing for permanent stormwater management facilities must be submitted to the Director prior to bond release in accordance with Town Code Section 23-14.D.
- _____ The maintenance agreement required in Town Code Section 23-18 must be recorded in the Fairfax County land records prior to termination of the General Permit.

I, _____, hereby certify that I fully understand the provisions of this Land Disturbing Permit and the requirements set forth in Chapter 23 of the Town Code and will implement the above referenced project as approved by the Town. I further grant right-of-entry onto this property to the designated personnel of the Town for the purpose of inspecting and monitoring for compliance with all aspects of Chapter 23.

APPROVED

Director of Public Works _____ Date _____

Town of Vienna Submittal and Review of Stormwater Management and Erosion and Sediment Control Plans

STANDARD OPERATING PROCEDURES

The following are to be submitted to the Town of Vienna Department of Planning and Zoning by an applicant for any proposed land disturbing activity regulated under Town Code Chapter 23 “Environment:”

1. A Land Disturbing Permit Application.
2. A stormwater management plan that meets the requirements of Chapter 23, Article 3, Section 23-14.
3. An erosion and sediment control plan that meets the requirements of Chapter 23, Article 2 “Erosion and Sediment Control.”
4. Plans for meeting the requirements of Chapter 18, Article 21.1 “Chesapeake Bay Preservation Areas.”

The Department of Planning and Zoning distributes items 1 through 4 to the Department of Public Works for review.

The Department of Public Works reviews the stormwater management plan in accordance with Chapter 23, Section 23-15 and the erosion and sediment control plan in accordance with Chapter 23, Section 23-6.

Stormwater Management Plan	Erosion and Sediment Control Plan
15 days for the Town to determine plan completeness and notify the applicant in writing.	45 days for the Town to review and approve the plan if it adequate.
60 days from the time of notification of completeness for the Town to review the plan and notify the applicant in writing.	45 days for the Town to review and provide written notice with an explanation for the plan if it is inadequate.
45 days from the date of any resubmission for the Town to review and respond in writing to a previously disapproved plan.	45 days for the Town to review and respond in writing to a plan that was previously disapproved.
60 days for the Town to review and respond in writing to modifications to the approved plan.	If no action is taken within the time frames specified above, the plan is deemed approved.

The Department of Public Works utilizes the Town of Vienna Stormwater Management Plan Review Checklist and any supplemental review materials in Appendix 3 of the Virginia Stormwater Management Handbook to review the stormwater management plan to verify that minimum standards are met and required elements of the plan have been provided in accordance with Article 3 “Stormwater Management” of Chapter 23.

The Department of Public Works utilizes the Virginia Stormwater BMP Clearinghouse or the Fairfax County Public Facilities Manual, whichever is more stringent unless waived by the Director of Public Works in accordance with Town Code Section 23-17.A.1., to review stormwater management facility design.

The Department of Public Works utilizes Chapter 6 and Chapter 7 of the Virginia Erosion and Sediment Control Handbook to verify that minimum standards are met and required elements of the plan have been provided in accordance with Article 2 “Erosion and Sediment Control” of Chapter 23.

The Department of Public Works provides comments to the Department of Planning and Zoning for communication to the applicant. Revisions and re-submittals are made in accordance with the Town Code until satisfactorily addressed.

The Department of Public Works approves the stormwater management plan and erosion and sediment control plan contingent on the following:

1. The applicant demonstrates that all land clearing, grading, excavating, transporting, and filling of land will be done in conformance with Town Code Chapter 23.
2. The applicant submits fees pursuant to Chapter 1, Section 1-13.
3. The applicant submits performance bonds required in Town Code Section 23-7 and Section 23-23.
4. The Town approves the stormwater management facility maintenance agreement as required in Town Code Section 23-18.

On approval of the stormwater management plan and erosion and sediment control plan by the Department of Public Works, the applicant submits a Registration Statement for a General Permit for Discharges from Construction Activities in accordance with 9VAC25-880.

On obtaining and presenting evidence of General Permit coverage to the Town, the Town finalizes and approves the Land Disturbing Permit.

TOWN OF VIENNA STORMWATER MANAGEMENT PLAN REVIEW CHECKLIST

1. Applicant Information

Submission Date _____

Project Name _____

Site Address _____

Applicant _____ Phone Number _____

Applicant Legal Address _____

Applicant Phone Number _____

Principal Designer Phone Number _____

General Contractor Phone Number _____

2. _____ Signature and stamp of licensed professional consultant and owner certification (for final plan submittal)

3. Plan Status

_____ Approved
_____ Not Approved

Legend: ✓ - Complete
 Inc. - Incomplete/Incorrect
 N/A - Not Applicable

4. _____ Common address and legal description of the site, including the tax reference number(s) and parcel number(s) of the property or properties affected.

5. _____ A narrative that includes a description of current site conditions and proposed development and final site conditions, including proposed use of environmental site design techniques and practices, stormwater control measures, relevant information pertaining to long-term maintenance of these measures (see item #12 below), and a construction schedule.

6. Existing and proposed mapping and plans (recommended scale of 1" = 50', or greater detail), which illustrates the following at a minimum:

- _____ North arrow
- _____ Legend
- _____ Vicinity map
- _____ Existing and proposed topography (minimum of 2-foot contours recommended)
- _____ Property lines
- _____ Perennial and intermittent streams
- _____ Mapping of predominant soils from USDA soils surveys as well as the location of any site-specific test bore hole investigations that may have been conducted and information identifying the hydrologic characteristics and structural properties of soils used in the installation of stormwater management facilities
- _____ Boundaries of existing predominant vegetation and proposed limits of clearing and grading
- _____ Location and boundaries of natural feature protection and conservation areas (e.g., wetlands, lakes, ponds, aquifers, public drinking water supplies, etc.) and applicable setbacks (e.g., stream buffers, drinking water well setbacks, septic drainfield setbacks, building setbacks, etc.)
- _____ Identification of any on-site or adjacent water bodies included on the Virginia 303(d) list of impaired waters
- _____ Current land use and location of existing and proposed roads, buildings, parking lots and other impervious areas
- _____ Location and description of any planned demolition of existing structures, roads, etc.
- _____ Proposed land use(s) with a tabulation of the percentage of surface area to be adapted to various uses, including but not limited to planned locations of utilities, roads, parking lots, stormwater management facilities, and easements
- _____ Location of existing and proposed utilities [e.g., water (including wells), sewer (including septic systems), gas, electric, telecommunications, cable TV, etc.] and easements
- _____ Earthwork specifications

- _____ Selection, location and design of both structural and non-structural stormwater control measures, including maintenance access and limits of disturbance
- _____ Storm drainage plans for site areas not draining to any BMP(s)
- _____ Location of existing and proposed conveyance systems, such as storm drains, inlets, catch basins, channels, swales, and areas of overland flow, including grades, dimensions, and direction of flow
- _____ Final drainage patterns and flow paths
- _____ Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainage systems
- _____ Location of all contributing drainage areas and points of stormwater discharge, receiving surface waters into which stormwater discharges, the pre-development and post-development conditions for drainage areas, and the potential impacts of site stormwater on adjoining parcels
- _____ Location and dimensions of proposed channel modifications, such as bridge or culvert crossings
- _____ Final stabilization and landscaping plans

7. Hydrologic and hydraulic analysis, including the following:

- _____ Site map with locations of design points and drainage areas (size in acres) for runoff calculations
- _____ Identification and calculation of stormwater site design credits, if any apply
- _____ Estimates of unified stormwater sizing criteria requirements
- _____ Time of concentration (and associated flow paths)
- _____ Imperviousness of the entire site and each drainage area
- _____ NRCS runoff curve numbers or volumetric runoff coefficients
- _____ A hydrologic analysis for the existing (pre-development) conditions, including runoff rates, volumes, and velocities, showing the methodologies used and supporting calculations
- _____ A hydrologic analysis for the proposed (post-development) conditions, including runoff rates, volumes, and velocities, showing the methodologies used and supporting calculations
- _____ Hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms
- _____ Pollution load and load reduction requirements and calculations
- _____ Final good engineering and sizing calculations for stormwater control measures, including contributing drainage areas, storage, and outlet configurations, verifying

- ☐ compliance with the water quality and water quantity requirements of the regulations
- ☐ Stage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities
- ☐ Final analysis of the potential downstream impacts/effects of the project, where necessary
- ☐ Downstream analysis, where detention is proposed
- ☐ Dam safety and breach analysis, where necessary

8. Representative cross-section and profile drawings and details of stormwater control measures and conveyances which include the following:

- ☐ Existing and proposed structural elevations (e.g., inverts of pipes, manholes, etc.)
- ☐ Design water surface elevations
- ☐ Structural details of BMP designs, outlet structures, embankments, spillways, grade control structures, conveyance channels, etc.

9. ☐ Applicable construction and material specifications, including references to applicable material and construction standards (ASTM, etc.)

10. ☐ Erosion and sediment control plan that, at a minimum, meets the requirements outlined in the Virginia Erosion and Sediment Control Regulations and Handbook

11. ☐ Landscaping plans for stormwater control measures and any site reforestation or revegetation

12. Operations and maintenance plan/agreement that includes the following:

- ☐ Name, legal address and phone number of the party or parties responsible for long-term maintenance activities
- ☐ Description and schedule of maintenance tasks
- ☐ Identification/description of the source of funding to support maintenance activities
- ☐ Description of access and safety issues
- ☐ Procedures for testing and disposal of sediments, if required
- ☐ Right-of-entry authorization for local government inspections/repairs, as needed

13. ☐ Evidence of acquisition of all applicable local and non-local permits

14. _____ Waiver/exception requests

15. _____ Evidence of acquisition of all necessary legal agreements (e.g., easements, covenants, land trusts, etc.)

16. _____ Applicable supporting documents and studies (e.g., infiltration tests, geotechnical investigations, TMDLs, flood studies, etc.)

17. _____ Other required permits

Town of Vienna Stormwater Management Construction Inspection and Enforcement

STANDARD OPERATING PROCEDURES

The Department of Planning and Zoning provides the approved stormwater management plan and the approved erosion and sediment control plan to the Department of Public Works.

PRIOR TO COMMENCEMENT OF PROJECT WORK, the Department of Public Works sets a meeting with the contractor on the construction site to:

- Verify that a Stormwater Pollution Prevention Plan is in place and on-site.
- Review erosion and sediment control elements.
- Review the stormwater management plan.
- Review the requirements of the Pollution Prevention Plan.
- Review the design specifications for stormwater management controls.
- Identify significant stormwater control installation points where the contractor MUST contact the Town for inspection either during or immediately after installation to ensure the practice is installed properly. A CRITICAL STORMWATER CONTROLS INSTALLATION AND CONSTRUCTION MILESTONES form will be completed by the Town and the contractor. At least 48 hours notice will be provided by the contractor to allow adequate time for planning by the Department.

The Department of Public Works utilizes Appendix 3 of the Virginia Stormwater Management Handbook and the appropriate sections of the Virginia Stormwater BMP Clearinghouse during construction inspections.

The Department of Public Works will monitor active construction projects on a periodic basis, but at least weekly and to inspect stormwater control installation points as agreed upon with the contractor at the initial on-site visit. Inspections will include:

- Compliance with the approved erosion and sediment control plan
- Compliance with the approved stormwater management plan
- Development, updating, and implementation of the pollution prevention plan
- Development and implementation of any additional control measures necessary to address a TMDL

Inspections will be recorded by the Town using the CONSTRUCTION INSPECTION REPORT FORM. If listed violation(s) constitute non-compliance and the corrective actions are not completed by the deadline, a notice to comply, stop work order, or other enforcement action

may be issued by the Town for the project. A stop work order will be lifted upon compliance. If there is a failure to comply with such measures within the time specified, the Land Disturbing Permit may be revoked and the responsible party shall be deemed to be in violation and upon conviction shall be subject to the penalties provided in Town Code Section 23-22.

The stormwater management performance bond will be released upon all stormwater management facilities in the stormwater management plan passing final construction inspection by the Director of Public Works or his designee. A construction record drawing for permanent stormwater management facilities must be submitted to the Director prior to bond release in accordance with Town Code Section 23-14.D.

**Town of Vienna Stormwater Management Construction
Inspection and Enforcement**

**CRITICAL STORMWATER CONTROL INSTALLATION AND
CONSTRUCTION MILESTONES**

Project Name _____

Site Address _____

Contact Name _____ Phone Number _____

**THE CONTRACTOR MUST CONTACT THE TOWN OF VIENNA DEPARTMENT OF PUBLIC
WORKS AT LEAST 48 HOURS PRIOR TO INSTALLATION OF THE FOLLOWING
STORMWATER CONTROL COMPONENTS. FAILURE TO COMPLY MAY RESULT IN
WORK HAVING TO BE RE-DONE AND/OR ENFORCEMENT ACTION.**

Department of Public Works – (703) 255-6380

Component: _____

Component: _____

Component: _____

Component: _____

Component: _____

Signed and Agreed by Contractor

Date

Town of Vienna Stormwater Management Construction Inspection and Enforcement

CONSTRUCTION INSPECTION REPORT FORM

Project Name: _____ Location: _____ Date: _____

Inspector's Name: _____ Weather Conditions: _____

Time Since Last Precipitation: _____ Precipitation Amount: _____

STAGE OF CONSTRUCTION

Pre-Construction Conference ☐ Building Construction ☐ Demolition ☐
 Clearing & Grubbing ☐ Finish Grading ☐ Bond Release ☐
 Rough Grading ☐ Final Stabilization ☐ Other _____ ☐

Reason for Inspection: ☐ Qualifying Rainfall Event ☐ Bi-weekly Inspection ☐ Other
 ☐ Stormwater Control Installation _____

Enforcement or Follow-up Action / Inspection Result:

☐ Notice to Comply ☐ Stop Work Order ☐ Re-inspection ☐ N/A

Erosion and Sediment Control Measures						
Ref. No.	BMP Installed & Operating Properly?			Type of BMP / Activity	Location and Corrective Action Needed	Date to complete corrective action
	Yes	No	N/A			
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temporarily or permanently stabilization of exposed areas		
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stabilization of stockpiles		
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate stabilization from vegetative cover		
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Installation and maintenance of perimeter sediment control		
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stabilization of earthen structures		
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Installation of sediment basins and or sediment traps		
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stabilization of slopes		
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Installation of proper controls on new disturbed areas		
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate catch basin inlet protection		

*Town of Vienna Stormwater Management Construction Inspection and Enforcement
Construction Inspection Report Form*

10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Channel lining/outlet protection for storm water conveyance channels		
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Measures used to minimize impact for in-stream construction		
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-erodible material for temporary stream crossings		
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Re-stabilization of in-stream construction		
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Underground utilities being installed in accordance with applicable standards		
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction entrance/exit and prevention of offsite tracking		
16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Dust control to prevent sediment from leaving the site		

Pollution Prevention Measures						
Ref. No.	BMP Implemented and Maintained?			Type of BMP / Activity	Corrective Action Needed	Date to complete corrective action
	Yes	No	N/A			
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Vehicle and equipment fueling, cleaning, storage, and maintenance areas free of spills, leaks, or any other deleterious material		
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Covered dumpster for trash and litter		
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concrete washout clearly marked and being used		
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sensitive areas (e.g., RPA, streams, mature trees) protected with barriers, flags, or similar		
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Additional control measures to address a TMDL		
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Materials with potential to impact stormwater stored under cover		

*Town of Vienna Stormwater Management Construction Inspection and Enforcement
Construction Inspection Report Form*

Stormwater Management Facility								
Ref. No.	SWM Facility Under Construction?			Is Construction Complete?			Type of SWM Facility	Type of work being performed
	Yes	No	N/A	Yes	No	N/A		
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Stormwater Pollution Prevention Plan (SWPPP)			
Yes	No	N/A	SWPPP Check
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is the SWPPP onsite?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does the SWPPP need to be modified?
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Has the SWPPP been modified since the last inspection? If so, note the date:

Please use space below if needed for additional instruction:

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Verbal / written notification given to: _____

If listed violations are not completed by the deadline(s), enforcement actions **as set forth in Town Code Chapter 23** may be utilized for ensuring compliance on the above project.

Inspector: _____
Signature Date

Town of Vienna Stormwater Management Construction Inspection and Enforcement

CONSTRUCTION INSPECTION REPORT FORM SINGLE FAMILY DEVELOPMENT OR LESS THAN ONE ACRE AND NOT SUBJECT TO VSMP PERMIT

Project Name: _____ Location: _____ Date: _____

Inspector's Name: _____ Weather Conditions: _____

Time Since Last Precipitation: _____ Precipitation Amount: _____

STAGE OF CONSTRUCTION

Pre-Construction Conference ☐ Building Construction ☐ Demolition ☐
 Clearing & Grubbing ☐ Finish Grading ☐ Bond Release ☐
 Rough Grading ☐ Final Stabilization ☐ Other _____ ☐

Reason for Inspection: ☐ Qualifying Rainfall Event ☐ Bi-weekly Inspection ☐ Other
 ☐ Stormwater Control Installation _____

Enforcement or Follow-up Action / Inspection Result:

☐ Notice to Comply ☐ Stop Work Order ☐ Re-inspection ☐ N/A

Erosion and Sediment Control Measures

Ref. No.	BMP Installed & Operating Properly?			Type of BMP / Activity	Location and Corrective Action Needed	Date to complete corrective action
	Yes	No	N/A			
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Temporarily or permanently stabilization of exposed areas		
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stabilization of stockpiles		
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate stabilization from vegetative cover		
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Installation and maintenance of perimeter sediment control		
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stabilization of slopes		
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Installation of proper controls on new disturbed areas		
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate catch basin inlet protection		

*Town of Vienna Stormwater Management Construction Inspection and Enforcement
Construction Inspection Report Form – SFD or Less Than One Acre and Not Subject to VSMP Permit*

8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Underground utilities being installed in accordance with applicable standards		
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Construction entrance/exit and prevention of offsite tracking		

Pollution Prevention Measures						
Ref. No.	BMP Implemented and Maintained?			Type of BMP / Activity	Corrective Action Needed	Date to complete corrective action
	Yes	No	N/A			
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Covered dumpster for trash and litter		
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Concrete washout clearly marked and being used		
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sensitive areas (e.g., RPA, streams, mature trees) protected with barriers, flags, or similar		
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Materials with potential to impact stormwater stored under cover		

Stormwater Management Facility								
Ref. No.	SWM Facility Under Construction?			Is Construction Complete?			Type of SWM Facility	Type of work being performed
	Yes	No	N/A	Yes	No	N/A		
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Please use space below if needed for additional instruction:

Verbal / written notification given to: _____
If listed violations are not completed by the deadline(s), enforcement actions **as set forth in Town Code Chapter 23** may be utilized for ensuring compliance on the above project.

Inspector: _____
Signature Date

Town of Vienna Stormwater Facility Maintenance and Inspection

STANDARD OPERATING PROCEDURES

A Stormwater Management Facility Maintenance Agreement (maintenance agreement) must be submitted to the Department of Public Works in a format acceptable to the Town Attorney and approved prior to approval of the stormwater management plan and issuance of the Land Disturbing Permit.

The maintenance agreement must include all components required by the Town Code Section 23-18. Inspection and maintenance frequency by the property owner will be based on the facility type in accordance with the Virginia Stormwater BMP Clearinghouse and site-specific considerations as determined by the Director of Public Works.

The developer or landowner who installs the stormwater facility is responsible for facility maintenance until the time of conveyance to the ultimate property owner and shall provide the successor landowner and the Town with maintenance schedules and maintenance procedures, known as a Stormwater Facility Maintenance Manual, for all facilities used in the development.

The approved maintenance agreement must be recorded in the Fairfax County land records prior to termination of the General Permit, or earlier if required by the Director of Public Works.

The Department of Public Works enters each individual stormwater management facility into an inventory database. The database is utilized to track all facilities and to document maintenance and inspections.

The Town will conduct public and private stormwater management facility inspections on the frequency required in the Town's municipal separate storm sewer system (MS4) permit and MS4 Program Plan. However, the Town will conduct facility inspections no less than once every five years.

The Town will use the following protocol for the Private Stormwater Management Facility Inspection and Maintenance Report that must be submitted by the owner to the Town in accordance with Town Code Section 23-18B.4:

- Six months prior to the deadline for submitting the inspection and maintenance report to the Town, the Department of Public Works will send a letter notifying the owner of the requirement.

- 30 days after due date if no inspection and maintenance report is received, a second letter will be sent via certified mail providing an additional 60 days to comply or face penalties.
- If after 60 days an inspection and maintenance report is not received, the Town will perform the inspection at the land-owners expense and will charge the property owner the full amount of the inspection. The Town may engage in enforcement action in accordance with Town Code Section 23-22.

The following documents and checklists are attached to this SOP: Stormwater Management Facility Maintenance Agreement; Private Stormwater Management Facility Inspection and Maintenance Report.

Town of Vienna Private Stormwater Management Facility Inspection and Maintenance Report

Responsible Party:

Date:

Property Information:

Owner

Street

City, State, ZIP Code

Stormwater Management Facility Type:

General Condition:	Yes	No	N/A
Is the primary outfall pipe/ ditch clear and functioning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are the inflow pipes/ ditches clear and functioning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the water quality pool at the correct height or infiltrating into the soil as designed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are water quality pool control weirs, pipes, etc. working properly (if present)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are emergency overflow devices clear and functional (if present)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the structure clear of sediment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the structure clear of trash?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is vegetation being managed in a manner appropriate to the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Certification

This certification must be made in accordance with the requirements of the Stormwater Facility Maintenance Agreement and may require certification by a licensed professional engineer, landscape architect, or other professional accepted by the Town.

☐ Based on a visual survey of the above facility conducted on _____, I certify that the facility is currently functioning as designed.

Printed Name

Date

Signature

Qualification

Address

Phone

Town of Vienna Stormwater Management Facility Maintenance Agreement

THIS AGREEMENT, made this _____ day of _____, _____, by and
between _____

Insert Full Name of Owners(s)

hereinafter called "Landowner," and the Town Council of the Town of Vienna, Virginia, hereinafter called
"Town:"

WITNESSETH:

WHEREAS, the Landowner is the owner of certain real property, more particularly described as:

Insert Full Name of Owners(s)

Plan Name

Tax Map Number

As recorded by Deed in the land records of Fairfax County, Virginia, in Deed Book _____ at
Page _____, hereinafter called the "Property;" and

WHEREAS, the Landowner has engaged in a land disturbing activity on the Property that is
regulated under Chapter 23 of the Town Code; and

WHEREAS, Site Plan/Subdivision Plan Number _____, hereinafter
called the "Plan" and expressly made part of this agreement, provides for management of stormwater
within the confines of the Property in accordance with a stormwater management plan approved by the
Town; and

WHEREAS, the Town and the Landowner agree that the health, safety, and welfare of the
residents of the Town of Vienna, Virginia require that stormwater management facilities be constructed
and maintained on the property; and

WHEREAS, the Town requires that stormwater management facilities be constructed and
adequately maintained by the Landowner.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained
herein, and the following terms and conditions, the parties hereby agree as follows:

1. The Landowner shall construct stormwater management facilities in accordance with the Plan, the stormwater management plan, and other plans approved by the Town and in compliance with all applicable laws and regulations promulgated pursuant to the Code of Virginia § 62.1-44.15:27 and 9VAC25-870 (Virginia Stormwater Management Program Regulations).
2. The Landowner shall maintain the stormwater management facilities in good working order so that the facilities are performing their design functions as described and shown on the Plan and in the Virginia Stormwater BMP Clearinghouse and in accordance with the specific maintenance requirements noted in the Stormwater Facility Maintenance Manual attached hereto as Attachment A.
3. The Landowner shall submit a Private Stormwater Management Facility Inspection and Maintenance Report to the Town on a frequency required in the Stormwater Facility Maintenance Manual, but no less than once every five years. The inspection report shall be signed and sealed by a qualified professional engineer or surveyor unless the Stormwater Facility Maintenance Manual explicitly provides otherwise.
4. The Landowner hereby grants permission to the Town, its authorized agents and employees, to enter on the Property to inspect the stormwater management facilities whenever it deems necessary. Except in cases of emergency, the Town shall make a reasonable attempt to notify the Landowner prior to entering the Property.
5. If the Landowner fails to adequately maintain the stormwater management facilities in accordance with the Plan and the Virginia Stormwater BMP Clearinghouse and in accordance with the specific maintenance requirements noted in the Stormwater Facility Maintenance Manual, or if the Landowner fails to submit a Private Stormwater Management Facility Inspection and Maintenance Report when due in accordance with the Stormwater Facility Maintenance Manual or this Agreement, the Town and its agents shall have the right, but not the obligation, to enter onto the Property and perform any inspection, replacement, repair and maintenance as the Town deems necessary. The Landowner shall reimburse the Town the costs of the inspection, replacement, repair, and maintenance of the stormwater management facilities performed by the Town within 10 days of receipt of an invoice by the Town. This provision shall not be construed to allow the Town to erect any building or structure on the Property without obtaining written approval of the Landowner. It is expressly understood and agreed that the Town is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Town.
6. The Landowner shall not alter the stormwater management facilities without prior written approval of the Town.
7. The intent of this Agreement is to ensure the proper maintenance of stormwater management facilities by the Landowner; provided, however, that this Agreement shall not be deemed to create or affect any additional liability on any party for damage alleged to result from or be caused by stormwater drainage.

*Town of Vienna Stormwater Facility Maintenance and Inspection Standard Operating Procedures
Stormwater Management Facility Maintenance Agreement*

8. The Landowner, its executors, administrators, assigns, and any other successors in interest, shall indemnify and hold harmless the Town and its agents and employees for any and all damages, accidents, casualties, occurrences or claims that might arise or be asserted against the Town from the construction, presence, existence, or maintenance of stormwater management facilities by the Landowner or the Town. In the event a claim is asserted against the Town, its agents or employees, the Town shall promptly notify the Landowner and the Landowner shall defend at his own expense any suit based on such claim. If any judgment or claims against the Town, its agents or employees is allowed, the Landowner shall pay all costs and expenses in connection therewith.
9. This Agreement shall be recorded among the land records of Fairfax County, Virginia, and shall constitute a covenant running with the land and shall be binding on the Landowner, its administrators, executors, assigns, heirs and any other successors in interest.

IN WITNESS of all of which, the parties hereto have caused this Agreement to be executed under seal on their behalf.

_____	_____
Landowner	Landowner
By: _____	_____
Signature	Signature
_____	_____
Print or Type Name and Title	Print or Type Name and Title

Address: (Type or Print): _____

STATE OF _____

COUNTY/CITY OF _____

I, _____, Notary Public in and for the State and County/City aforesaid, do hereby certify that _____ whose name(s) is (are) signed to the foregoing Agreement, this day personally appeared before me in my State and County/City aforesaid and acknowledged the same.

Given under my hand this _____ day of _____, _____.

My commission expires: _____

Notary Public

*Town of Vienna Stormwater Facility Maintenance and Inspection Standard Operating Procedures
Stormwater Management Facility Maintenance Agreement*

TOWN COUNCIL, TOWN OF VIENNA, VIRGINIA

By: _____
Director of Public Works, Town of Vienna

COMMONWEALTH OF VIRGINIA
COUNTY OF FAIRFAX

This _____ day of _____, _____, appeared before me in
my State and County aforesaid, _____ Director of Public Works,
and acknowledged his signature.

My commission expires: _____
Notary Public

Approved to Form

Town Attorney

Town of Vienna Stormwater Management Record Keeping

STANDARD OPERATING PROCEDURES

Documentation to be submitted to the Virginia Department of Environmental Quality:

- The Department of Public Works will document and track in Excel format the number and type of exceptions granted to the Town's stormwater management provisions in accordance with Town Code 23-17.F.
- The Department of Public Works will collect the following information in Excel format on each stormwater management facility newly installed in the Town: geographic coordinates, acres treated, and the surface waters into which the stormwater management facility will discharge.
- The Department of Public works will collect and track in Excel format the number and type of enforcement actions taken on existing stormwater management facility in the Town.
- The Town will submit the above information on a fiscal year basis (July 1 to June 30) to the Virginia Department of Environmental Quality no later than October 1 of each year with the Town's MS4 permit annual report.

Documentation to be maintained by the Town:

- Project records, including approved stormwater management plans, will be kept by the Department of Public Works for at least three years after general permit termination or project completion.
- Stormwater management facility inspection records shall be entered into Excel format by the Department of Public Works and retained for at least five years from the date of inspection.
- Stormwater management facility inspection certifications submitted by property owners will be repainted by the Department of Public Works for at least five years from the date of inspection.
- Construction record drawings submitted in accordance with Town Code 23-14.D will be maintained by the Department of Public Works in perpetuity or until a stormwater management facility is removed.

Appendix G

**Good Housekeeping
Standard Operating Procedures**



Town of Vienna, Virginia

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Vehicle and Equipment Maintenance and Cleaning	
Date:	July 16, 2015; Revised April 8, 2019
Purpose of SOP:	To establish standard, consistent stormwater pollution prevention procedures for vehicle and equipment maintenance and washing activities to prevent the discharge of pollutants related to these activities.
MS4 Permit Reference	Part I E 6 a
Responsible Party	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

Vehicles and equipment can become sources of pollution as a result of leaks and spills during operation and maintenance if proper measures are not implemented. Further, vehicle and equipment wash water is prohibited from being discharged into the MS4 without authorization under a separate VPDES permit.

Pollutants may include, but are not limited to, petroleum products, antifreeze, solvents, battery acid, detergents, and heavy metals. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1) Responsible Parties

- a) Town Staff. Preventive vehicle and equipment maintenance is primarily performed by the Vehicle Maintenance Division of the Department of Public Works. Minor repair and response to spills may also be conducted by the Parks Maintenance Division of the Department of Parks and Recreation.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with vehicle and equipment maintenance and cleaning. The requirements of this SOP will be discussed with contractors in project contract discussions or other appropriate venues to ensure a complete understanding of the details of this SOP.

2) Equipment and Vehicle Maintenance

- a) Cover from Precipitation. To the extent possible, all maintenance activities should be conducted indoors or under cover.
- b) Designated Waiting Area. A designated area will be established for equipment awaiting maintenance.
 - i. The designated area should be located away from storm drain inlets or other stormwater conveyances.
 - ii. Drip pans or other secondary containment should be placed under leaking, or leak-prone equipment.
 - iii. Additional drip pans should be located in an area that is easily accessible to the designated waiting area.
 - iv. Periodic, and preferably daily, visual inspections of the designated area should be conducted to identify any issues that could affect surface waters.
- c) Fluid Storage. Fluids such as fuel, antifreeze, hydraulic fluid, motor oils, solvents, and similar materials will be properly managed to prevent discharge to surface waters.
 - i. Fluids should be stored under cover and within a secondary containment structure, such as a concrete secondary containment structure, spill pallet, or similar structure.
 - ii. Keep waste oil, antifreeze, and other fluids properly covered and contained in tight fitting containers with proper labeling.
 - iii. Keep fluids as far away as possible from bay doors or other places where a leak or spill could reach an outside area.
- d) Spills and Leaks. Spills and leaks will be cleaned up immediately.
 - i. Spill kits with absorbent materials, drain covers or plugs (if applicable), and instructions must be located within 50 feet of designated maintenance areas.
 - ii. Dry clean-up methods shall be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
 - iii. Waste sorbent material shall be drained of free flowing material and disposed of as solid waste in accordance with local regulations.
 - iv. Water should never be used to clean up spilled material.
 - v. Wash down of pavement should not occur until all spills and leaks have been cleaned up. If a buildup of waste materials is present on the pavement, the resulting wash water must be contained and disposed of in a sanitary sewer or by another appropriate method.
- e) Work Space.
 - i. Sweep the maintenance area as needed to prevent a buildup of pollutants.
 - ii. A trash receptacle must be provided in/near the maintenance area.
 - iii. Areas shall be maintained in an orderly manner to minimize the chance for spills and leaks.
- f) Inspections. Inspect equipment for damaged hoses and leaky gaskets routinely and repair or replace immediately.

- g) Parts Washing.
 - i. Only wash parts in a designated area (e.g., parts washer) and verify that no wash water is discharged during the process.
 - ii. Dispose of parts wash water in an approved manner.

3) Washing Activities

- a) Washing Generally. Washing of vehicles and equipment will only be conducted at the Northside Property Yard in the wash bay designed for that purpose. Wash water from that facility enters the sanitary sewer system.
- b) Exceptions. If access to the designated wash area is not an option, the following alternatives must be used:
 - i. Use a commercial washing contractor that provides mobile washing services. All wash water must be contained and removed by the washing contractor. Town staff must oversee the activities to ensure proper containment and removal of the wash water.
 - ii. Use a commercial washing facility.
 - iii. If the washing is limited to removal of vegetative matter or soil particles, and can be done without the use of detergents, it can be conducted on a flat, grassy area away from storm drains, stormwater conveyances, or natural water ways. This practice will not be used to clean vehicles or equipment for salt, fuels, oil, etc.

4) Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve vehicle and equipment maintenance and cleaning. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.



Town of Vienna, Virginia

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Outdoor Material Storage	
Date:	July 16, 2015; Revised April 8, 2019
Purpose of SOP:	To minimize or prevent pollutant discharge from the outdoor storage of materials.
MS4 Permit Reference	Part I E 6 a
Responsible Party	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

Outdoor storage of material can become a source of pollution as a result of leaks, spills, or accidents, or through the corrosion or leaching of materials into stormwater. Bulk materials such as sand, dirt, gravel, asphalt material, and mulch can also wash into the storm drain system when left exposed to precipitation. This SOP is designed to minimize the potential for outdoor storage of material to negatively affect stormwater quality.

1. Responsible Parties

- a) Town Staff. The Department of Public Works and the Department of Parks and Recreation engage in multiple activities that involve the outdoor storage of materials.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with outdoor storage of materials. This includes, but is not limited to liquid bulk storage as well as dry storage such as sand, gravel, mulch, dirt, and asphalt material.
- c) Other SOPs and Documents. In addition to this SOP, the following documents are incorporated by reference and must be consulted:
 - i. The Snow and Deicing Operations SOP for storage of salt and deicing materials.
 - ii. Stormwater Pollution Prevention Plan (SWPPP) for the Northside Property Yard.

2. Outdoor Storage Areas

- a) Indoor Storage. All chemical and material containers should be stored indoors whenever possible. If they must be stored outdoors, place them under a roof or secured tarp.
- b) Secondary Containment.
 - i. All containers and dry materials should have secondary containment.
 - ii. Place all containers and dry materials on a plastic pallet or other device that elevates them off the ground or pavement and provides containment.
 - iii. Never release accumulated stormwater from a secondary containment structure unless it has been verified that there is no contamination present. If contamination is present, it must be properly mitigated prior to discharge, discharged to a sanitary sewer, or otherwise handled in accordance with the contaminate present.
- c) Placement. Place containers on paved or impervious surfaces and as far from (or at a lower elevation than) storm drain inlets and drainage ditches as possible.
- d) Traffic Control. Materials should be stored away from vehicle and equipment traffic. Bollards should be placed around materials where vehicles and equipment may come into close proximity.
- e) Spill Response.
 - i. Provide a spill kit near all storage areas.
 - ii. Clean up any spills, leaks, or discharges promptly.
 - iii. If a container is found to be leaking, either empty the contents into a leak-tight container or place the entire container inside of a larger leak-tight container.
- f) Inspections. Inspect all containers stored outdoors regularly.

3. Sand, Dirt, Gravel, and Asphalt Material Stockpiles

- a) Stockpiles should be stored inside a storage building or under a roof whenever possible.
- b) If a permanent overhead structure is not available, cover stockpiles with a properly secured tarp to the extent practicable.
- c) Contain stormwater run-off from stockpiles by using barriers or berms.
- d) Sweep areas surrounding the stockpile frequently to prevent materials from mingling with stormwater.
- e) Whenever possible, order only the amount of the material to be stockpiled that is needed for the specific job and schedule delivery to minimize the amount of outdoor storage time.
- f) Locate stockpiles away from storm drain inlets. Provide protection for the inlet if necessary to prevent the discharge of materials.

4. Bulk Liquid Materials Storage

- a) Ensure that the content of a bulk liquid storage vessel is clearly marked in plain language.
- b) Provide impervious secondary containment for all above ground storage tanks (ASTs).
- c) To the extent possible, provide adequate containment for all material loading/unloading areas.
- d) Refer to the SWPPP for the Northside Property Yard for facility-specific requirements and best practices.
- e) Where provided, keep drain valves in secondary containment locked in the closed position at all times.
- f) Never release accumulated stormwater in a secondary containment structure unless it has been verified that there is no contamination present. If contamination is present, it must be properly cleaned prior to discharge.
- g) Provide locks for all access points to bulk liquid storage tanks.
- h) Make sure that an adequate spill kit with sufficient equipment and supplies is located near storage areas where spills are possible. Clean up any spills, leaks, or discharges immediately.

5. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve the outdoor storage of materials. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.



Town of Vienna, Virginia

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Pesticides, Herbicides, and Fertilizers	
Date:	July 16, 2015; Revised April 8, 2019
Purpose of SOP:	To establish standard, consistent stormwater pollution prevention procedures for the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers to prevent the discharge of pollutants related to these activities.
MS4 Permit Reference	Part I E 6 a
Responsible Party	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

Pesticides, herbicides, and fertilizers can become sources of pollution if improperly applied, stored, transported, or disposed. Fertilizers contribute to nutrient pollution. The Town of Vienna is subject to the Chesapeake Bay Total Maximum Daily Load (TMDL), which means that the Town must achieve specific nutrient reductions in accordance with its municipal separate storm sewer system (MS4) permit. Pesticides and herbicides can be toxic to aquatic life in local streams and waterways. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1) Responsible Parties

- a) Town Staff. The Parks Maintenance Division of the Department of Parks and Recreation is responsible for most activities involving pesticides, herbicides, and fertilizers. This includes park property and Town rights-of-way.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with pesticide, herbicide, and fertilizer application, storage, transport, or disposal. The requirements of this SOP will be discussed with contractors in project contract discussions or other appropriate venues to ensure a complete understanding of the details of this SOP.

2) General Practices

- a) Manufacturer's Recommendations. Follow all manufacturer's recommendations for mixing, applying, and handling pesticides, herbicides, and fertilizers.
- b) Storage. All materials, whether liquid or dry, should be properly stored under cover when not in use.
 - i. Materials must be stored in an adequately ventilated and secured building to prevent unauthorized use or access.
 - ii. Materials must be stored under cover and, where possible, within a secondary containment structure, such as a concrete secondary containment structure, spill pallet, or similar structure.
 - iii. Keep materials properly covered and contained in tight fitting containers.
 - iv. Properly label all materials.
 - v. Keep materials as far away as possible from bay doors or other places where a spill could reach an area outside area.
- a) Mixing.
 - i. Mix materials inside a protected area with impervious secondary containment so that spills and leaks will not contact soil and will be easy to clean up.
 - ii. All mixed material containers shall be labeled with the specific contents.
 - iii. Mix the minimum amount of material needed for the immediate job.
- b) Application.
 - i. Time the application of materials to coincide with the manufacturer's recommendation for best results.
 - ii. Do not apply pesticides or herbicides during precipitation or if precipitation is expected. Do not apply before an irrigation cycle.
 - iii. Do not apply fertilizers when heavy rain that could cause significant runoff is anticipated.
 - iv. Do not apply when wind conditions could result in spray drift to waterbodies or areas not targeted for application.
 - v. If possible, limit the application of pesticides or herbicides to a specific problem area.
 - vi. Avoid applying materials in or near any drainage ditch, creek, pond, or seasonal streambed.
- c) Spills and Leaks. Spills and leaks should be cleaned up immediately.
 - i. Dry clean-up methods should be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
 - ii. Waste sorbent material must be disposed of properly.
 - iii. Water should never be used to clean up spilled material.
 - iv. Wash down of pavement should not occur until all spills and leaks have been cleaned up.

d) Clean-Up.

- i. Sweep pavement and sidewalks where fertilizers or other solid chemicals have fallen. Sweep them onto grassy areas or collect and dispose of properly.
- ii. Make sure all containers are properly labeled.
- iii. Dispose of excess or left over chemicals according to instructions on the label and local waste regulations.
- iv. Triple rinse all pesticide and herbicide containers prior to disposal. Rinsate water should be added to the sprayer tank as part of the application.
- v. Never rinse pesticides in an area where it has the potential to enter the storm drain or be washed into a local water body.
- vi. Application equipment and containers must be washed in a fully contained area that drains to a holding tank or a sanitary sewer.

3) Pesticides and Herbicides

- a) Application and Training. All staff who apply pesticides or herbicides to Town-owned property will receive proper training/certification in accordance with the Virginia Pest Control Act (§3.2-3900 et seq of the Code of Virginia). Training/certification will be documented at least annually in the Town's MS4 Program Plan annual report to the Virginia Department of Environmental Quality (DEQ).
- b) Contractors. All contract applicators who apply pesticides or herbicides to Town-owned property will agree through contract language or otherwise provide written certification that proper training and certification in accordance with the Virginia Pest Control Act has been obtained. Contractors will provide documentation on request.
- c) Safety Data Sheets: Safety Data Sheets (SDSs) will be maintained for all relevant materials stored or used on-site. SDSs will be readily available for all personnel on-site to review.
- d) Use Minimization and Targeting.
 - i. Use manual and/or mechanical methods for weed and pest control or vegetation removal wherever possible rather than chemical methods.
 - ii. When chemicals are required, use the least toxic method to control animal or plant pests. This may include, but is not limited to, pheromone-based traps and sticky paper.
 - iii. When chemicals are used, use the most biodegradable product that will accomplish the desired goal.
 - iv. When possible, limit the application to the problem area and spot spray on infested areas only.
 - v. Designate a no-spray zone, preferably 50 feet or more, around water features such as ponds, lakes, streams, or other surface waters. A buffer area will help prevent material from entering surface waters.
 - vi. Contact the Fairfax County office of the Virginia Cooperative Extension for more information on Integrated Pest Management at <http://offices.ext.vt.edu/fairfax/> or (703) 324-5369.

4) Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve the application, storage, transport, or disposal of pesticides, herbicides, and fertilizers. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.



Town of Vienna, Virginia

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Road, Street, Parking Lot, and Sidewalk Maintenance	
Date:	July 16, 2015; Revised April 8, 2019
Purpose of SOP:	To minimize or prevent pollutant discharge from daily operations associated with road, street, and parking lot maintenance.
MS4 Permit Reference	Part I E 6 a
Responsible Party	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

Roads, streets, parking lots, and sidewalks can become a source of pollution during maintenance and construction activities if proper pollution prevention measures are not implemented. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1. Responsible Parties

- a) Town Staff. The Street Maintenance Division of the Department of Public Works is responsible for asphalt repair, pothole repair, slurry seal, snow removal, street sweeping, storm drain maintenance, and traffic marking maintenance. Work is completed in accordance with Virginia Department of Transportation (VDOT) and Town of Vienna standards.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with road, street, parking lot, and sidewalk maintenance and construction. The requirements of this SOP will be discussed with contractors in project contract discussions, pre-construction meetings, or other appropriate venues to ensure a complete understanding of the details of this SOP.

2. General Procedures

- a) Spill Response. Ensure spill response material/equipment is readily available when work activity requires the use of paints, chemicals, or other materials that could harm

human health or the environment and any time that equipment is used that involves hydraulic fluids or other fluids that may leak.

- b) Storm Inlet Protection. Provide for storm drain inlet protection when working in close proximity and there is a potential for a discharge as the result of a spill or a precipitation event.
- c) Safety Data Sheets. Ensure that safety data sheets (SDSs) are available for all materials used during surface repair and maintenance activities. SDSs should be readily available and accessible to all Town and contractor personnel handling chemicals or other potentially harmful materials.
- d) Weather Conditions. To the extent possible, construction and maintenance activities should only be scheduled and conducted during dry weather. All possible precautions should be used to avoid conducting potential pollution generating construction and maintenance activities immediately before or during times when precipitation is likely to occur.
- e) Routine Inspections. During periods of construction and/or maintenance, the work area should be routinely inspected for signs of spills, leaks, trash accumulation, illicit discharges from the site, buildup of sediment, or other conditions that may result in the discharge of pollutants from the site to the storm drainage system.
- f) Clean Surfaces. To the extent possible, broom sweep or vacuum all surfaces periodically to keep the work area clean and free from pollutants. Hosing down surfaces should be avoided unless the area is completely contained so that all drainage is directed to the sanitary sewer. Water may also be directed to grass surfaces where it can infiltration into the ground.

3. Asphalt Surface Repair and Maintenance

- a) Store mixed asphalt under cover and protected from precipitation and extreme temperatures.
- b) Reduce the amount of asphalt materials stored onsite. When possible, purchase only the amount of materials necessary to complete a project.
- c) If bulk material storage is necessary, locate storage area outside of the drainage conveyances and away from storm drain inlets. Ensure a tarp is available in case the materials need to be protected from precipitation. Refer to the Outdoor Material Storage SOP for additional storage and handling procedures.
- d) Minimize the amount of water used when conducting asphalt cutting, grinding, or milling. Water should only be used in amounts necessary to control dust and provide lubrication, and should never be used in amounts that would result in a flow that could discharge to the drainage system.
- e) All sediment and debris resulting from cutting, grinding, milling, or other repair and maintenance shall be contained, swept or vacuumed up, and disposed of properly.

- f) The use of tar-based products is strongly discouraged since they contain higher levels of polycyclic aromatic hydrocarbons (PAHs) that harm fish and other aquatic organisms.
- g) Apply sealants or other liquid surface treatments with care, avoiding misapplication to a storm drain or other non-asphalt surface. When conditions require application adjacent to a storm drain inlet, consider the use of an impervious inlet cover to prevent unintended spray into the storm drain.

4. Surface Painting/Striping

- a) When removing old paint, contain the removed paint to the extent possible and dispose of as appropriate. If there is a potential to encounter lead-based paint, additional precautions not outlined in this SOP may be required.
- b) When using high pressure water to remove old paint, protect nearby inlets to prevent the discharge of waste paint, sediment, or other pollutants into the storm drainage system. Use perimeter controls around the work area to collect removed paint and dispose of as appropriate.
- c) When surface grinding or sand blasting to remove paint, sweep up the paint debris immediately. If water is used for grinding, minimize the amount of water used and provide proper containment to prevent any discharge to the drainage system.
- d) When possible, use thermoplastic markings instead of paint for all surface striping.
- e) All paint should be stored inside and protected from precipitation.
- f) To the extent practical, handle paint in a contained area, under cover from precipitation. If secondary containment is not available, use temporary structural best management practices to protect storm drain inlets and prevent the discharge of paints in the event of a spill.
- g) Apply paint at an appropriate rate to prevent excess paint from running off the site.
- h) In the event of a spill, containment materials should be deployed to contain the spill and prevent paint from entering the storm drain.
- i) Dispose of all waste material in an appropriate manner.
 - i. Excess latex and water based paint that is not able to be used elsewhere can be allowed to dry, under cover from precipitation, and disposed of as solid waste. Refer to product information for specific requirements for disposal.
 - ii. Leftover oil based paints and solvents must be disposed of as household hazardous waste according to federal and state environmental regulations. These materials are accepted at Fairfax County's household hazardous waste drop-off locations.
- j) Paint equipment should be washed after use in a designated wash area that is plumbed to a sanitary sewer, or approved containment structure.

5. Concrete Surface Repair and Maintenance

- a) Store dry concrete material inside, under cover from precipitation.
- b) Minimize the amount of concrete material stored onsite. If possible purchase only the amount of concrete material needed for a particular job.
- c) Locate storm drain inlets in the vicinity of the work site. Storm drain inlets should be protected with a barrier if the work is in close proximity to the inlets and there is a reasonable chance for material to discharge to the inlet as the result of a spill or precipitation event.
- d) To control dust, “wet” cutting methods should be used when practicable. Minimize the amount of water used when conducting cutting to prevent a discharge to the storm drain system. Saw cut slurry shall be contained and properly disposed. Using a vacuum to contain slurry in the saw cutting process is an effective way to ensure that pollutants are not allowed to enter storm drains or other stormwater infrastructure.
- e) Remove demolished concrete or related debris and dispose of at a solid waste facility that accepts construction and demolition debris. Dry clean-up methods (broom and shovel) should be used to manage concrete debris to the extent practicable.
- f) A concrete washout shall be clearly established and identified at any location where concrete is to be mixed or poured. The concrete washout shall be constructed with an impervious material and in a manner that would prevent washout material from discharging to the storm system. Guidance can be found at www.epa.gov/npdес/pubs/concretewashout.pdf.
- g) Excess material that cannot be used at another location or project can be discharged into the designated concrete washout facility, if adequate capacity exists, where it should be allowed to dry and then be disposed as construction waste.

6. Porous Concrete, Porous Pavers, and Similar Structures

- a) Prior to conducting any construction or maintenance work, locate and identify any stormwater management facilities within the project area, including but not limited to pervious or porous pavement, rain gardens, etc.
- b) Clearly delineate porous pavement, pervious pavers, and similar structures that are not easily distinguishable from traditional surfaces, to increase awareness of their existence.
- c) Surface vacuuming should be performed on a routine basis and in the event of a spill of any material that may clog pore spaces. While sweeping may be effective, it can lead to clogging of pores with sediment and other granular material.
- d) Do not locate staging areas, equipment or material storage areas on top of porous pavement.

7. Vegetation Management

- a) During routine mowing operations, minimize the amount of clippings with the potential to enter the storm drain by directing clippings away from impervious surfaces to the extent practicable.
- b) Do not purposefully sweep, blow, or dump clippings or any vegetated waste into storm inlets. Either blow clippings into grassy areas or collect the clippings or vegetated waste for composting.

8. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve road, street, parking lot, and sidewalk maintenance. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.



Town of Vienna, Virginia

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Snow and Deicing Operations	
Date:	July 16, 2015; Revised April 8, 2019
Purpose of SOP:	To minimize or prevent pollutant discharge from operations associated with snow removal and deicing.
MS4 Permit Reference	Part I E 6 a
Responsible Parties	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

This SOP is designed to minimize, to the extent practical, the impacts of snow removal and deicing operations on local water quality while still ensuring public safety. This includes the storage and application of sand, salt, and other deicing chemicals.

1. Responsible Parties

- a) Town Staff. The Street Maintenance Division of the Department of Public Works is responsible for snow removal and deicing operations in the Town's road right-of-way and on Town property. Other staff members may engage in minor treatment of sidewalks and building entrances using bagged or boxed deicing materials.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with snow removal or deicing operations within the Town's road right-of-way or on Town property.

2. Use of Deicing Agents Containing Urea or Other Nutrients

The Town, including contractors, will not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, sidewalks, or other paved surfaces.

3. Salt and Deicer Storage

- a) Proper Containment. Salt and other chemical deicers will be stored in a covered, corrosion-resistant structure or container at all times, unless active loading or spreading

is occurring. The structure will have an impervious bottom such as a concrete slab. For the Town of Vienna, these are the salt dome and brine storage containers at the Northside Property Yard.

- b) Temporary Storage. Temporary storage of salt and other chemical deicers is not recommended; however, if materials must be stored outside of a permanent structure, the storage must be on a temporary basis only. Temporary storage piles must be on an impervious surface (the use of a tarp as an impervious bottom is not adequate) and covered with a tarp that is adequately secured at all times when not being actively worked.
- c) Management of Run-on and Run-off. Storage structures must provide adequate barriers to prevent run-on into the storage pile, and minimize erosion from the pile. All run-off from salt and other chemical deicer piles must be eliminated at all times. Any run-off containing salt material must be captured and either returned to the storage pile, managed as salt brine, or discharged to a sanitary sewer system in accordance with Fairfax County guidelines.

4. Sand and Deicer Use

- a) Deicing Material. Prior to each winter season, the Town will assess deicing materials, and to the extent practical, will select the materials and mix that has the least impact on water quality while still effectively meeting the Town's public safety needs.
- b) Anti-icing. Liquid anti-icing materials may be applied prior to storm events to prevent the bond between winter precipitation and the road surface. This can effectively reduce the amount of deicing material necessary for a storm event. Anti-icing applications should be conducted per manufacturer's recommendations.
- c) Equipment Calibration. All equipment will be calibrated in accordance with the manufacturer's instructions and the specified applications rates for the material being applied. Calibration will include plowing speed and applicable spreader settings. The manufacturer's instructions will be kept at the Northside Property Yard and referenced prior to each winter storm event.
- d) Application Rate. The Town will use the lowest application rate that will effectively treat surfaces to meet safety needs.
- e) Loading. When loading salt, sand, or other deicers, care will be taken to not overfill the truck or tank.

5. Sand and Deicer Clean Up

- a) Clean-Up. Loading areas will be swept frequently to prevent salt or sand build-up and run-off. At a minimum, loading areas should be inspected and swept following each storm event or other period when handling occurs.
- b) Street Sweeping. The Town conducts routine street sweeping beginning in spring to clean up debris and other materials that collect during winter months, including salt, sand, and other deicers.

- c) Small Applications. To the extent practical, small amounts of salt, sand, and deicing materials applied to sidewalks or building entrances by Town staff will be swept up and disposed of properly when weather conditions allow.
- d) Vehicle Washing. Spreading and other equipment used during deicing operations will only be washed inside the bay designed for that purpose at the Northside Property Yard. Wash water from that facility enters the sanitary sewer system.

6. Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve snow and deicing operations. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.



Town of Vienna, Virginia

Stormwater Pollution Prevention Standard Operating Procedure (SOP)

Utility Construction and Maintenance	
Date:	July 16, 2015; Revised April 8, 2019
Purpose of SOP:	To establish standard, consistent stormwater pollution prevention procedures for utility construction and maintenance activities to prevent the discharge of pollutants related to these activities.
MS4 Permit Reference	Part I E 6 a
Responsible Party	Michael Gallagher, PE, Director of Public Works Christine Horner, PE, Water Quality Engineer

Utility construction and maintenance activities may become sources of pollution if proper measures are not implemented. This SOP has been designed to minimize or prevent pollutant discharges from these activities.

1) Responsible Parties

- a) Town Staff. Routine construction and maintenance of utilities is conducted by the Water Division, Sewer Division, and Street Maintenance Division of the Department of Public Works.
- b) Contractors. This SOP must be adopted by reference or otherwise incorporated into all contracting agreements dealing with utility construction and maintenance. The requirements of this SOP will be discussed with contractors in project contract discussions, pre-construction meetings, or other appropriate venues to ensure a complete understanding of the details of this SOP.

2) Utility Construction and Maintenance Controls

- a) Project Planning.
 - i. To the extent possible, all maintenance and construction activities should be conducted during periods of dry weather.
 - ii. The extent of areas excavated at one time should be minimized where possible to limit the active construction area.

- b) Excavation and Material Management. Installing new, or uncovering existing underground utilities must be done with care to avoid the discharge of pollutants to the drainage system.
 - i. Locate storm drain inlets prior to any excavation, and provide controls for inlets in close proximity to the work area.
 - ii. Existing vegetation in and around areas being excavated should be preserved to provide natural erosion control.
 - iii. The limits of the excavation should be minimized to the extent practicable.
 - iv. Material excavated during trenching activities should be neatly stockpiled. In the event that the stockpiles must remain overnight, proper covering (secured tarps) and perimeter controls (sediment logs, straw bales, etc.) must be used.
 - v. Materials temporarily stockpiled in a roadway or other impervious surface that conveys directly to the storm drain should be removed by the end of the work day or prior to any precipitation, whichever comes first.
 - vi. If excavated material will not be used as backfill, the material should be removed from the site as soon as possible.
 - vii. If trench or pipe dewatering is necessary, provide appropriate sediment controls, such as dewatering bags or other sediment traps at the point of discharge.
 - viii. Dispose of all waste materials generated in the construction and maintenance process accordingly.
- c) Fluid Storage and Handling.
 - i. Fluids should be stored in a general secondary containment structure (storage bin, truck bed, etc.) when not being actively used.
 - ii. All materials should be kept in tight fitting containers that are compatible with the material, and with proper labeling provided.
 - iii. To the extent possible, fluids should be added to equipment in a location that is an adequate distance from a storm drain inlet. This is typically 25 feet or more.
- d) Spills and Leaks.
 - i. Spill kits with absorbent materials should be onsite during all construction and maintenance activities.
 - ii. Dry clean-up methods shall be used to clean up spilled material. This includes the use of absorbent pads, granular absorbent, booms, and similar measures.
 - iii. Waste sorbent material shall be drained of free flowing material and disposed of as solid waste in accordance with local regulations.
 - iv. Water should never be used to clean up spilled material.
 - v. Wash down of pavement should not occur until all spills and leaks have been cleaned up. If a buildup of waste materials is present on the pavement, the resulting wash water should be contained and disposed of in a sanitary sewer or by another appropriate means.
- e) Other Town SOPs.
 - i. Refer to the Road, Street, Parking Lot, and Sidewalk Maintenance SOP for additional procedures for maintenance activities that involve asphalt and concrete surface repair and maintenance.
 - ii. Refer to the Outdoor Material Storage SOP for additional procedures for material storage.

3) Training

This SOP will be incorporated into annual training for applicable employees in accordance with the Town's MS4 Program Plan that involve utility construction and maintenance. Documentation of the training, including sign-in sheets and materials used, will be included in the Town's MS4 annual reports.

Appendix H

High Priority Facility SWPPP

Town of Vienna, Virginia

Northside Property Yard Stormwater Pollution Prevention Plan Final – December 17, 2020



**Town of Vienna
Department of Public Works
127 Center Street, South
Vienna, Virginia 22180**



TOWN OF

VIENNA

wood.

**Prepared with assistance by:
Wood Environment & Infrastructure Solutions
Chantilly, Virginia**

**Prepared in Compliance with Municipal Separate Storm Sewer System (MS4)
Permit No. VAR040066**

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."



Name

Town Manager

Title

12/18/20

Date

Record of Plan Updates

July 2015	June 2016	December 2020

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1. Introduction

1.1 Background

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Town of Vienna Northside Property Yard. The Town's General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) requires the development and implementation of SWPPPs for high priority facilities. Part I E 6 c of the MS4 permit defines these facilities as:

- (1) areas where residuals from using, storing, or cleaning machinery or equipment remain and are exposed to stormwater;
- (2) materials or residuals on the ground or in stormwater inlets from spills and leaks;
- (3) material handling equipment;
- (4) materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);
- (5) materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- (6) materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated, or leaking storage drums, barrels, tanks, or similar containers;
- (7) waste materials except waste in covered, non-leaking containers (e.g., dumpsters);
- (8) application or disposal of process wastewater (unless otherwise permitted); or,
- (9) particulate matter or visible deposits of residuals from roof stacks, vents, or both, not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

Based on this definition, the Northside Property Yard (site or facility) is required to develop a SWPPP. Table 1A presents the SWPPP organization and how it meets the specific requirements of Part I E 6 d of the MS4 permit.

Table 1A – SWPPP Organization and Permit Compliance

SWPPP Requirement	Location
A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies.	Section 2; Figures 2A-C (Appendix A)
A description and checklist of potential pollutants and pollutant sources.	Section 3
A description of all potential non-stormwater discharges.	Section 3; Table 3A
Written procedures designed to reduce and prevent pollutant discharge.	Section 4

SWPPP Requirement	Location
A description of applicable training as required in Part I E 6 m of the MS4 permit.	Section 5
Procedures to conduct an annual comprehensive site compliance evaluation.	Section 5; Appendix E
An inspection frequency of no less than once per year and maintenance requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP.	Section 5; Appendix E
A log of each unauthorized discharge, release, or spill incident reported in accordance with Part III G, including the following information: date of incident; material discharged, released, or spilled; and, estimated quantity discharged, released, or spilled.	Section 5; Appendix F

Wood Environment & Infrastructure, Inc. (Wood) conducted a site inspection with Town staff on August 5, 2020 to confirm site drainage and assess potential pollutant sources and non-stormwater discharges. Specific findings and recommendations are incorporated into this SWPPP. A copy of this SWPPP must be kept at the Northside Property Yard and updated as necessary to reflect any changes in activities or the physical layout of the site that could affect stormwater pollution.

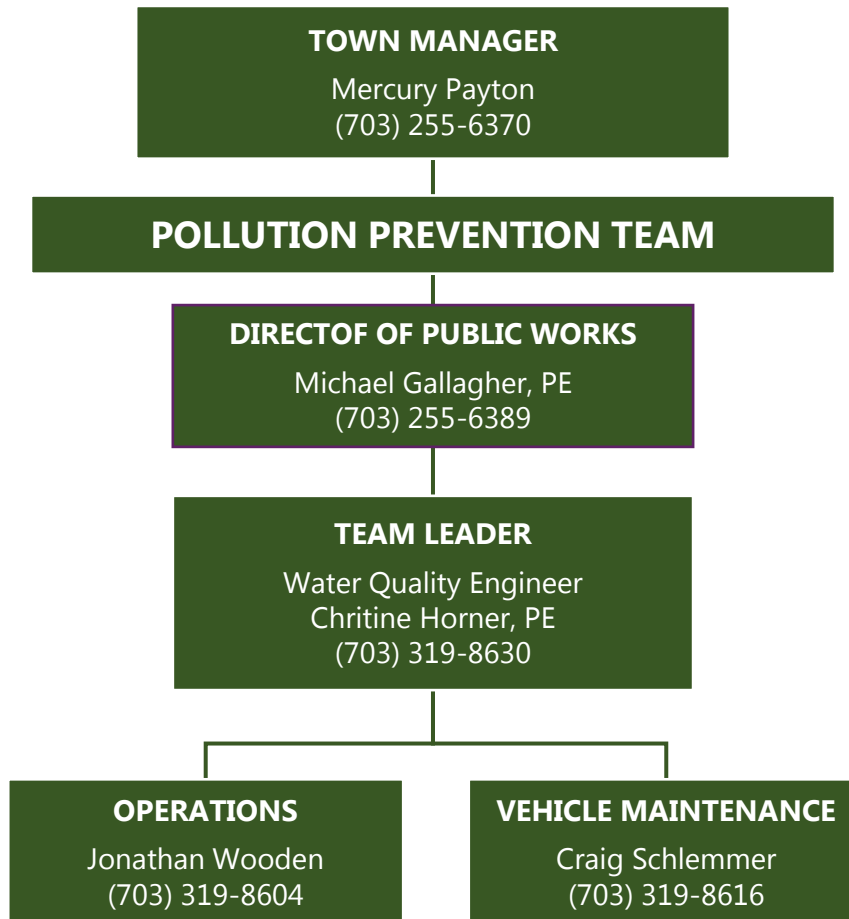
1.2 Pollution Prevention Team and Responsibilities

A key step in developing and implementing a SWPPP is to establish an organizational hierarchy familiar with pollution prevention plans and operational activities. The SWPPT consists of facility supervisors and other personnel that the Town of Vienna chooses to appoint. The SWPPT will report to the Town Manager for financial support purposes.

The SWPPT will meet at least once annually to evaluate the effectiveness of the SWPPP and to determine if additional control measures are required. A series of forms are provided in this plan to assist the SWPPT. The SWPPT is required to make revisions to the plan when changes to the facility occur. These revisions can take the form of brief narratives inserted as amendments to the SWPPP.

The organizational arrangement of the SWPPT is presented in Table 1B. The organizational chart shows the chain of command for ensuring compliance with applicable requirements. Most of the information provided in this plan requires effort by the SWPPT and on-site employees. The on-site team members or their designees will assist the SWPPT Leader with those areas under their specific management control.

Table 1B – Stormwater Pollution Prevention Team Members



The responsibilities of the Town Manager are to:

- Review and certify the SWPPP;
- Appoint the SWPPT Leader;
- Ensure that adequate resources are allocated to implement the SWPPP; and,
- Review and approve revisions to the SWPPP identified by SWPPT.

The responsibilities of the SWPPT Leader are to:

- Ensure that SWPPT members are trained and familiar with SWPPP requirements;
- Ensure implementation of required training, evaluations, and inspections; and;
- Schedule and conduct annual SWPPT meetings.

The responsibilities of the SWPPT members are to:

- Attend annual SWPPT meetings;
- Implement procedures and control measures;
- Perform record keeping and documentation as required by the SWPPP; and,
- Evaluate the adequacy of the SWPPP and recommend modifications as necessary.

1.3 Supporting Plans and Policies

This SWPPP is designed to work in conjunction with other plans and policies adopted by the Town to protect water quality and the environment. Table 1C provides an overview of these documents and their relationship to this SWPPP. Several items are reference throughout the SWPPP.

Table 1C – Supporting Plans and Policies

Document and Hyperlink	Description
MS4 Program Plan	Documents the Town's overall pollution prevention strategy in compliance with the MS4 permit. The plan identifies best management practices (BMPs) to implement six minimum control measures (MCMs): <ul style="list-style-type: none"> • Public Education and Outreach • Public Involvement and Participation • Illicit Discharge Detection and Elimination • Construction Site Stormwater Runoff Control • Post-Construction Stormwater Management • Pollution Prevention/Good Housekeeping for Municipal Operations
Chesapeake Bay TMDL Action Plan	Documents the Town's strategy for meeting the Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL establishes the maximum amount of a pollutant that can enter a water body without violating water quality standards. Pollutants of concern (POCs) include nitrogen, phosphorus, and sediment.
Difficult Run Local TMDL Action Plans	Documents the Town's strategy for meeting local TMDLs established for Difficult Run. The strategy is combined with that for Accotink Creek. POCs for Difficult Run include bacteria and sediment.
Spill Prevention, Control, and Countermeasures (SPCC) Plan	40 CFR 112 (Oil Pollution Prevention) requires facilities to develop and certify an SPCC plan when the following criteria are met: (1) there is a reasonable potential for discharging oil from fixed facilities into waters of the United States; or, (2) the oil storage

Document and Hyperlink	Description
	capacity on-site in containers with capacities equal to or greater than 55 gallons exceeds 1,320 gallons of above ground storage. An SPCC plan has been developed for the site and it kept in the main office.
Pollution Prevention Standard Operating Procedures (SOPs) (Appendix B)	Establishes Town SOPs designed to reduce pollution associated with municipal operations. Specific SOPs include: <ul style="list-style-type: none"> • Vehicle and Equipment Maintenance and Cleaning • Outdoor Material Storage • Pesticide, Herbicides, and Fertilizers • Road, Street, Parking Lot, and Sidewalk Maintenance • Utility Construction and Maintenance • Snow and Deicing Operations
Illicit Discharge Detection and Elimination (IDDE) Plan (Appendix F of the MS4 Program Plan)	Establish procedures for the Town to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the Town's storm drain system. The plan includes dry weather screening of the Town's storm drain outfalls.

Future plans and policies adopted by the Town will be evaluated by the SWPPT and incorporated into the SWPPP during the annual review as appropriate.

2. Facility Description

2.1 Facility Description

The Northside Property Yard is located at 600 Mill Street, NE, Vienna, Virginia. See Figure 2A and Figure 2B in Appendix A for a detailed site map. The facility is operated by the Town of Vienna Department of Public Works (DPW) and includes separate areas for vehicle maintenance, water and sewer services, and general operations activities.

The primary structure on the property is the main service building. This main service building consists of office and related space to support site activities, as well as vehicle maintenance bays, related chemical storage, and a vehicle wash bay located on the east side of the building.

A storage building located on the west side of the site consists of five separate storage bays used for storing additional equipment and materials. Three bays are occupied by water and sewer services, one is for vehicle maintenance operations, and one is for general maintenance.

A salt dome with associated brine tanks are located just south of the main building and contains road salt and brine that are utilized by the Town for winter storm management.

Additional indoor storage is provided by several sheds located in the upper yard (one on the west side of the main service building and three along the southern perimeter of the main parking lot) and two sheds near the Mill Street entrance. Outdoor storage is conducted in several areas around the site, but is most prevalent along the southern perimeter of the main parking lot and in the southern portion of the facility. A detailed description of potential pollutants related to each site activity is included in Section 3.

2.2 Facility Drainage and Receiving Waters

The facility is within HUC PL22 (Difficult Run) and discharges to Piney Branch, which borders the site to the south and west. Piney Branch and Difficult Run flow to the Potomac River, all of which are within the Chesapeake Bay watershed. Internal drainage within the facility is managed by a network of underground stormwater infrastructure, as well as surface swales that carry surface runoff. See Figure 2C for a general drainage map.

Drainage from the site is divided into four separate drainage areas (DAs), as noted in Table 2A. The majority of the northern portion of the site (DA-001) consists of a subsurface drainage system with surface inlets located throughout the facility. The drainage system discharges to a Downstream Defender stormwater management structure to the south of the main parking area. The Downstream Defender discharges to the south, by way of a 48" concrete culvert, to Piney Branch. Activities within

DA-001 consist of all operations within the facility's main building and storage building, as well as general vehicle and equipment parking within the main lot. Two dumpsters (one recycling and one solid waste) are located within a fenced area in the southwest corner of the parking area. Equipment and materials are stored on a gravel strip along the southern edge of the main parking area. This includes metal pipe, metal sign posts, fire hydrants, bricks and pavers, and traffic control devices. A significant amount of stormwater run-on enters this drainage area from the north. The run-on is not thought to contain industrial pollutants, but has been noted by Town staff to bring a significant amount of vegetation (leaves) from neighboring properties. This flow has been noted to overwhelm the northern-most storm drain inlet, resulting in occasional flooding around the main building.

DA-002 consists of sheet flow that reaches a curb cut down-flow of the salt storage dome as well as water that is collected through a surface inlet near the gate separating the upper and lower portions of the site. Flow from both sources converge into a swale that discharges to Piney Branch. Significant activities within this area consist of the salt storage dome, liquid deicer storage tanks, and the fueling station. There is also a scrap metal recycling roll-off and pavement equipment storage.

DA-003 consists of the equipment and material stockpile area on the southern portion of the site. A new storm drain system has been installed that collects water from the road and storage areas through slotted manholes and then discharges to Piney Branch. Much of this area is under active construction due to the Piney Branch stream restoration project. Equipment and materials currently in storage include a sand pile, leaf collection and mulching equipment, and material storage bins (sweeper spoils, rocks, and cold mix). Once construction is complete, roughly 50 feet of vegetated buffer area will be restored between site activities and Piney Branch.

DA-004 consists of the far eastern portion of the site. Flow is conveyed via small swales on either side of the access road. A culvert is located under the roadway at a low point in each small drainage area. Flow is then discharged to the south into Piney Branch. Activities include covered salt spreader storage, storage of snow plow blades, and general equipment and material storage. There are also two storage sheds for general materials.

Areas generally to the south of these drainage areas sheet flow directly to Piney Branch. There are also two storm drain outfalls that do not capture on-site flow. Rather, these two outfalls handle flow from surrounding residential neighborhoods. The storm pipes go under the site and discharge directly to Piney Branch.

Difficult Run, to which Piney Branch flows, is designated as impaired by the State Water Control Board and is subject to TMDLs for fecal coliform bacteria and sediment. As a result, the Town is required to reduce bacteria and sediment in accordance with its Bacteria TMDL Action Plan for Difficult Run and Accotink Creek and Sediment TMDL Action Plan for Difficult Run and Accotink Creek. The Town

is also subject to the Chesapeake Bay TMDL, which establishes target reductions for nitrogen, phosphorus, and sediment in accordance with its Phase II Chesapeake Bay TMDL Action Plan.

Piney Branch is the subject of a stream restoration project, which will recreate approximately 1,155 linear feet of natural stream and stabilize steep, eroded banks along the southern portion of the Northside Property Yard. The completed project will reduce sediment and improve water quality.

Figure 2C – General Drainage Map

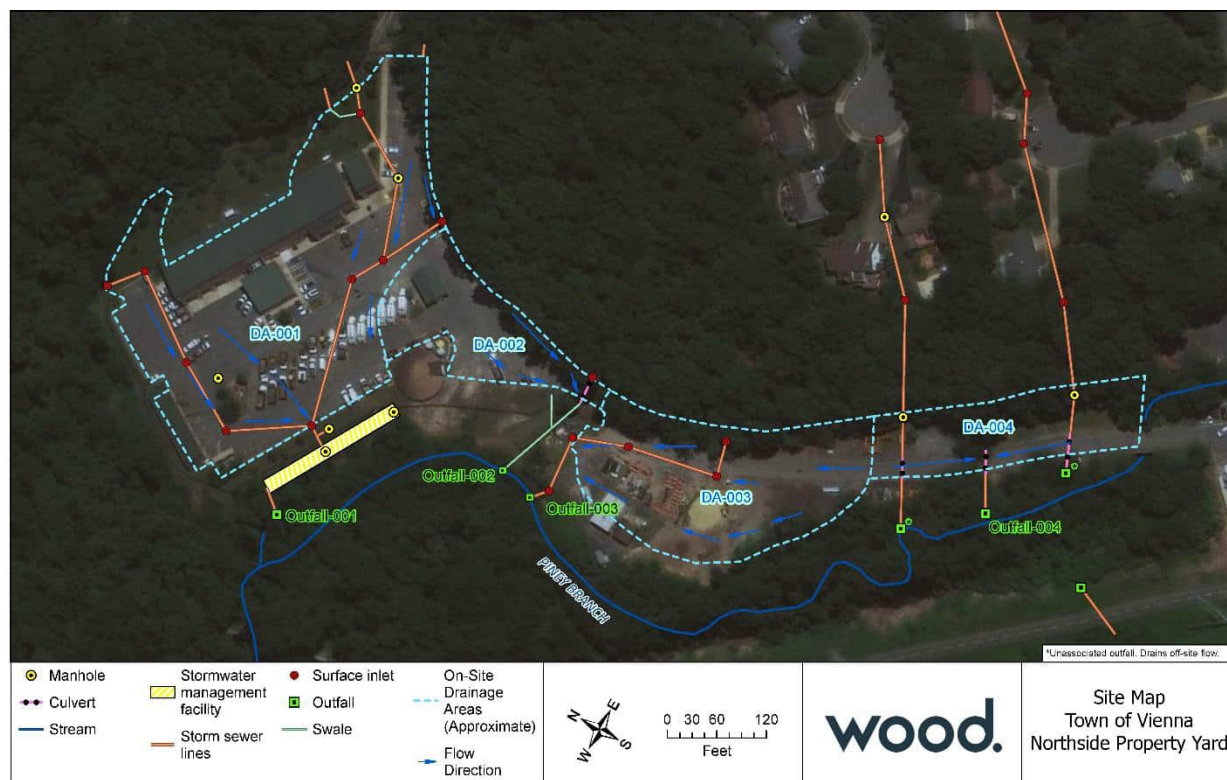


Table 2A – On-Site Drainage Area Description

Drainage Area	Impervious (acres)	Pervious (acres)	Total (acres)
DA-001	2.11	0.37	2.48
DA-002	0.53	0.03	0.56
DA-003	0.95	0.20	1.15
DA-004	0.22	0.39	0.61

3. Potential Pollutant Sources

This section provides a discussion of each significant potential pollutant generating area of the site (Figure 3A) and associated potential non-stormwater discharges.

Figure 3A – Location of Potential Pollutant Sources



3.1 Allowable Discharges

In accordance with the Town's MS4 permit and 9VAC25-890-20, and unless found to be a significant contributor of pollutants by the Town or DEQ, the only non-stormwater discharges or flows that may be discharged from the Town's storm drain system are the following:

- Water line flushing, managed in a manner to avoid an instream impact;
- Landscape irrigation;
- Diverted stream flows;
- Rising groundwaters;
- Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20);
- Uncontaminated pumped groundwater;
- Discharges from potable water sources;
- Foundation drains;
- Air conditioning condensation;

- Irrigation water;
- Springs;
- Water from crawl space pumps;
- Footing drains;
- Lawn watering;
- Individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Street wash water;
- Discharges or flows from firefighting activities;
- Discharges from noncommercial fundraising car washes if the washing uses only; biodegradable, phosphate-free, water-based cleaners; or,
- Other activities generating discharges identified by the department as not requiring VPDES authorization.

3.2 Chemical Storage

Chemical storage is conducted in various parts of the facility to support vehicle maintenance, street maintenance, water and sewer, and general maintenance operations. Chemicals are stored within approved containers with secondary containment provided through double walled construction, spill pallets, containment trenches, or general containment within the building envelope. General containment provided in specific areas, or for specific operations, is described in subsequent subsections. A summary of all significant chemicals stored onsite is provided in Appendix B.

The Town has adopted an SOP for Outdoor Materials Storage in order to minimize the potential for chemical storage to result in a discharge to the storm drain system or to otherwise affect stormwater quality. The SOP is provided in Appendix C.

3.3 Vehicle Maintenance

Vehicle maintenance activities are conducted indoors at the main facility building. There are six maintenance bays that are utilized to maintain and repair Town vehicles. Activities within the vehicle maintenance bays range from routine maintenance (fluid changes, inspection, minor repairs, etc.) to more extensive repair and rehabilitation. Lubricants in 55-gallon drums, as well as smaller quantity containers) are stored and utilized within the vehicle maintenance area. A separate chemical storage room has been established for chemical storage. 55-gallon drums of oil and other lubricants are located within the storage area, and positioned over a secondary containment trench. A system of pumps and distribution lines runs from the barrels to overhead hose reels within the maintenance bays. This allows personnel to efficiently disperse lubricant in an orderly fashion.

Waste oils and antifreeze generated by Town vehicle maintenance personnel are temporarily stored in designated containers within the vehicle maintenance areas. In addition, the facility accepts waste oil and antifreeze from Town residents. The waste material is stored in designated containers, which are routinely serviced by a waste hauling contractor.

The bays are equipped with trench drains at each entrance that will intercept any spills or leaks occurring within the bays. The trench drains discharge to an oil/water separator (OWS) located to the south of the main building.

Pollutants within this area may include a variety of heavy metals from vehicle parts (lead, iron, aluminum, zinc, copper, cadmium, chromium, and nickel) as well as petroleum hydrocarbons from a variety of lubricants, fuels, and chemicals.

The Town has adopted an SOP for Vehicle Equipment Maintenance and Cleaning in order to minimize the potential for these activities to affect stormwater quality. The SOP is contained in Appendix C.

3.4 Vehicle Wash

The vehicle wash is located on the easternmost side of the main facility building and is used for washing Town equipment and vehicles. The wash is fully enclosed and drains to an internal inlet that discharges to an OWS, which then discharges to the sanitary sewer. Town personnel use the wash to clean all types of equipment and vehicles, including passenger vehicles, trash vehicles, and emergency response vehicles, as well as construction and maintenance equipment. The wash is equipped with a pressure washer that allows personnel to wash equipment with the minimal amount of water possible.

Potential pollutants generated from the wash could include a variety of heavy metals from vehicle parts (lead, iron, aluminum, zinc, copper, cadmium, chromium, and nickel), as well as petroleum hydrocarbons. Sediment and other solids (leaf debris, trash, etc.) are likely pollutants as well.

The Town has adopted an SOP for Vehicle Equipment Maintenance and Cleaning in order to minimize the potential for these activities to affect stormwater quality. The SOP is provided in Appendix C.

3.5 Fueling Station

A fueling station is located on the eastern portion of the site. Two 5,000 gallon aboveground storage tanks (ASTs) are located at the station to facilitate fueling of Town vehicles and equipment. One tank contains gasoline, while the other contains diesel fuel. The tanks are contained in a singular secondary containment structure, with a concrete shell that provides protection from impact. In

addition, a 330 gallon tote of diesel fuel additive is located in a locked storage shed immediately adjacent to the ASTs.

The fueling station is subject to the Town's SPCC plan, most recently certified June 17, 2019. The SPCC plan identifies regulated ASTs, potential discharge volumes and the direction of flow in the case of a release, secondary containment structures, discharge prevention provisions, inspection schedules, outdoor liquid transfer provisions (including transfer to ASTs and dispensing fuel to vehicles and equipment), discharge response procedures, and spill reporting and documentation requirements. The actions and forms contained in this SWPPP are supplemental to, and do not replace, those in the SPCC plan.

3.6 Diesel Generator

A 210 gallon diesel generator is located along the rear of the main facility building.

3.7 Storage Building

A storage building is located on the western portion of the facility. The building is utilized for vehicle maintenance, water and sewer, and general maintenance activities. The majority of the storage includes dry material such as hand tools, replacement parts, and other related equipment. One 250 gallon tote of PavePro is located in the northernmost bay (Bay A). A flame resistant cabinet for gasoline and other flammable products is located in this bay as well. The middle bay (Bay C) is utilized by vehicle maintenance operations and is used to store excess 55-gallon barrels of lubricant until they are needed in the maintenance bays. There are typically up to 10 55-gallon drums stored in this bay at any one time.

3.8 Salt Dome and Liquid Deicer Storage

Storage of road salt and liquid deicer material for treating roads during winter storms is located onsite. A salt storage dome is located toward the center of the facility, just south of the main parking area. Salt is stored in the building year round, with volumes fluctuating based on the time of year. The dome has an uncovered entrance to the south that allows for access to the salt. Salt handling and transfer into application trucks is conducted on the pavement outside of the dome.

Adjacent to the dome are four polyethylene tanks used to store liquid deicers. This includes three 3,000 gallon tanks, two of which contain magnesium chloride and one of which contains sodium chloride. A 5,000 gallon tank is used to store magnesium chloride. Loading and unloading from the tanks is conducted on the pavement adjacent to the tanks.

3.9 Waste Containers

Two waste containers are located on the western side of the site, just south of the storage building to manage solid waste at the facility. These containers are managed by the Town sanitation division. A metal recycling roll-off is located by the salt storage dome.

3.10 Material Stockpiles

Outdoor storage of material is located on the southern portion of the facility. Stockpiled material includes street sweeper spoils, gravel, cold mix, sand, asphalt millings, and topsoil. These materials are used by or generated by Town personnel in various public works projects. The volume of these piles will fluctuate based on construction and maintenance activity levels.

The Town has adopted an SOP for Outdoor Material Storage in order to minimize the potential for these activities to affect stormwater quality. The SOP is provided in Appendix C.

3.11 Equipment and Vehicle Parking

Parking areas south of the main facility building are utilized for personnel vehicles as well as Town vehicles and equipment. Waste hauling vehicles, dump trucks, a street sweeper, a vactor truck, and other construction equipment (backhoes, loaders, roller, trailers, etc.) are all located within this area. Vehicles awaiting maintenance are also typically stored in this area, primarily on the eastern portion of the parking area.

3.12 Equipment and Material Storage

A variety of equipment and material is stored along the southern edge of the main parking area and on the southern portion of the facility. There are several storage buildings that are used to store material that must be protected from exposure to the elements. The remainder of the material and equipment is stored outdoors. Material stored in this area includes:

- Traffic control posts, signs, cones, and related material;
- Snow plows and salt spreaders;
- Water/sewer metal pipes, valves, fire hydrants, and related material;
- Leaf boxes, woody material chippers, and leaf grinder;
- Plastic and PVC pipes;
- Metal manhole covers, rings, and related material;
- Pallets and other wood material;
- Equipment parts, tires, and related items;
- Bricks and other masonry material; and,
- Other related material that may need to be stored outside for a period of time.

As noted, the Town has adopted an SOP for Outdoor Materials Storage in order to minimize the potential for these materials to affect water quality. The SOP is provided in Appendix C.

3.13 Checklist of Potential Non-Stormwater Discharges

Table 3A provides a description and checklist of potential pollutants, pollutant sources, and non-stormwater discharges.

Table 3A – Checklist of Potential Pollutants and Non-Stormwater Discharges

Activity Area	Drainage Area	Potential Pollutants	Potential Non-Stormwater Discharges
Equipment and Material Storage	DA-001 DA-002 DA-003 DA-004	POLs Metals Organic Matter Sediment	A non-stormwater discharge could occur as a result of pollutants washing off of the stored materials or through the leaching of metals into stormwater.
Chemical Storage	DA-001	See Appendix B	A non-stormwater discharge could occur as a result of leaks, spills, or accidents; or through the corrosion or leaching of chemical materials through containers into stormwater.
Vehicle Maintenance	DA-001	Heavy Metals Petroleum/Oil/Lubricants (POLs) Used Oil and Antifreeze Various Chemicals	A non-stormwater discharge could occur if maintenance is conducted outdoors or if materials are stored in close proximity to bay doors where a leak or spill could circumvent the trench drain. Measures have been put in place to reduce the risk of spills and leaks, including the trench drain system, the overhead system of pumps and distribution lines, and dedicated indoor storage areas for bulk storage of chemicals.
Vehicle Wash	DA-001	Heavy Metals POLs Sediment Organic Materials Trash	A non-stormwater discharge could occur if wash water is allowed to flow out of the bay or if washing occurs outdoors.

Activity Area	Drainage Area	Potential Pollutants	Potential Non-Stormwater Discharges
Equipment and Vehicle Parking	DA-001	POLs Heavy Metals Sediment	A non-stormwater discharges could occur if leaked or spilled materials from equipment and vehicles are not properly contained and cleaned up.
Storage Building	DA-001	Heavy Metals POLs Sediment Various Chemicals	A non-stormwater discharge could occur if materials spilled or leaked inside the building were to exit the building and be exposed to stormwater.
Waste Containers	DA-001	Trash/Debris Sediment Organic Materials Liquid Wastes Metals Other Residential and Industrial Waste	A non-stormwater discharge could occur if waste container lids are left open during a storm event, therefore allowing the precipitation to comingle with the waste and leak through the bottom of the container. If waste containers are allowed to overflow or have rusted out bottoms, litter and floatables could be discharged into the storm drain system.
Generator	DA-001	Diesel	A non-stormwater discharge could occur as a result of overtopping during filling or by damage to the tank.
Fueling Station	DA-002	Gasoline Diesel	A non-stormwater discharge could occur as a result of overtopping of the tanks during filling, spillage while filling vehicles or equipment, or the release of contaminated stormwater from the secondary containment structure.
Salt Dome and Liquid Deicer Storage	DA-002	Sodium Chloride Magnesium Chloride	A non-stormwater discharge could occur if materials were spilled during transfer and allowed to remain on the paved area where it could then mingle with stormwater run-on.

Activity Area	Drainage Area	Potential Pollutants	Potential Non-Stormwater Discharges
Material Stockpiles	DA-003 DA-004	Sediment Organic Matter	A non-stormwater discharge could occur if the materials are not protected from precipitation through erosion or leaching of materials into the storm drain system.

4. Procedures and Control Measures

This section identifies the written procedures and control measures designed to reduce and prevent pollutant discharges from the sources identified in Section 3.

4.1 Baseline Measures

Baseline measures are procedures and control measures that should generally be applied at most high priority facilities. This section discusses baseline measures that will be implemented at the Northside Property Yard.

4.1.1 Good Housekeeping Program

Good housekeeping is the preservation of a clean and orderly work environment that contributes to overall pollution control efforts. The site will implement the practices in Table 4A to minimize the potential for stormwater pollution. General walk-throughs of the site will be conducted by the SWPPT Leader, or designated personnel, during normal daily duties to ensure that measures are being implemented.

Table 4A – Good Housekeeping Practices

Subject	Practice	Frequency
Clean Work Environment	Interior floors will be swept, with residue placed in designated waste disposal containers.	At least weekly.
Clean Work Environment	Brooms, dust pans, and mops will be kept on hand for easy access and use.	Continuous.
Trash and Litter	Exterior areas will be patrolled for trash and litter. Trash and litter will be disposed of properly.	Bi-weekly or more frequently if required.
Trash and Litter	Litter and trash will be removed from catch basins and other inlets to the storm drainage system.	Bi-weekly or more frequently if required.
Trash and Litter	Dumpster and recycling bin lids will be kept closed to prevent exposure to precipitation.	Continuous.
Scrap Parts and Empty Drums	Scrap parts and empty drums will be removed from the facility promptly.	Continuous.
Spill and Leak Prevention	Maintenance activities will be conducted indoors whenever possible.	Continuous.

Subject	Practice	Frequency
Spill and Leak Prevention	Chemicals, when not otherwise stored in appropriate tanks or containers, must be stored indoors and away from entrances where spills and leaks could escape the building envelope.	Continuous.
Spill and Leak Prevention	All equipment will be visually inspected for leaks and other conditions that could lead to a discharge of a pollutant.	During use or at least monthly.
Spill and Leak Prevention	Hazardous substances will be stored in approved containers. Containers will be stored in an area not exposed to stormwater where practical.	Continuous.
Spill and Leak Prevention	Containers will be located away from direct vehicular traffic. Bollards will be used when necessary to protect containers from vehicles and equipment.	Continuous.
Spill and Leak Prevention	Containers of liquid hazardous substances will be placed on spill containment pallets, racks, or otherwise be provided with containment and corrosion prevention. The containers will be stored in an area not exposed to precipitation where practical.	Continuous.
Labeling	Containers will be labeled for their contents in plain language. A Safety Data Sheet (SDS) will be provided in areas accessible to personnel for each chemical.	Continuous.
Labeling	Drums and tanks containing used oil and used antifreeze must be labeled "USED OIL" and "USED ANTIFREEZE" accordingly.	Continuous.
Spill and Leak Response	Spills, drips, and leaks will be cleaned promptly.	Immediately after occurrence.
Parking Areas	Parking areas will be swept periodically to prevent the buildup of sediment and other loose materials.	As needed.
Parking Areas	Pressure washing will be conducted on sections of the parking area where oil and grease buildup is obvious. Water generated in the process must be collected and discharged to the sanitary sewer system or other appropriate disposal method.	As needed.
Training	Formal pollution prevention training will be provided to all affected personnel.	Formal training every 24 months; informal on continuous basis.

Subject	Practice	Frequency
Documentation	Complete the good housekeeping checklist during site inspections.	Semi-annually.

4.1.2 Preventative Maintenance Program

Regular inspection of equipment and operational systems is required to ensure that failure does not result in a release of pollutants into the stormwater drainage system. Equipment and operational systems include items such as nozzles, pumps, electrical components, gauges, valves, and gaskets. Regular inspections will uncover conditions such as cracks or slow leaks that could cause breakdowns or failures. Inspections will also detect noises and vibrations that may indicate wear of components and possible failure. The program will reduce breakdowns and failures by making proper adjustments, repair, or replacement of equipment or parts.

Inspections will occur during two specific preventative maintenance periods. Run-time preventative maintenance occurs on days when the equipment is in use under normal operation of the equipment and machinery. Preventative maintenance at regularly scheduled intervals involves inspections, cleaning, and minor repairs. The SPCC plan, discussed in Section 4.2, will be used as the primary document governing preventive maintenance of equipment and operational systems associated with tanks and drums at the site.

4.1.3 Spill Prevention and Response

The purpose of a spill prevention and response program is to reduce the potential for spills to occur in the first place and to ensure that personnel are trained to properly handle a spill so that it does not enter surface waters. This section includes general spill prevention and response procedures that will be implemented. The SPCC plan discussed in Section 4.2 will be used as the primary document for governing spill prevention and response.

Outdoor Liquid Transfer

Outdoor liquid transfer may occur as a result of the delivery of fuel or other substances from a tanker truck to a tank or when fuel or other materials are dispensed by Town staff into fleet vehicles or equipment. Tank truck fuel transfers will meet the minimum requirements contained in Table 5.3 of the SPCC plan. The following will be observed when fuel is dispensed by Town staff:

- Operators will ensure that all hoses are secure and that proper absorbent materials (e.g., pads, booms and socks) are available.
- Operators should remain with the vehicle at all times.

- Operators should be instructed to never “top off” a vehicle or other container.
- OLT will be avoided when at all possible during precipitation events unless adequate precautions are taken to ensure that the material does not co-mingle with stormwater. The fuel station canopy is generally considered an adequate precaution unless weather conditions indicate otherwise.

Employee Awareness

Employee awareness is the key to an effective spill prevention and response program. Spill prevention training will be a component of the general employee training program. New personnel will be taught spill prevention practices. Maintenance personnel will gain a sufficient understanding of the objectives of the spill prevention program. Spill prevention training will highlight previous spill events, equipment failures, remedies taken, and newly developed prevention measures. Section 4.2 includes specific training and documentation requirements for site personnel.

Secondary Containment

Secondary containment should be provided for any AST, non-empty 55-gallon drum, or any area where smaller amounts of paints, solvents, POLs, pesticides, herbicides, or other liquid hazardous substances are stored. Containers up to 55-gallons (e.g., buckets, jerricans, drums) have several secondary containment options:

- Store containers on a spill pallet.
- Store containers inside a prefabricated metal HAZMAT storage building with integral secondary containment.
- Use the existing building and provide a trench, built-up berm, or spill blocker at the doorway or bay threshold.
- Build a depressed concrete slab with curbing and a shed roof.
- Store small containers within a self-contained flammables cabinet.

For larger ASTs, the volume of secondary containment should equal the volume of the largest AST within the containment area plus sufficient freeboard for a specified storm event. Options include poured concrete secondary containment, prefabricated tanks with integral secondary containment, and double-walled tanks.

Spill Kits

A complete and adequate spill kit should be positioned in an easily accessible location anywhere there is the potential for a spill or a leak. This includes fueling areas, vehicle and equipment storage areas, chemical storage areas, and anywhere that bulk material is stored (including 55-gallon drums).

Facility personnel should have knowledge of the location of all spill kits. Spill kits should have sufficient absorbent to contain a spill from the largest container within the hazardous substance storage location. Each facility should have at least one large drum or similar container for holding contaminated materials (e.g., soil, booms, absorbent pads) prior to disposal.

Spill Response

In case of a spill that has entered or is likely to enter the storm drain system or surface waters, or where personnel do not believe they can address the spill safely, the facility will request aid from Fairfax County Fire and Rescue using 911. The Town Department of Public Works and the Virginia Department of Environmental Quality, Northern Regional Office, will also be notified. The SPCC plan discussed in Section 4.2 includes specific response and documentation requirements for facility personnel. Reporting and documentation requirements specific to the Town's MS4 permit are discussed in Section 5. Warning signs placed at fuel stations, bulk storage tanks, or other refueling areas should contain emergency telephone numbers to aid in quick response.

Minor spills can be absorbed with dry granular absorbents, pads, booms, or socks. Personnel should be trained to ensure that used materials are swept up and disposed of properly on a timely basis (and before any precipitation event). In general, there are four basic steps that are to be taken to control pollution that can result from a spill:

- Stop the spill at the source.
- Contain the spill.
- Collect the spilled material.
- Dispose of the spilled material and subsequent contaminated material properly and legally.

If containment methods are required for which the responder is not trained, or personal protective equipment is not available, immediately evacuate the contaminated area and prevent unauthorized personnel from entering. Steps 3 and 4 should only be undertaken by personnel that are properly trained in spill response and cleanup.

4.1.4 Vehicle and Equipment Parking and Storage

Vehicle and equipment parking areas should be monitored routinely for spills and leaks. A specific area should be designated for vehicles and equipment waiting for maintenance. The area should be located away from storm drain inlets and have easy access to drip pans. The area should also be subject to more frequent monitoring for spills and leaks.

Any observed leaks should be cleaned up immediately using absorbent material. The material should be disposed of properly. Water should never be used to clean up spilled material. Wash down of

pavement should not occur until all spills and leaks have been cleaned up. If a buildup of waste materials is present on the pavement, the resulting wash water must be contained and disposed of in a sanitary sewer or by another appropriate method.

4.1.5 Waste/Recycling Containers

The Site will observe the following to minimize the potential for waste and recycling containers to become sources of pollutants:

- Lids are to remain closed at all times when not actively loading the containers.
- Trash should only be stored inside the containers. Piling excess trash on the outside of the container is not permitted.
- Dumpsters should be located away from storm drain inlets.
- Periodic inspections of the dumpsters should be conducted to observe for signs of deterioration or leakage.

4.1.6 Material Stockpiles

Stockpiles that present a risk of transport of materials (through erosion or leaching) to the storm drain system or surface waters should be stored inside a storage building or under a roof whenever possible. If a permanent overhead structure is not available, steps should be taken to prevent erosion and leaching of materials to the extent practicable. This may include covering stockpiles with a properly secured tarp, use of silt fencing, temporary vegetative cover, or other effective means of preventing stormwater pollution. The following will be observed:

- Contain stormwater run-off from stockpiles by using barriers or berms.
- Sweep areas surrounding the stockpile frequently to prevent materials from mingling with stormwater.
- Whenever possible, order only the amount of the material to be stockpiled that is needed for the specific job and schedule delivery to minimize the amount of outdoor storage time.
- Locate stockpiles away from storm drain inlets. Provide protection for the inlet if necessary to prevent the discharge of materials.

4.1.7 Scrap Material Storage and Salvage

Measures to be taken by Town personnel to minimize the quantity of scrap materials stored at the facility are as follows.

- Remove scrap materials from the site promptly.
- Divert stormwater away from scrap storage areas.

- Divert stormwater from scrap storage areas through a buffer strip, onto a level grassy area, or into a grass berm.
- Minimize direct introduction of stormwater to the drainage system without the use of buffer strips or other runoff management devices.

Some items present a pollutant risk while they are stored on site. Rusting tanks, barrels, machinery, and other related equipment can introduce leached metals into stormwater runoff. To minimize the risk of contamination, the Town will remove them from the site to the extent practicable. In addition, the Town will ensure scrap materials are free from lubricants and loose paint to the extent practical and ensure that salvaged vehicle fuel tanks are empty and drips are contained.

Small scrap items such as automotive batteries will be stored indoors or under cover until removed from the facility.

4.1.8 Illicit Connections and Improper Discharge Elimination

Illicit connections include direct pipe or other conveyance tie-ins to the stormwater drainage system. Improper discharges include the dumping of non-permitted non-stormwater materials into the stormwater drainage system.

Floor drains that connect to the stormwater drainage system are illicit connections that provide an avenue for an improper discharge. Floor drains connected to the stormwater drainage system must be plugged. Personnel must be instructed not to pour non-stormwater materials into catch basins, drop inlets, ditches, and other portions of the stormwater drainage system.

Hand sinks that discharge to the ground or stormwater drainage system are illicit connections. These hand sinks must be re-routed to the sanitary sewer system. Label hand sinks with instructions prohibiting the entry of hazardous substances.

4.1.9 Sediment and Erosion Control

Areas where bare soil is exposed to water, wind, or ice can erode and cause sediment pollution. The facility should promptly stabilize any bare area that could become a source of pollution. If an area is persistently bare and causing erosion, the Town can employ one or more of the following:

- Prevent runoff from flowing across the exposed areas by diverting the flow to vegetated areas.
- Slow down the runoff flowing across the area by using level spreaders or terraces.
- Provide check dams in drainage ways to decrease flow velocities.
- Use grassed swales rather than paved channels.

- Remove sediment from stormwater runoff before it leaves the site by allowing it to sheet flow through vegetative buffers.

The Town will also ensure that all grading and site-disturbing activities that occur at the facility comply with the requirements of Town Code Chapter 23, Article 2 "Erosion and Sediment Control."

4.1.10 Stormwater Management

Stormwater management includes (1) practices that reduce the amount of impervious surface cover and maximize the amount of pervious area where stormwater can naturally infiltrate into the soil and (2) practices that capture and treat pollutants once they are already in the stormwater. The Town operates a Downstream Defender stormwater management facility within DA-001. This specific structure is discussed in Section 4.2.

The need for additional structural controls will be based on an assessment of the nature of the specific pollutants to be controlled, site specific conditions such as soil and topography, and the reductions required by the Town's performance criteria. In addition, the need for any structures will be assessed in the context of overall Town stormwater management targets, including but not limited to those in the Town's Chesapeake Bay TMDL Action Plan. Finally, the Town will also ensure that all grading and site-disturbing activities that occur at the facility comply with the requirements of Town Code Chapter 23, Article 3 "Stormwater Management."

4.1.11 On-Site Contractor Responsibilities

The Town has developed and implemented standard contract language to inform all contractors that they are responsible for implementing the Town's SOPs and abiding by all local, state, and federal stormwater regulations and requirements, including this SWPPP.

4.1.12 Security Measures

An effective security system may prevent an accidental or intentional release of materials to the stormwater drainage system as a result of vandalism, theft, sabotage, or other improper uses of the property. Security includes fencing, keypads or swipe cards for entrance or use of equipment, and adequate lighting. Personnel should be trained to observe for potential security breaches, such as breaches to fencing or unidentified individuals on the site.

4.2 Site-Specific Measures

This section discusses procedures and control measures that are specific to the Northside Property Yard. Because they are site-specific, they should be frequently evaluated to ensure that they are effective at reducing potential non-stormwater discharges and sources of pollutants.

4.2.1 Spill Prevention, Control, and Countermeasures Plan

An SPCC plan has been developed for the site in accordance with 40 CFR 112 (Oil Pollution Prevention). The plan includes a description of the facility and ASTs subject to the plan, spill response and disposal procedures, post-spill actions, and training, inspection, and record keeping requirements. The most recent plan was certified in June 2019. The plan must be reviewed and recertified on a five-year basis.

Training must occur annually and be documented using the SPCC Plan Discharge Prevention Training Form. Inspections must occur at least monthly in accordance with Above Ground Storage Tank Monthly Checklist. Reportable spills must be recorded using the Discharge Notification Form. The forms in this SWPPP may supplement, but do not replace those in the SPCC plan.

4.2.2 Fueling Station

The fueling station is subject to the SPCC plan. In addition to the operating procedures identified in the plan, the fueling station has a number of structural controls designed to prevent the discharge of pollutants from fueling activities. They include the following:

- An overhead covering is provided at the fueling station to prevent precipitation from coming in contact with pollutants generated from the fueling operations.
- Two spill kits (one on each side) are located at the fueling station to allow personnel to quickly address any spills/leaks that may occur. The spill kits are clearly labeled so that personnel can quickly identify them in the event of a spill.
- An electronic access system is installed for access to the fuel pumps. This provides access only to Town personnel and safeguards against vandalism.
- An emergency shutoff switch is located immediately adjacent to the fueling station to allow for the pumps to be shut off in the event of a spill.
- Emergency contact information is conspicuously displayed in case of a large spill or other emergency.
- Bollards are located at the fueling station to prevent vehicular impact that could damage the fuel tanks.
- Fire extinguishers are located at the fuel tank to allow personnel to address fires as needed.

4.2.3 Trench Drains

Trench drains have been installed at the entrance to the maintenance bays to capture any leaks spills within the bays. The drains convey material to the OWS, which then discharges to the sanitary sewer system. Fluids should be stored as far away as possible from bay doors or other places where a leak

or spill could reach an outside area. Further, bay door trench drains should be consistently maintained to ensure adequate capacity to control a spill or a leak.

4.2.4 Vehicle and Equipment Wash

A dedicated vehicle wash is provided at the facility to handle all vehicle and equipment washing activities. The wash drains to an OWS and then to the sanitary sewer. All washing activities are to be conducted within the vehicle wash to prevent the discharge of pollutants from outside vehicle washing activities. Routine maintenance on the wash facility includes removing solids from the drainage inlet in the bay. Solids tend to accumulate rapidly as a result of washing construction and maintenance equipment (loaders, backhoes, dump trucks, street sweeper, etc.).

4.2.5 Salt and Liquid Deicers

The salt dome located to the south of the parking area provides adequate storage for salt material used by the Town for winter storm management purposes. The following are implemented by the facility to prevent runoff of salt and other deicing materials:

- Stormwater is diverted away from the salt loading/unloading area.
- All salt handling activities occur on an impervious surface that can be swept at the end of the handling activity.
- Care is taken to reduce spillage of salt when loaded onto trucks in non-covered areas.
- Residue is swept at the end of each precipitation event or significant sand loading operation.
- At the end of each winter season, salt storage areas are inspected to determine whether additional sweeping and material covering is required.

Additional controls related to salt storage are recommended.

The pavement in front of the salt dome should be sealed to prevent salt from leaching into the subsoil and allow for easier cleanup following salt handling activities. A barrier should be installed at the entrance to the salt dome to prevent stormwater from entering the dome and washing salt out in to the drainage system. In addition, an impervious tarp should be installed to prevent wind-blown precipitation from entering the dome. A more permanent, long-term fix that includes permanent doors on the entrance is recommended.

Secondary containment should be provided for the liquid deicer storage tanks. The secondary containment should be adequate in size and configuration to encompass the storage and transfer activities.

4.2.6 Downstream Defender

A Downstream Defender stormwater management facility is located to the south of the parking lot. Flow within DA-001 leads to the Downstream Defender prior to being discharged at Outfall-001. The Downstream Defender provides primary treatment of the stormwater by settling suspended solids and filtering out trash and other debris. Routine inspections and maintenance of the Downstream Defender are to be conducted in accordance with the manufacturer's recommendations as provided in Appendix D.

4.2.7 Street Sweeper and Vacuum Materials Management

The Town conducts street sweeping and vector truck activities throughout the year. The material is temporarily brought to the site at the materials stockpile area prior to being hauled away for final disposal. Because of the difficulty in providing temporary cover to the materials, the Town is actively pursuing the development and implementation of a physical containment structure/dewatering pit. Physical improvements to the site will be added to future SWPPP updates.

4.2.8 Property Yard Site Improvements

The Town has developed a Northside Property Yard Improvements Concept Design Report (April 2017) to identify stormwater control and general pollution prevention improvements to the site. These include specific recommendations in Section 4.2.5 (Salt and Liquid Deicers) and Section 4.2.7 (Street Sweeper and Vacuum Materials Management) as well as the more general recommendations in Section 4.1.6 (Materials Stockpile). The objectives addressed in the report include:

- Address the potential for salt to mix with stormwater as a result of salt loading and unloading activities that occur in front of the existing salt dome.
- Provide secondary containment for existing deicer/anti-icer ASTs.
- Address runoff from the existing material stockpile area on the southern portion of the site.
- Provide overhead cover or other protection to equipment and parts storage areas where practical.
- Increase or introduce a vegetated buffer between the site and Piney Branch, primarily on the southern portion of the site. Protect the buffer area from concentrated stormwater through the use of level spreaders and other management techniques.

The report identifies existing conditions/specific site issues and provide options and recommendations for improvements to site layout and physical structures (such as canopies, stockpile bins, and dewatering structures). The Town is actively implementing report recommendations through its Capital Improvement Plan.

4.3 Recommended Actions

The actions in Table 4B are based on the recommendations in Section 4.2 and a review of the site conducted on August 5, 2020. Additional actions may be added based on further review or identification of potential pollutants and/or non-stormwater discharges.

Table 4B – Procedures and Control Measures Action Plan

Location	Recommended BMP	Sec. Ref.	Target Date	Implement Date
Salt Storage	A permanent door or other barrier should be installed at the salt dome to prevent salt from being released to the drainage system.	4.2.5		__/__/__
Salt Storage	Pavement in front of the salt storage dome should be repaired to prevent salt from leaching into the subsurface.	4.2.5		__/__/__
Salt Storage	Implement secondary containment around the liquid deicer containers.	4.2.5		__/__/__
Street Sweeping and Vacuum Spoils	Evaluate the feasibility of installing a dewatering system for spoils that discharges to the sanitary sewer system	4.2.7		
Equipment and Material Storage	Evaluate the feasibility of providing cover for other stockpiles and equipment.	4.2.8		__/__/__

5. TRAINING, INSPECTIONS, AND RECORDKEEPING

5.1 Training

Personnel training is essential to the effective performance of the SWPPP. Personnel at all levels of responsibility will be trained on the components and goals of the SWPPP, including employees who work in areas where high risk materials or activities are exposed to stormwater and employees responsible for implementing activities identified in the SWPPP.

In accordance with the Part I E 6 d (5) of the MS4 permit, personnel training for the SWPPP will occur at least every 24 months. Personnel from the facility will also be trained on other specific topics as required by the permit in the schedule presented in the MS4 Program Plan (BMP 6.3). The overall goal of this training program is to provide some level of training on a pollution prevention topic at least annually. A Training Documentation Sheet (Form 1) is provided in Appendix E and will be used to document SWPPP training.

5.2 Semi-Annual Site Inspections

In accordance with Part I E 6 d (7) of the MS4 permit, routine site inspections will be conducted on at least a semi-annual basis by a qualified individual. If the inspections reveal systemic issues, the SWPPT Leader will implement more frequent site inspections. A member of the SWPPT should either conduct or participate in the inspection. Inspections should be completed during a time of normal facility operations. A Semi-Annual Inspection Checklist (Form 2) is provided in Appendix E. The facility manager is responsible for verifying the scope and adequacy of these inspection reports.

5.3 Annual Comprehensive Site Compliance Evaluation

In accordance with Part I E 6 d (6) of the MS4 permit, a comprehensive site compliance evaluation will be conducted annually. The evaluation may take place at the same time as one of the semi-annual inspections in Section 5.2.

The evaluation will determine if the pollution prevention measures in this SWPPP have been implemented and will assess their effectiveness. The evaluation will include an assessment of: the accuracy of the site map; the accuracy of the SWPPP and related records; the accuracy of potential pollutant sources, the effectiveness of stormwater pollution prevention procedures, and the overall effectiveness of the SWPPP. Each site will be reviewed for changes in operations and potential non-stormwater discharges. Records and files will be reviewed for completeness. The SWPPP will be updated to reflect changes in operations that have the potential to affect stormwater quality and any

new procedures necessary to reduce and prevent pollutant discharges. Updates may take the form of short narratives attached at the end of the SWPPP.

A Comprehensive Site Comprehensive Evaluation (Form 3) is provided in Appendix E.

5.4 Stormwater Quality Management Structure Inspections

The Downstream Defender and other stormwater quality management structures must be inspected in accordance with the manufacturer's recommendations or the schedule established by the Town. A Structural Controls Inspection Report (Form 4) is provided in Appendix E. Other appropriate forms as determined by the Town may also be used to document the inspections.

5.5 Spill Records

In accordance with Part I E 6 d (8) of the MS4 permit, the SWPPP must include a log of each unauthorized discharge, release, or spill incident in accordance with Part III G. Incidents subject to the SPCC plan should follow the spill reporting requirements contained in that plan. Incidents at other locations should use the Spill Incident Report (Form 5) in Appendix E. In both cases, the completed forms must be included in Appendix F of this SWPPP.

Smaller spills not subject to Part III G should be logged using the Small Spill Log (Form 6) in Appendix E. This information is used by the SWPPT Leader to reinforce good housekeeping practices and to identify potential issue areas.

Part III G of the MS4 permit requires each facility to report any unauthorized discharges into state waters or discharges that may reasonably be expected to enter state waters. The facility must also report non-compliance that endangers human health or the environment. Both situations require the SWPPT Leader or Town Manager to notify DEQ. For an unauthorized discharge, the Town must notify DEQ immediately upon discovery, but in no case later than 24 hours. For non-compliance, the Town must notify DEQ within 24 hours from the time the Town becomes aware of the circumstances.

Table 5A – Emergency Spill Contacts

Contact	Contact Number
Fairfax County Fire and Rescue	911 – Active spill event (703) 246-4386 – Not active spill event, no immediate hazard – work hours (703) 691-2131 – Not active spill event, no immediate hazard – after hours number
Department of Environmental Quality, Northern Regional Office	(703) 583-3800
Town of Vienna Department of Public Works	(703) 255-6380

Table 5B – 24-Hour Reporting Requirements

Regular Business Hours and Online Reporting	
DEQ, Northern Regional Office	(703) 583-3800
	DEQ Reporting Form: https://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx
Nights, Holidays, and Weekends	
Virginia Department of Emergency Management	1 (800) 468-8892

A written report must be submitted to DEQ within five days to 13901 Crown Court, Woodbridge, Virginia 22193. The written report must contain the information in Table 5C.

Table 5C – Written Report Requirements

Unauthorized Discharges	Non-Compliance
<ol style="list-style-type: none"> 1. A description of the nature and location of the discharge; 2. The cause of the discharge; 3. The date on which the discharge occurred; 4. The length of time that the discharge continued; 5. The volume of the discharge; 6. If the discharge is continuing, how long it is expected to continue; 	<ol style="list-style-type: none"> 1. A description of the noncompliance and its causes; 2. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time said non-compliance is expected to continue; and, 3. Steps taken or planned to reduce, eliminate, and prevent

Unauthorized Discharges	Non-Compliance
<ol style="list-style-type: none"> 7. If the discharge is continuing, what the expected total volume of the discharge will be; and, 8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by a permit. 	

5.6 Release of Stormwater from Secondary Containment

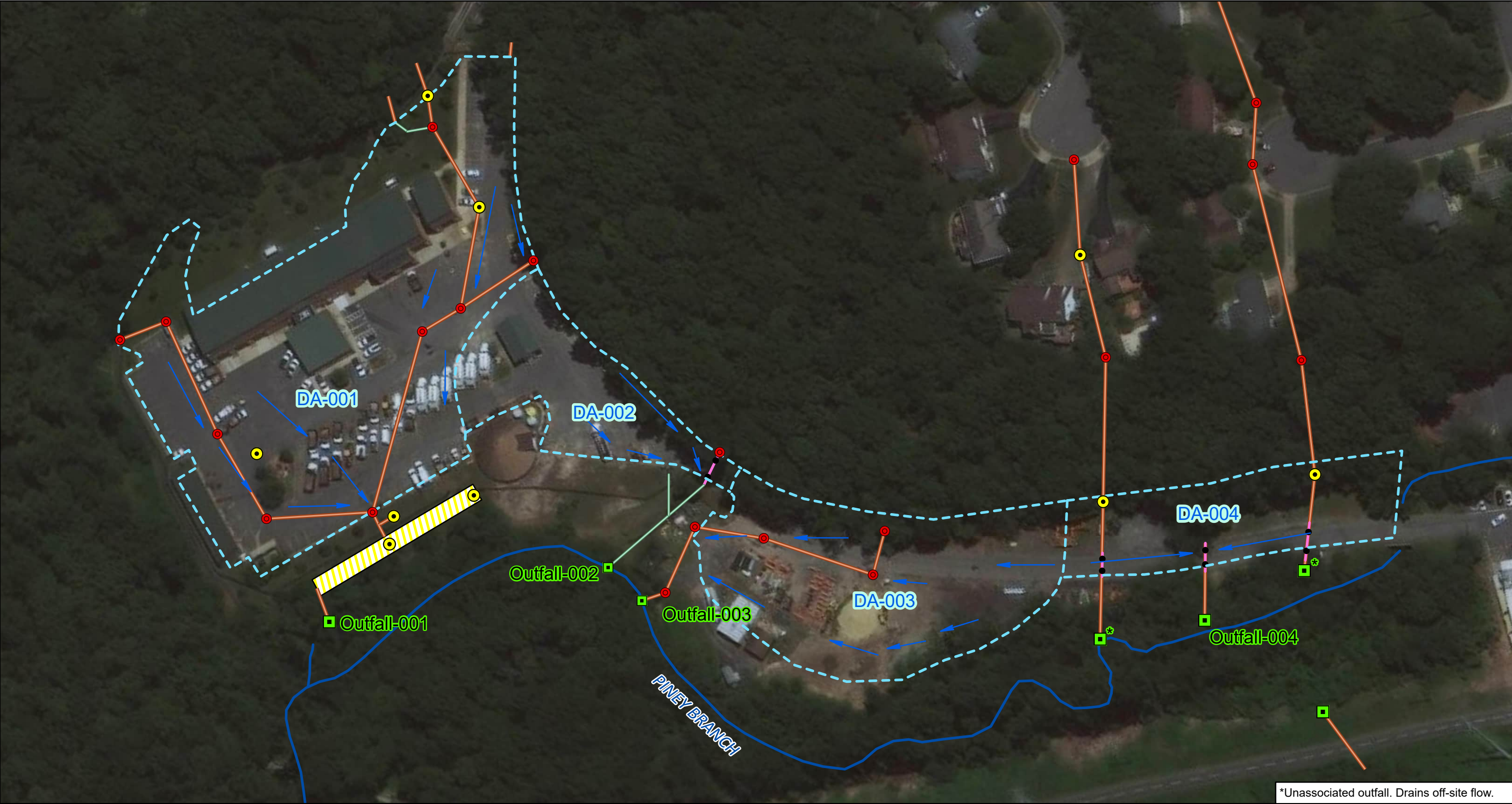
The site is considering the installation of secondary containment for the liquid deicer storage tanks. Accumulated rainwater should only be released from exposed secondary containment structures once it has been visually confirmed that there is no contamination (such as sheen). Such releases will use Secondary Containment Release Documentation (Form 7) in Appendix E. If contamination is evident, then the contamination will be removed prior to the release.



5.7 Documentation

All completed forms and other documentation will be included with this SWPPP as Appendix F.

APPENDIX A

SITE MAP



<ul style="list-style-type: none">ManholeCulvertStream	<ul style="list-style-type: none">Stormwater management facilityStorm sewer lines	<ul style="list-style-type: none">Surface inletOutfallSwale	<ul style="list-style-type: none">On-Site Drainage Areas (Approximate)Flow Direction	<div><div>03060120 Feet</div></div>	<div></div>	<div>Site Map Town of Vienna Northside Property Yard</div>
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APPENDIX B

CHEMICAL INVENTORY

Northside Property Yard Stormwater Pollution Prevention Plan

Operation	Chemical	Number of Containers	Approximate Volume (gal)
Vehicle Maintenance	Unleaded Gasoline	1	5,000
	Diesel	1	5,000
	Diesel Fuel Additive	1	330
	Automotive Grease	Various	55
	Antifreeze	Various	250
	Oils/Lubricants	Various	800
	Various Cleaners and Aerosols	Various	Various
	Detergents	Various	20
Street Maintenance	PavePro	1	250
	Magnesium Chloride	2	3,000
	Magnesium Chloride	1	5,000
	Sodium Chloride	1	3,000
	Road Salt	N/A	300 Tons
	Asphalt Tack Agent	1	75
Water and Sewer	Green Gobbler Grease	Various	25
	Goldstar Degreaser	2	10
	Lubricant	Various	Various
	State Degreaser	1	5
	Rust Remover	Various	Various
	Tracing Dye	Various	Various
General Operations	Latex Paints	Various	Various
	Paints (other)	Various	Various
	Paint Thinner	Various	Various
	Diesel (Generator)	1	210

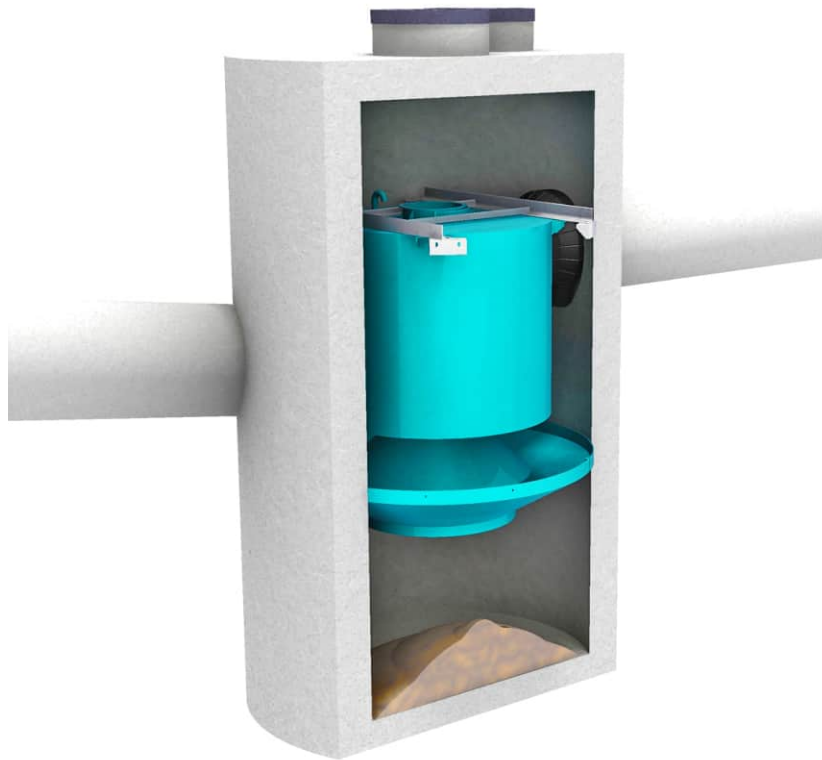
Note: Due to the nature of the facility operations, this inventory is subject to change at any time and should not be considered a complete representation of the chemicals stored and handled onsite at any given time.

APPENDIX C

STANDARD OPERATING PROCEDURES

APPENDIX D

DOWNSTREAM DEFENDER MAINTENANCE INSTRUCTIONS



Operation and Maintenance Manual

Downstream Defender®

Vortex Separator for Stormwater Treatment

Turning Water Around ...®

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Downstream Defender® Installation Log

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Downstream Defender® Inspection and Maintenance Log

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DISCLAIMER: Information and data contained in this manual is exclusively for the purpose of assisting in the operation and maintenance of Hydro International plc's Downstream Defender®. No warranty is given nor can liability be accepted for use of this information for any other purpose. Hydro International plc have a policy of continuous product development and reserve the right to amend specifications without notice.

Downstream Defender® by Hydro International

The Downstream Defender® is an advanced Hydrodynamic Vortex Separator designed to provide high removal efficiencies of settleable solids and their associated pollutants, oil, and floatables over a wide range of flow rates.

The Downstream Defender® has unique, flow-modifying internal components developed from extensive full-scale testing, CFD modeling and over thirty years of hydrodynamic separation experience in wastewater, combined sewer and stormwater applications. These internal components distinguish the Downstream Defender® from simple swirl-type devices and conventional oil/grit separators by minimizing turbulence and headlosses, enhancing separation, and preventing washout of previously stored pollutants.

The high removal efficiencies and inherent low headlosses of the Downstream Defender® allow for a small footprint making it a compact and economical solution for the treatment of non-point source pollution.

Benefits of the Downstream Defender®

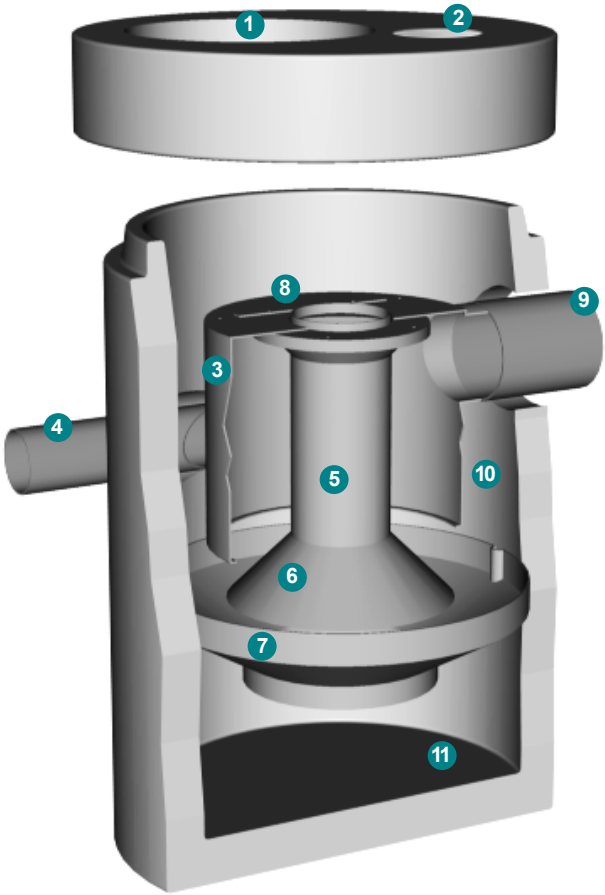
- Removes sediment, floatables, oil and grease
- No pollutant washouts
- Small footprint
- No loss of treatment capacity between clean-outs
- Low headloss
- Efficient over a wide ranges of flows
- Easy to install
- Low maintenance

Applications

- New developments and retrofits
- Utility yards
- Streets and roadways
- Parking lots
- Pre-treatment for filters, infiltration and storage
- Industrial and commercial facilities
- Wetlands protection

Downstream Defender® Components

1. Central Access Port
2. Floatables Access Port (6-ft., 8-ft. and 10-ft. models only)
3. Dip Plate
4. Tangential Inlet
5. Center Shaft
6. Center Cone
7. Benching Skirt
8. Floatables Lid
9. Outlet Pipe
10. Floatables Storage
11. Isolated Sediment Storage Zone



HYDRO MAINTENANCE SERVICES

Hydro International has been engineering stormwater treatment systems for over 30 years. We understand the mechanics of removing pollutants from stormwater and how to keep systems running at an optimal level.

NOBODY KNOWS OUR SYSTEMS BETTER THAN WE DO



AVOID SERVICE NEGLIGENCE

Sanitation services providers not intimately familiar with stormwater treatment systems are at risk of the following:

- Inadvertently breaking parts or failing to clean/replace system components appropriately.
- Charging you for more frequent maintenance because they lacked the tools to service your system properly in the first place.
- Billing you for replacement parts that might have been covered under your Hydro warranty plan
- Charging for maintenance that may not yet have been required.

LEAVE THE DIRTY WORK TO US

Trash, sediment and polluted water is stored inside treatment systems until they are removed by our team with a vactor truck. Sometimes teams must physically enter the system chambers in order to prepare the system for maintenance and install any replacement parts. Services include but are not limited to:

- Solids removal
- Removal of liquid pollutants
- Replacement media installation (when applicable)



BETTER TOOLS, BETTER RESULTS

Not all vactor trucks are created equal. Appropriate tools and suction power are needed to service stormwater systems appropriately. Companies who don't specialize in stormwater treatment won't have the tools to properly clean systems or install new parts.



SERVICE WARRANTY

Make sure you're not paying for service that is covered under your warranty plan. Only Hydro International's service teams can identify tune-ups that should be on us, not you.

TREATMENT SYSTEMS SERVICED BY HYDRO:

- Stormwater filters
- Stormwater separators
- Baffle boxes
- Biofilters/biorention systems
- Storage structures
- Catch basins
- Stormwater ponds
- Permeable pavement



SAVE TIME & MONEY: CALL HYDRO FOR A QUOTE

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Operation

Introduction

The Downstream Defender® operates on simple fluid hydraulics. It is self-activating, has no moving parts, no external power requirement and is fabricated with durable non-corrosive components. No manual procedures are required to operate the unit and maintenance is limited to monitoring accumulations of stored pollutants and periodic clean-outs. The Downstream Defender® has been designed to allow for easy and safe access for inspection/monitoring and clean-out procedures. Entry into the unit or removal of the internal components is not necessary for maintenance, thus safety concerns related to confined-space-entry are avoided.

Pollutant Capture and Retention

The internal components of the Downstream Defender® have been designed to protect the oil, floatables and sediment storage volumes so that separator performance is not reduced as pollutants accumulate between clean-outs. Additionally, the Downstream Defender® is designed and installed into the storm drain system so that the vessel remains wet between storm events. Oil and floatables are stored on the water surface in the outer annulus separate from the sediment storage volume in the sump of the unit providing the option for separate oil disposal, and accessories such as adsorbant pads. Since the oil/floatables and sediment storage volumes are isolated from the active separation region, the potential for re-suspension and washout of stored pollutants between clean-outs is minimized.

Wet Sump

The sump of the Downstream Defender® retains a standing water level between storm events. The water in the sump prevents stored sediment from solidifying in the base of the unit. The clean-out procedure becomes more difficult and labor intensive if the system allows fine sediment to dry-out and consolidate. Dried sediment must be manually removed by maintenance crews. This is a labor intensive operation in a hazardous environment.

Blockage Protection

The Downstream Defender® has large clear openings and no internal restrictions or weirs, minimizing the risk of blockage and hydraulic losses. In addition to increasing the system headloss, orifices and internal weirs can increase the risk of blockage within the unit.

Maintenance

Overview

The Downstream Defender® protects the environment by removing a wide range of pollutants from stormwater runoff. Periodic removal of these captured pollutants is essential to the continuous, long-term functioning of the Downstream Defender®. The Downstream Defender® will capture and retain sediment and oil until the sediment and oil storage volumes are full to capacity. When sediment and oil storage capacities are reached, the Downstream Defender® will no longer be able to store removed sediment and oil. Maximum pollutant storage capacities are provided in Table 1.

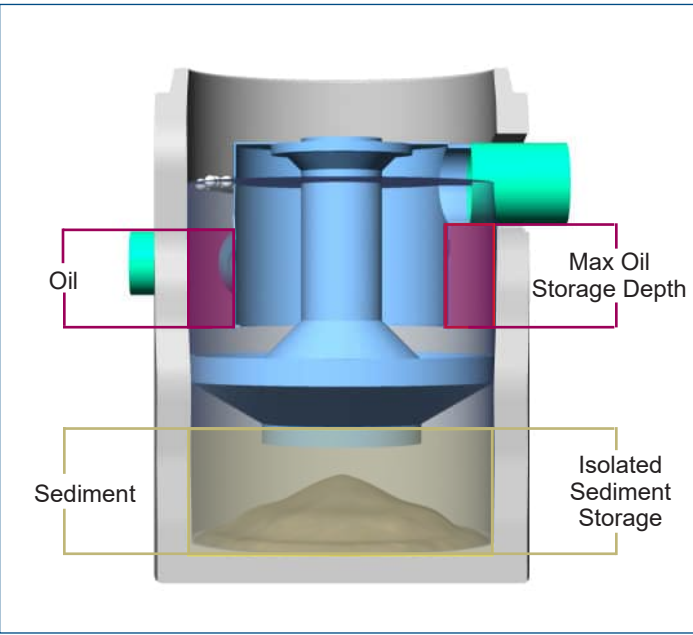


Fig.1 Pollutant storage volumes of the Downswtream Defender®.

Inspection Procedures

Inspection is a simple process that does not involve entry into the Downstream Defender®. Maintenance crews should be familiar with the Downstream Defender® and its components prior to inspection.

Scheduling

- It is important to inspect your Downstream Defender® every six months during the first year of operation to determine your site-specific rate of pollutant accumulation
- Typically, inspection may be conducted during any season of the year
- Sediment removal is not required unless sediment depths exceed 75% of maximum clean-out depths stated in Table 1

Recommended Equipment

- Safety Equipment and Personal Protective Equipment (traffic cones, work gloves, etc.)
- Crow bar or other tool to remove grate or lid
- Pole with skimmer or net
- Sediment probe (such as a Sludge Judge®)
- Trash bag for removed floatables
- Downstream Defender® Maintenance Log

The Downstream Defender® allows for easy and safe inspection, monitoring and clean-out procedures. A commercially or municipally owned sump-vac is used to remove captured sediment and floatables. Access ports are located in the top of the manhole. On the 6-ft, 8-ft and 10-ft units, the floatables access port is above the outlet pipe between the concrete manhole wall and the dip plate. The sediment removal access ports for all Downstream Defender® models are located directly over the hollow center shaft.

Maintenance events may include Inspection, Oil & Floatables Removal, and Sediment Removal. Maintenance events do not require entry into the Downstream Defender®, nor do they require the internal components of the Downstream Defender® to be removed. In the case of inspection and floatables removal, a vactor truck is not required. However, a vactor truck is required if the maintenance event is to include oil removal and/or sediment removal.

Determining Your Maintenance Schedule

The frequency of cleanout is determined in the field after installation. During the first year of operation, the unit should be inspected every six months to determine the rate of sediment and floatables accumulation. A simple probe such as a Sludge Judge® can be used to determine the level of accumulated solids stored in the sump. This information can be recorded in the maintenance log (see page 9) to establish a routine maintenance schedule.

The vactor procedure, including both sediment and oil/flotables removal, for a 6-ft Downstream Defender® typically takes less than 30 minutes and removes a combined water/oil volume of about 500 gallons.

Table 1. Downstream Defender® Pollutant Storage Capacities and Max. Cleanout Depths.

Unit Diameter	Total Oil Storage	Oil Clean-out Depth	Total Sediment Storage	Sediment Clean-out Depth	Max. Liquid Volume Removed
(feet)	(gallons)	(inches)	(gallons)	(inches)	(gallons)
4	70	<16	141	<18	384
6	216	<23	424	<24	1,239
8	540	<33	939	<30	2,884
10	1,050	<42	1,757	<36	5,546
12	1,770	<49	2,970	<42	9,460

NOTES

1. Refer to Downstream Defender® Clean-out Detail (Fig. 1) for measurement of depths.
2. Oil accumulation is typically less than sediment, however, removal of oil and sediment during the same service is recommended.
3. Remove floatables first, then remove sediment storage volume.
4. Sediment removal is not required unless sediment depths exceed 75% of maximum clean-out depths stated in Table 1.



Fig. 4



Fig. 5



Fig. 6

Inspection Procedures

1. Set up any necessary safety equipment around the access port or grate of the Downstream Defender® as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the lids to the manhole (Fig. 4). NOTE: The 4-ft Downstream Defender® will only have one lid.
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities. See Fig. 7 and 8 for typical inspection views.
4. Without entering the vessel, use the pole with the skimmer net to remove floatables and loose debris from the outer annulus of the chamber.
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel (Fig. 5).
6. On the Maintenance Log (see page 9), record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or blockages.



Fig. 7 View over center shaft into sediment storage zone.

7. Securely replace the grate or lid.
8. Take down safety equipment.
9. Notify Hydro International of any irregularities noted during inspection.

Floatables and Sediment Cleanout

Floatables cleanout is typically done in conjunction with sediment removal. A commercially or municipally owned sump-vac is used to remove captured sediment and floatables (Fig. 6).

Floatables and loose debris can also be netted with a skimmer and pole. The access port located at the top of the manhole provides unobstructed access for a vactor hose and skimmer pole to be lowered to the base of the sump.

Scheduling

- Floatables and sump cleanout are typically conducted once a year during any season.
- If sediment depths are greater than 75% of maximum clean-out depths stated in Table 1, sediment removal is required.
- Floatables and sump cleanout should occur as soon as possible following a spill in the contributing drainage area.



Fig. 8 View of outer annulus of floatables and oil collection zone.

Recommended Equipment

- Safety Equipment (traffic cones, etc)
- Crow bar or other tool to remove grate or lid
- Pole with skimmer or net (if only floatables are being removed)
- Sediment probe (such as a Sludge Judge®)
- Vactor truck (6-inch flexible hose recommended)
- Downstream Defender® Maintenance Log

1. Set up any necessary safety equipment around the access port or grate of the Downstream Defender® as stipulated by local ordinances. Safety equipment should notify passing pedestrian and road traffic that work is being done.
2. Remove the lids to the manhole (NOTE: The 4-ft Downstream Defender® will only have one lid).
3. Without entering the vessel, look down into the chamber to inspect the inside. Make note of any irregularities.
4. Using the Floatables Port for access, remove oil and floatables stored on the surface of the water with the vactor hose or the skimmer net (Fig. 9).
5. Using a sediment probe such as a Sludge Judge®, measure the depth of sediment that has collected in the sump of the vessel and record it in the Maintenance Log (Pg. 9).
6. Once all floatables have been removed, drop the vactor hose to the base of the sump via the Central Access Port. Vactor out the sediment and gross debris off the sump floor (Fig. 6).

7. Retract the vactor hose from the vessel.
8. On the Maintenance Log provided by Hydro International, record the date, unit location, estimated volume of floatables and gross debris removed, and the depth of sediment measured. Also note any apparent irregularities such as damaged components or blockages.
9. Securely replace the grate or lid.

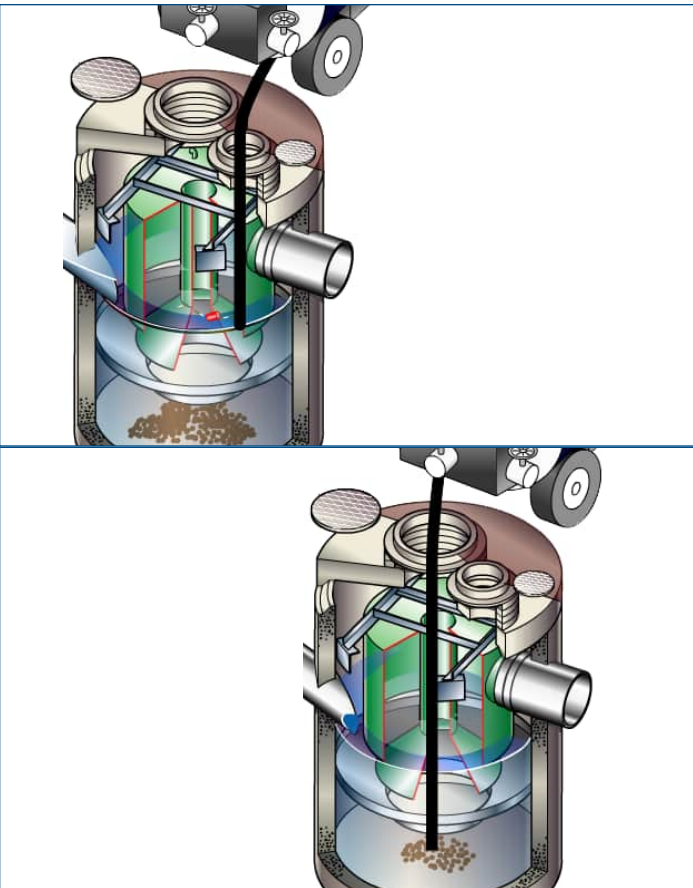


Fig. 9 Floatables and sediment are removed with a vactor hose

Maintenance at a Glance

Activity	Frequency
Inspection	- Regularly during first year of installation - Every 6 months after the first year of installation
Oil and Floatables Removal	- Once per year, with sediment removal - Following a spill in the drainage area
Sediment Removal	- Once per year or as needed - Following a spill in the drainage area

NOTE: For most cleanouts it is not necessary to remove the entire volume of liquid in the vessel. Only removing the first few inches of oils/floatables and the sediment storage volume is required.



Downstream Defender® Installation Log

HYDRO INTERNATIONAL REFERENCE NUMBER:	
SITE NAME:	
SITE LOCATION:	
OWNER:	CONTRACTOR:
CONTACT NAME:	CONTACT NAME:
COMPANY NAME:	COMPANY NAME:
ADDRESS:	ADDRESS:
TELEPHONE:	TELEPHONE:
FAX:	FAX:

INSTALLATION DATE: / /

MODEL (CIRCLE ONE): 4-FT 6-FT 8-FT 10-FT CUSTOM



Downstream Defender® Inspection and Maintenance Log

Date	Initials	Depth of Floatables and Oils	Sediment * Depth Measured	Volume of Sediment Removed	Site Activity and Comments

*Note: Sediment removal is not required unless sediment depths exceed 75% of maximum clean-out depths stated in Table 1.

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APPENDIX E

INSPECTION CHECKLISTS AND FORMS

TRAINING DOCUMENTATION SHEET	FORM 1
SEMI-ANNUAL INSPECTION CHECKLIST	FORM 2
COMPREHENSIVE SITE COMPLIANCE EVALUATION	FORM 3
STRUCTURAL CONTROLS INSPECTION REPORT	FORM 4
SPILL INCIDENT REPORT	FORM 5
SMALL SPILL LOG	FORM 6
SECONDARY CONTAINMENT RELEASE DOCUMENTATION.....	FORM 7

FORM 1

TRAINING DOCUMENTATION SHEET

Training Name:	Date:	
Location:		
Instructor:		

Employee Name	Initials	Title/Dept.

FORM 1



Town of Vienna Semi-Annual Inspection Checklist

Date:	Northside Property Yard	Inspector:
-------	-------------------------	------------

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are brooms, dust pans, and mops easily on hand for easy access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are containment areas in good condition, with valves closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are dumpsters closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the site free of litter and debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are catch basins and other inlets to the storm drain system free from trash?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Materials Handling and Storage	Yes	No	N/A	Observations/Required Actions
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have proper security measures been taken for storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all containers labeled with contents on the appropriate label?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Safety Data Sheets available for all chemical substances?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all containers that are not in use closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FORM 2

Are containers stored indoors and away from entrances whenever practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are maintenance activities conducted indoors whenever practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If outdoors, are containers protected from precipitation and runoff whenever practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are containers protected from vehicular traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all containers been inspected and are they generally in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do all containers have secondary containment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Spill Prevention and Response	Yes	No	N/A	Observations/Required Actions
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all spills been properly cleaned up and disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Pump Inspection	Yes	No	N/A	Observations/Required Actions
Have fuel pumps been inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have oil pumps been inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have other pumps been inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has mobile equipment been inspected for potential leaking fluids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5. Structural Control Devices	Yes	No	N/A	Observations/Required Actions
Has the Downstream Defender been inspected at least once annually?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the most recent Downstream Defender inspection included in the SWPPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FORM 2

Has the oil water separator been inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has the vehicle wash catch basin been inspected for sediment build-up?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Scrap Metal Storage	Yes	No	N/A	Observations/Required Actions
Have scrap parts and empty drums no longer in use been removed from the property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Erosion and Sediment Controls	Yes	No	N/A	Observations/Required Actions
Is the facility free of bare areas that could result in soil erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Salt Storage Controls	Yes	No	N/A	Observations/Required Actions
Is the salt storage area protected from run-on of stormwater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the area around the salt storage area swept after each use and free of material that could mingle with stormwater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Fueling Operations	Yes	No	N/A	Observations/Required Actions
Is the spill kit fully stocked at the fuel station and accessible for use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is all signage in good, readable condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have fire extinguishers been tested and are they accessible for use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Vehicles and Equipment Maintenance and Washing	Yes	No	N/A	Observations/Required Actions
Are vehicles and equipment checked for leaking fluids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are drip pans and spill kits located within easy access of vehicle and equipment storage areas?				
Are maintenance activities performed indoors when practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FORM 2

Is wash water contained or otherwise kept out of the storm drainage system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there any build-up of pollutants in vehicle parking areas, and if so, is there a plan for removal in accordance with the SWPPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
11. Other Indicators of Illicit Discharges	Yes	No	N/A	Observations/Required Actions
Is the facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
12. Personnel Training and Record Keeping	Yes	No	N/A	Observations/Required Actions
Is a program in place to train employees on pollution prevention and the Town's good housekeeping SOPs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are employees trained on proper spill prevention and response for the materials that they handle?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Site Name:	
Evaluator:	

1. Accuracy of Site Map

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Identification and location of outfalls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Watershed boundaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direction of runoff flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buildings and impervious areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposed material storage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

2. Accuracy of SWPPP and Related Records

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Pollution prevention team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outfall characteristics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed employee training records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed semi-annual inspection checklists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed spill records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION (Continued)

3. Accuracy of Potential Pollutant Sources

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Chemical storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fueling station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storage building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salt dome and liquid deicer storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waste containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material stockpiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment and vehicle parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment and material storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

4. Effectiveness of Procedures and Control Measures

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Good housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill prevention and response	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and equipment parking and storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waste/recycling containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material stockpiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scrap material storage and stockpile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illicit connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion and sediment control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onsite contractor responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION (Continued)

4. Effectiveness of Procedures and Control Measures (Continued)

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
SPCC plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fueling station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trench drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and equipment wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salt and liquid deicers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Downstream Defender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Street sweeper and vacuum materials management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Property yard site improvements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

5. Overall Effectiveness of the SWPPP

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Overall effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

Signature:	Date:	
Title:		

FORM 3

STRUCTURAL CONTROLS INSPECTION REPORT

(NOTE: COMPLETE ONE FORM FOR EACH STRUCTURE OR GROUP OF STRUCTURES)

Facility Name: Northside Property Yard
Inspector: _____ **Date:** _____
BMP ID: _____ **Location:** _____

Structure/ Treatment Type:

☐ E&SC or Inlet Protection Device
☐ Inlets/ Trench Drain/ Manhole
☐ Culverts
☐ Oil/Water Separator
☐ Downstream Defender
☐ Other: _____

Overall Outfall Condition:

☐ (1) Clear and Functioning (3) Needs Repair
 (2) Needs Maintenance (4) Needs Replacement

Maintenance Needed?

Clean Out Debris: ☐ Yes ☐ No Structural Repair: ☐ Yes ☐ No Silt: ☐ Yes ☐ No
 Infiltration: ☐ Yes ☐ No Erosion: ☐ Yes ☐ No

General Condition:	Yes	No	N/A
Is the primary outfall pipe/ ditch clear and functioning?			
Are the inflow pipes/ ditches clear and functioning?			
Is the water quality pool at the correct height (if present)?			
Are water quality pool control weirs, pipes, etc. working properly?			
Are emergency overflow devices clear and functional (if present)?			
Is the structure clear of sediment?			
Is the structure clear of trash?			
Is the structure clear of mosquito larva?			
Is the structure clear of excessive vegetation?			
Is the structure clear of other identified pollutants?			
Has structural control returned to full function?			

Corrective Action Taken:

FORM 4

FORM 5

SPILL INCIDENT REPORT

Part 1. Facility (Division) Originating Report									
Name				Phone			Fax		
Address	600 Mill Street, NE		City	Vienna	State	VA	Zip	22180	
Part 2. Incident Description									
Date/Time Started (24 hr clock):				Date/Time Ended (24 hr clock):					
Cloud Cover				Precipitation Conditions					
Temperature (°F)				Wind Direction & Speed					
Incident Location									
Type Material Spilled/Released									
Damages or Injuries? NO <input type="checkbox"/> YES <input type="checkbox"/> (if yes, describe):									
Release/Spill To (check applicable box(es)):				Containment <input type="checkbox"/>		Ground <input type="checkbox"/>		Sewer <input type="checkbox"/>	
<i>Amount released to each area checked:</i>									
<i>Amount recovered from each area checked:</i>									
<i>Product/material source container(s):</i>									
<i>Total capacity of spill source container(s):</i>									
If spill entered storm sewer inlet, was spill contained within the system?						YES <input type="checkbox"/>		NO <input type="checkbox"/>	
Did spill impact adjacent properties? NO <input type="checkbox"/> YES <input type="checkbox"/> (if yes, describe):									
Description of Cause (check all that apply):				<input type="checkbox"/> INADEQUATE PROCEDURES					
<input type="checkbox"/> PERSONNEL ERROR				<input type="checkbox"/> EQUIPMENT/COMPONENT FAILURE					
<input type="checkbox"/> LACK OF TRAINING				<input type="checkbox"/> OTHER (describe):					
Comments:									
Long-Term Corrective Action(s) Taken:									
Part 3. Notifications									
Agency & Telephone #			Contact Name			Date		Time	
<i>Local Emergency: 911</i>								am/pm	
<i>Virginia DEQ: (703) 583-3800</i>								am/pm	
<i>NRC: (800) 424-8802</i>								am/pm	
<i>Other:</i>								am/pm	
Instructions Given By Agencies									
Part 4. Review and Approval									
Preparer of Spill Report (Print Name)				Signature				Date	

FORM 5

SMALL SPILL LOG

_____ Reporting Individual		_____ Individual Responsible for Clean-Up
_____ Date of Spill	_____ Material Spilled	_____ Approximate Amount
_____ Location of Spill		
_____ Cause of Spill		
_____ Action Taken		

_____ Reporting Individual		_____ Individual Responsible for Clean-Up
_____ Date of Spill	_____ Material Spilled	_____ Approximate Amount
_____ Location of Spill		
_____ Cause of Spill		
_____ Action Taken		

FORM 6

SECONDARY CONTAINMENT RELEASE DOCUMENTATION

Complete this form each time that accumulated rainwater is to be released from an exposed secondary containment structure.

Date:	Time	
Location	Northside Property Yard	
Containment Structure		
SWPPT Member		

Visual Observation of Accumulated Rainwater

Check yes or no, and provide details under comments.

ITEM	YES	NO	COMMENTS
COLOR			
FOAM			
CLOUDY			
OUTFALL STAINING			
OIL SHEEN			
OTHER			

If accumulated rainwater appears contaminated, list actions taken to remove contaminants:

After the release of the accumulated rainwater, was the secondary containment drain valve properly closed?

☐ YES

☐ NO

Comments:

FORM 7

APPENDIX F

COMPLETED FORMS

Town of Vienna, Virginia

Nutley Street Maintenance Yard Stormwater Pollution Prevention Plan Final – December 17, 2020



**Town of Vienna
Department of Parks and Recreation
120 Cherry Street, SE
Vienna, Virginia 22180**

**Prepared with assistance by:
Wood Environment & Infrastructure Solutions
Chantilly, Virginia**



**Prepared in Compliance with Municipal Separate Storm Sewer System (MS4)
Permit No. VAR040066**

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1. Introduction

1.1 Background

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared for the Town of Vienna Nutley Street Maintenance Yard. The Town's General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) requires the development and implementation of SWPPPs for high priority facilities. Part I E 6 c of the MS4 permit defines these facilities as:

- (1) areas where residuals from using, storing, or cleaning machinery or equipment remain and are exposed to stormwater;
- (2) materials or residuals on the ground or in stormwater inlets from spills and leaks;
- (3) material handling equipment;
- (4) materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);
- (5) materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- (6) materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated, or leaking storage drums, barrels, tanks, or similar containers;
- (7) waste materials except waste in covered, non-leaking containers (e.g., dumpsters);
- (8) application or disposal of process wastewater (unless otherwise permitted); or,
- (9) particulate matter or visible deposits of residuals from roof stacks, vents, or both, not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

Based on this definition, the Nutley Street Maintenance Yard (site or facility) is required to develop a SWPPP. Table 1A presents the SWPPP organization and how it meets the specific requirements of Part I E 6 d of the MS4 permit.

Table 1A – SWPPP Organization and Permit Compliance

SWPPP Requirement	Location
A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies.	Section 2; Figures 2A-C (Appendix A)
A description and checklist of potential pollutants and pollutant sources.	Section 3
A description of all potential non-stormwater discharges.	Section 3; Table 3A
Written procedures designed to reduce and prevent pollutant discharge.	Section 4

SWPPP Requirement	Location
A description of applicable training as required in Part I E 6 m of the MS4 permit.	Section 5
Procedures to conduct an annual comprehensive site compliance evaluation.	Section 5; Appendix E
An inspection frequency of no less than once per year and maintenance requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP.	Section 5; Appendix E
A log of each unauthorized discharge, release, or spill incident reported in accordance with Part III G, including the following information: date of incident; material discharged, released, or spilled; and, estimated quantity discharged, released, or spilled.	Section 5; Appendix F

Wood Environment & Infrastructure, Inc. (Wood) conducted a site inspection with Town staff on August 5, 2020 to confirm site drainage and assess potential pollutant sources and non-stormwater discharges. Specific findings and recommendations are incorporated into this SWPPP. A copy of this SWPPP must be kept at the Nutley Street Maintenance Yard and updated as necessary to reflect any changes in activities or the physical layout of the site that could affect stormwater pollution.

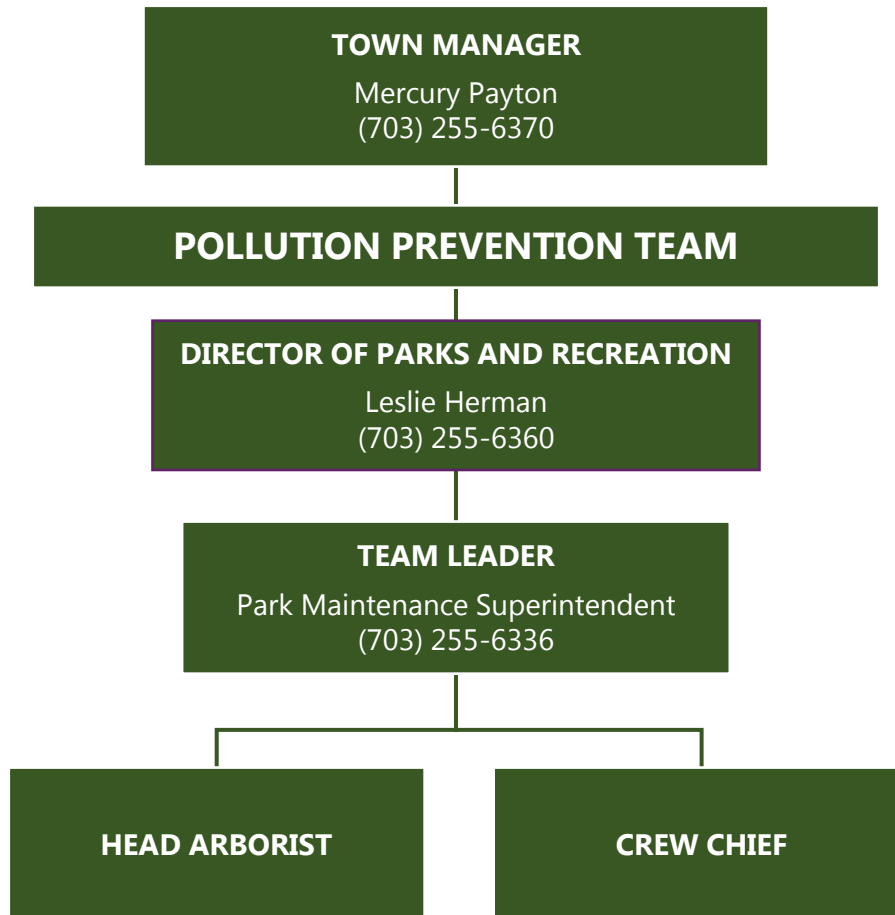
1.2 Pollution Prevention Team and Responsibilities

A key step in developing and implementing a SWPPP is to establish an organizational hierarchy familiar with pollution prevention plans and operational activities. The Stormwater Pollution Prevention Team (SWPPT) consists of facility supervisors and other personnel that the Town of Vienna chooses to appoint. The SWPPT will report to the Town Manager for financial support purposes.

The SWPPT will meet at least once annually to evaluate the effectiveness of the SWPPP and to determine if additional control measures are required. A series of forms are provided in this plan to assist the SWPPT (Appendix C). The SWPPT is required to revise the plan when changes to the facility occur. These revisions can take the form of brief narratives inserted as amendments to the SWPPP.

The organizational arrangement of the SWPPT is presented in Table 1B. The organizational chart shows the chain of command for ensuring compliance with applicable requirements. Most of the information provided in this plan requires effort by the SWPPT and on-site employees. The on-site team members or their designees will assist the SWPPT Leader with those areas under their specific management control.

Table 1B – Stormwater Pollution Prevention Team Members



The responsibilities of the Town Manager are to:

- Review and certify the SWPPP;
- Appoint the SWPPT Leader;
- Ensure that adequate resources are allocated to implement the SWPPP; and,
- Review and approve revisions to the SWPPP identified by SWPPT.

The responsibilities of the SWPPT Leader are to:

- Ensure that SWPPT members are trained and familiar with SWPPP requirements;
- Ensure implementation of required training, evaluations, and inspections; and;
- Schedule and conduct annual SWPPT meetings.

The responsibilities of the SWPPT members are to:

- Attend annual SWPPT meetings;
- Implement procedures and control measures;
- Perform record keeping and documentation as required by the SWPPP; and,
- Evaluate the adequacy of the SWPPP and recommend modifications as necessary.

1.3 Supporting Plans and Policies

This SWPPP is designed to work in conjunction with other plans and policies adopted by the Town to protect water quality and the environment. Table 1C provides an overview of these documents and their relationship to this SWPPP. Several items are reference throughout the SWPPP.

Table 1C – Supporting Plans and Policies

Document and Hyperlink	Description
MS4 Program Plan	Documents the Town's overall pollution prevention strategy in compliance with the MS4 permit. The plan identifies best management practices (BMPs) to implement six minimum control measures (MCMs): <ul style="list-style-type: none"> • Public Education and Outreach • Public Involvement and Participation • Illicit Discharge Detection and Elimination • Construction Site Stormwater Runoff Control • Post-Construction Stormwater Management • Pollution Prevention/Good Housekeeping for Municipal Operations
Chesapeake Bay TMDL Action Plan	Documents the Town's strategy for meeting the Chesapeake Bay Total Maximum Daily Load (TMDL). The TMDL establishes the maximum amount of a pollutant that can enter a water body without violating water quality standards. Pollutants of concern (POCs) include nitrogen, phosphorus, and sediment.
Accotink Creek and Potomac River Local TMDL Action Plans	Documents the Town's strategy for meeting local TMDLs. Accotink Creek is impaired for bacteria, sediment, and chloride. The pollutant reduction strategy for bacteria and sediment is combined with that for Difficult Run. A separate strategy for chloride will be developed no later than May 1, 2021. The Potomac River is impaired for PCBs, which affects the Accotink Creek portion of the Town.

Document and Hyperlink	Description
Pollution Prevention Standard Operating Procedures (SOPs) (Appendix B)	<p>Establishes Town SOPs designed to reduce pollution associated with municipal operations. Specific SOPs include:</p> <ul style="list-style-type: none"> • Vehicle and Equipment Maintenance and Cleaning • Outdoor Material Storage • Pesticide, Herbicides, and Fertilizers • Road, Street, Parking Lot, and Sidewalk Maintenance • Utility Construction and Maintenance • Snow and Deicing Operations
Illicit Discharge Detection and Elimination (IDDE) Plan (Appendix F of the MS4 Program Plan)	<p>Establish procedures for the Town to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping, to the Town's storm drain system. The plan includes dry weather screening of the Town's storm drain outfalls.</p>

Future plans and policies adopted by the Town will be evaluated by the SWPPT and incorporated into the SWPPP during the annual review as appropriate.

2. Facility Description

2.1 Facility Description

The Nutley Street Maintenance Yard is located at 247 Nutley Street, NW, Vienna, Virginia. See Figure 2A in Appendix A for a detailed site map. The facility is operated by the Town of Vienna Department of Parks and Recreation (DPR) and includes separate areas for park maintenance (mowing, landscaping, field maintenance, snow removal, etc.), records storage, green house operations, water services, and general operations activities.

The primary structure on the property is the main building and garage. The main building consists of office and related space to support site activities. Attached to the main building is a garage with a workshop space. This building is used for light maintenance as well as storage of equipment, materials, and chemicals, including pesticides and herbicides.

A storage building located on the south side of the site and consists of temperature controlled administrative and record storage space for Town archives.

A greenhouse is located just north of the main building and garage. This area is utilized for seasonal plantings and off-season material storage.

Additional indoor storage (holiday decorations, traffic control devices, etc.) is provided by several other small outbuildings on the property.

Outdoor storage is conducted throughout the site, but is most prevalent in the area surrounding the water tank and the area between the garage and greenhouse. Outdoor storage includes equipment (such as bobcats, bush hogs, snow blades, etc.) and material stockpiles (mulch, crumb rubber for sports fields, vegetation/brush, pavers, and similar materials).

An elevated water storage tank and associated pump station are located on the facility.

A detailed description of potential pollutants related to each site activity is included in Section 3.

2.2 Facility Drainage and Receiving Waters

The facility is within the Accotink Creek watershed (HUC PL30) and discharges to Hunter's Branch. Hunter's Branch and Accotink Creek flow to the Potomac River, all of which are within the Chesapeake Bay watershed. Stormwater flows overland and by roof drains from the storage building to a single grate inlet in the southwestern portion of the site. As a result, there is only one drainage area (DA-001) for the site. Stormwater is then discharged off the property to the storm drain system along

Nutley Street. A trench inlet near the northwest corner of the garage has filled with material and no longer accepts stormwater. A storm pipe traverses through the northern part of the property but does not collect flow from the site. See Figure 2B for a general drainage map.

Figure 2B – General Drainage Map



Table 2A – On-Site Drainage Area Description

Drainage Area	Impervious (acres)	Pervious (acres)	Total (acres)
DA-001	0.64	0.31	0.95

Accotink Creek is designated as impaired by the State Water Control Board and is subject to TMDLs for fecal coliform bacteria, sediment, and chloride. The Town is required to reduce bacteria and sediment in accordance with its Bacteria TMDL Action Plan for Difficult Run and Accotink Creek and Sediment TMDL Action Plan for Difficult Run and Accotink Creek. A Chloride TMDL Action Plan for Accotink Creek is under development and will be completed by May 2021. The Potomac River is impaired for PCBs. As a result, the Town is required to reduce PCBs in accordance with its PCB TMDL Action Plan. The PCB TMDL Action Plan only affects the Accotink Creek portion of the Town. Finally, the Town is subject to the Chesapeake Bay TMDL, which establishes target reductions for nitrogen, phosphorus, and sediment in accordance with its Phase II Chesapeake Bay TMDL Action Plan.

3. Potential Pollutant Sources

This section provides a discussion of each significant potential pollutant generating area of the site (Figure 3A) and associated potential non-stormwater discharges.

Figure 3A – Location of Potential Pollutant Sources



3.1 Allowable Discharges

In accordance with the Town's MS4 permit and 9VAC25-890-20, and unless found to be a significant contributor of pollutants by the Town or DEQ, the only non-stormwater discharges or flows that may be discharged from the Town's storm drain system are the following:

- Water line flushing, managed in a manner to avoid an instream impact;
- Landscape irrigation;
- Diverted stream flows;
- Rising groundwaters;
- Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20);
- Uncontaminated pumped groundwater;
- Discharges from potable water sources;
- Foundation drains;
- Air conditioning condensation;
- Irrigation water;
- Springs;
- Water from crawl space pumps;
- Footing drains;
- Lawn watering;
- Individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Street wash water;
- Discharges or flows from firefighting activities;
- Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners; or,
- Other activities generating discharges identified by the department as not requiring VPDES authorization.

3.2 Main Building and Storage Building

Potential sources of pollution at the main building and storage building are very limited since all activities are conducted indoors. The main building consists primarily of office space and space to support other site activities (restrooms, kitchen, etc.). The storage building consists of space for storage of Town archives and records.

3.3 Garage

The garage is primarily used for the storage of equipment and materials associated with parks operations and maintenance. All vehicle and heavy equipment maintenance occurs offsite at the Town's Northside Property Yard.

Equipment stored in the garage includes mowers, tillers, infield groomers, gas-powered string trimmers, gas-powered chainsaws, fertilizer broadcast spreaders, and similar items. Materials include ice melt (50 pound bags), spray paint, cans of paint and stain (one gallon and less), various disinfectants and cleaners, small quantities of oil and lubricants, caulking, and spray insecticides. A green metal flame-retardant cabinet is used to store pesticides and herbicides along the back right of the garage. The garage has a refrigerator and a washer and dryer.

A workshop area is located along the rear of the garage. This area is used to conduct light maintenance of portable equipment as well as sanding, painting, and similar activities. All activities are conducted indoors.

3.4 Vehicle Parking

Personnel as well as Town vehicles are parked in front of the garage and the storage building, as well as in the vicinity of the water tower and between the garage and the green house. Town vehicles include pick-up trucks, dump trucks, and bucket trucks. There are typically fewer than 10 Town vehicles parked at the site. Fueling, maintenance, and washing services for Town vehicles are provided off-site at the Town's Northside Property Yard.

3.5 Equipment and Material Storage

A variety of equipment and material is stored on site, including the area between the garage and the green house, along the perimeter of the water tower, and along the western side of the site near the water tower pump station. Most of the material and equipment is stored outdoors. These include:

- One bobcat and two front end loaders;
- Snow blowers and snow blades;
- Turf aerator;
- Bricks and other masonry material;
- Football goal posts;
- Used tires;
- Corrugated plastic pipe;
- Chipper equipment;
- Wheel barrows;

- Mobile vinegar tanks (used as an alternative herbicide);
- Traffic control posts, signs, cones, and related material; and,
- Other related material that may need to be stored outside for a period of time.

There are three storage sheds (one brick and two manufactured) that are used to store material that must be protected from exposure to the elements (holiday decorations, etc.). There are also two metal storage sheds along the outside north wall of the garage that are used to store plastic fuel containers. One is used for diesel and gasoline while the other is used for mixed gas.

The Town has adopted an SOP for Outdoor Materials Storage in order to minimize the potential for these materials to affect water quality. The SOP is provided in Appendix B.

3.6 Material Stockpiles

In addition to equipment and material storage are several material stockpiles. This includes a mulch stockpile area toward the northern end of the site, an area for vegetative waste next to the green house, and crumb rubber used for artificial turf fields around the base of the water tower. Crumb rubber is stored in both plastic containers as well as in open piles. The volume of stockpiled materials fluctuates based on the season and maintenance activity levels.

The Town has adopted an SOP for Outdoor Material Storage in order to minimize the potential for these activities to affect stormwater quality. The SOP is provided in Appendix B.

3.7 Waste Containers

Three dumpsters are located on the southwestern corner of the site. Two dumpsters are used for municipal solid waste and one dumpster is used for recycling. These containers are managed by the Town sanitation division. There are also several trash cans located throughout the site.

3.8 Water Tower Pump Station

Potential sources of pollution at the water tower pump station are very limited since the pump is powered by electricity and there is no back-up generator. The tower is maintained in a way to prevent corrosion and subsequent leaching of materials.

3.9 Generator

A 3,500 watt emergency gasoline-powered generator is located at the outside northwest corner of the garage.

3.10 Checklist of Potential Non-Stormwater Discharges

Table 3A provides a description and checklist of potential pollutants, pollutant sources, and non-stormwater discharges.

Table 3A – Checklist of Potential Pollutants and Non-Stormwater Discharges

Activity Area	Potential Pollutants	Potential Non-Stormwater Discharges
Main Building and Storage Building	Waste Water Cleaning Wash Water	A non-stormwater discharge could occur if waste water is improperly plumbed to the storm sewer or if cleaning wash water or other materials are improperly disposed of outside the buildings.
Garage	Petroleum/Oil/Lubricants (POLs) Paints Ice Melt (Calcium, Potassium, Sodium, and Magnesium Chloride) Various Chemicals Pesticides and Herbicides	A non-stormwater discharge could occur during unloading of materials, if materials are brought outdoors, or if materials are stored in close proximity to bay doors where a leak or spill could leave the garage.
Vehicle Parking	POLs Heavy Metals Sediment	A non-stormwater discharge could occur if leaked or spilled materials from vehicles are not properly contained and cleaned up.
Equipment and Material Storage	POLs Heavy Metals Sediment Vinegar	A non-stormwater discharge could occur if leaked or spilled materials from equipment are not properly contained and cleaned up. Some materials may leach (such as metal equipment or pipe) if left exposed for prolonged periods of time. A discharge of vinegar could occur if tanks are ruptured as a result of corrosion or being struck by an object.

Activity Area	Potential Pollutants	Potential Non-Stormwater Discharges
Material Stockpiles	Sediment Organic Matter Crumb Rubber	A non-stormwater discharge could occur if the materials are not protected from precipitation through erosion or leaching of materials into the storm drain system.
Waste Containers	Trash/Debris Sediment Organic Materials Liquid Wastes Metals Other Residential and Industrial Waste	A non-stormwater discharge could occur if waste container lids are left open during a storm event, therefore allowing the precipitation to come in contact with the waste and leak through the bottom of the container. If waste containers are allowed to overflow or have rusted out bottoms, litter and floatables could be discharged into the storm drain system.
Water Tower Pump Station	Metals	A non-stormwater discharge could occur if the water tower and equipment were allowed to corrode and leach metals into stormwater.
Generator	Gasoline	A non-stormwater discharge could occur as a result of overtopping during filling or by damage to the tank.

4. Procedures and Control Measures

This section identifies the written procedures and control measures designed to reduce and prevent pollutant discharges from the sources identified in Section 3.

4.1 Baseline Measures

Baseline measures are procedures and control measures that should generally be applied at most high priority facilities. This section discusses baseline measures that will be implemented at the Nutley Street Maintenance Yard.

4.1.1 Good Housekeeping Program

Good housekeeping is the preservation of a clean and orderly work environment that contributes to overall pollution control efforts. The site will implement the practices in Table 4A to minimize the potential for stormwater pollution. General walk-throughs of the site will be conducted by the SWPPT Leader, or designated personnel, during normal daily duties to ensure that measures are being implemented.

Table 4A – Good Housekeeping Practices

Subject	Practice	Frequency
Clean Work Environment	Interior floors will be swept, with residue placed in designated waste disposal containers.	At least weekly.
Clean Work Environment	Brooms, dust pans, and mops will be kept on hand for easy access and use.	Continuous.
Trash and Litter	Exterior areas will be patrolled for trash and litter. Trash and litter will be disposed of properly.	Bi-weekly or more frequently if required.
Trash and Litter	Litter and trash will be removed from catch basins and other inlets to the storm drainage system.	Bi-weekly or more frequently if required.
Trash and Litter	Dumpster and recycling bin lids will be kept closed to prevent exposure to precipitation.	Continuous.
Scrap Parts and Empty Drums	Scrap parts and empty drums will be removed from the facility promptly.	Continuous.
Spill and Leak Prevention	Maintenance activities will be conducted indoors whenever possible.	Continuous.
Spill and Leak Prevention	Chemicals, when not otherwise stored in appropriate tanks or containers, must be stored	Continuous.

Subject	Practice	Frequency
	indoors and away from entrances where spills and leaks could escape the building envelope.	
Spill and Leak Prevention	All equipment will be visually inspected for leaks and other conditions that could lead to a discharge of a pollutant.	During use or at least monthly.
Spill and Leak Prevention	Hazardous substances will be stored in approved containers. Containers will be stored in an area not exposed to stormwater where practical.	Continuous.
Spill and Leak Prevention	Containers will be located away from direct vehicular traffic. Bollards will be used when necessary to protect containers from vehicles and equipment.	Continuous.
Spill and Leak Prevention	Containers of liquid hazardous substances will be placed on spill containment pallets, racks, or otherwise be provided with containment and corrosion prevention. The containers will be stored in an area not exposed to precipitation where practical.	Continuous.
Labeling	Containers will be labeled for their contents in plain language. A Safety Data Sheet (SDS) will be provided in areas accessible to personnel for each chemical.	Continuous.
Spill and Leak Response	Spills, drips, and leaks will be cleaned promptly.	Immediately after occurrence.
Parking Areas	Parking areas will be swept periodically to prevent the buildup of sediment and other loose materials.	As needed.
Parking Areas	Pressure washing will be conducted on sections of the parking area where oil and grease buildup is obvious. Water generated in the process must be collected and discharged to the sanitary sewer system or other appropriate disposal method.	As needed.
Training	Formal pollution prevention training will be provided to all affected personnel.	Formal training every 24 months; informal training on a continuous basis.
Documentation	Complete the good housekeeping checklist during site inspections.	Semi-annually.

4.1.2 Preventative Maintenance Program

Regular inspection of equipment and operational systems is required to ensure that failure does not result in a release of pollutants into the stormwater drainage system. Equipment and operational systems include items such as nozzles, pumps, electrical components, gauges, valves, and gaskets. Regular inspections will uncover conditions such as cracks or slow leaks that could cause breakdowns or failures. Inspections will also detect noises and vibrations that may indicate wear of components and possible failure. The program will reduce breakdowns and failures by making proper adjustments, repair, or replacement of equipment or parts.

Inspections will occur during two specific preventative maintenance periods. Run-time preventative maintenance occurs on days when the equipment is in use under normal operation of the equipment and machinery. Preventative maintenance at regularly scheduled intervals involves inspections, cleaning, and minor repairs.

4.1.3 Spill Prevention and Response

The purpose of a spill prevention and response program is to reduce the potential for spills to occur in the first place and to ensure that personnel are trained to properly handle a spill so that it does not enter surface waters. This section includes general spill prevention and response procedures that will be implemented.

Outdoor Liquid Transfer

Outdoor liquid transfer occurs at the site, but is generally limited to small amounts of fuel associated with the generator and mowing and landscaping equipment. The following will be observed when fuel or other liquid substances are transferred or dispensed by Town staff:

- Personnel will ensure that all hoses/connections are secure and that proper absorbent materials (e.g., pads, booms and socks) are available.
- Personnel will remain with the equipment at all times.
- Personnel will be instructed to never “top off” equipment or containers.
- OLT will be avoided when at all possible during precipitation events unless adequate precautions are taken to ensure that the material does not co-mingle with stormwater.

Employee Awareness

Employee awareness is the key to an effective spill prevention and response program. Spill prevention training will be a component of the general employee training program. New personnel will be taught spill prevention practices. Spill prevention training will highlight previous spill events, equipment failures, remedies taken, and newly developed prevention measures.

Secondary Containment

Secondary containment should be provided for any above-ground storage tank (AST), non-empty 55-gallon drum, or any area where smaller amounts of paints, solvents, POLs, pesticides, herbicides, or other liquid hazardous substances are stored. Containers up to 55-gallons (e.g., buckets, jerricans, drums) have several secondary containment options:

- Store containers on a spill pallet.
- Store containers inside a prefabricated metal HAZMAT storage building with integral secondary containment.
- Use the existing building and provide a trench, built-up berm, or spill blocker at the doorway or bay threshold.
- Build a depressed concrete slab with curbing and a shed roof.
- Store small containers within a self-contained flammables cabinet.

For larger ASTs, the volume of secondary containment should equal the volume of the largest AST within the containment area plus sufficient freeboard for a specified storm event. Options include poured concrete secondary containment, prefabricated tanks with integral secondary containment, and double-walled tanks.

Spill Kits

A complete and adequate spill kit should be positioned in an easily accessible location anywhere there is the potential for a spill or a leak. Facility personnel should have knowledge of the location of all spill kits. Spill kits should have sufficient absorbent to contain a spill from the largest container within the hazardous substance storage location. Each facility should have at least one large drum or similar container for holding contaminated materials (e.g., soil, booms, absorbent pads) prior to disposal.

Spill Response

In case of a spill that has entered or is likely to enter the storm drain system or surface waters, or where personnel do not believe they can address the spill safely, the facility will request aid from Fairfax County Fire and Rescue using 911. The Town Department of Public Works and the Virginia Department of Environmental Quality, Northern Regional Office, will also be notified. Reporting and documentation requirements specific to the Town's MS4 permit are discussed in Section 5. Warning signs placed at key locations should contain emergency telephone numbers to aid in quick response.

Minor spills can be absorbed with dry granular absorbents, pads, booms, or socks. Personnel should be trained to ensure that used materials are swept up and disposed of properly on a timely basis (and before any precipitation event). In general, there are four basic steps that are to be taken to control pollution that can result from a spill:

- Stop the spill at the source.
- Contain the spill.
- Collect the spilled material.
- Dispose of the spilled material and subsequent contaminated material properly and legally.

If containment methods are required for which the responder is not trained, or personal protective equipment is not available, immediately evacuate the contaminated area and prevent unauthorized personnel from entering. Steps 3 and 4 should only be undertaken by personnel that are properly trained in spill response and cleanup.

4.1.4 Vehicle and Equipment Parking and Storage

Vehicle and equipment parking areas should be monitored routinely for spills and leaks. The area should be located away from storm drain inlets and have easy access to drip pans. The area should also be subject to more frequent monitoring for spills and leaks.

Any observed leaks should be cleaned up immediately using absorbent material. The material should be disposed of properly. Water should never be used to clean up spilled material. Wash down of pavement should not occur until all spills and leaks have been cleaned up. If a buildup of waste materials is present on the pavement, the resulting wash water must be contained and disposed of in a sanitary sewer or by another appropriate method.

4.1.5 Waste/Recycling Containers

The site will observe the following to minimize the potential for waste and recycling containers to become sources of pollutants:

- Lids are to remain closed at all times when not actively loading the containers.
- Trash should only be stored inside the containers. Piling excess trash on the outside of the container is not permitted.
- Dumpsters should be located away from storm drain inlets.
- Periodic inspections of the dumpsters should be conducted to observe for signs of deterioration or leakage.

4.1.6 Material Stockpiles

Stockpiles that present a risk of transport of materials (through erosion or leaching) to the storm drain system or surface waters should be stored inside a storage building or under a roof whenever possible. If a permanent overhead structure is not available, steps should be taken to prevent erosion and leaching of materials to the extent practicable. This may include covering stockpiles with a properly secured tarp, use of silt fencing, temporary vegetative cover, or other effective means of preventing stormwater pollution. The following will be observed:

- Contain stormwater run-off from stockpiles by using barriers or berms.
- Sweep areas surrounding the stockpile frequently to prevent materials from mingling with stormwater.
- Whenever possible, order only the amount of the material to be stockpiled that is needed for the specific job and schedule delivery to minimize the amount of outdoor storage time.
- Locate stockpiles away from storm drain inlets. Provide protection for the inlet if necessary to prevent the discharge of materials.

4.1.7 Scrap Material Storage and Salvage

Measures to be taken by Town personnel to minimize the quantity of scrap materials stored at the facility are as follows.

- Remove scrap materials from the site promptly.
- Divert stormwater away from scrap storage areas.
- Divert stormwater from scrap storage areas through a buffer strip, onto a level grassy area, or into a grass berm.
- Minimize direct introduction of stormwater to the drainage system without the use of buffer strips or other runoff management devices.

Some items present a pollutant risk while they are stored on site. Rusting tanks, barrels, machinery, and other related equipment can introduce leached metals into stormwater runoff. To minimize the risk of contamination, the Town will remove them from the site to the extent practicable. In addition, the Town will ensure scrap materials are free from lubricants and loose paint to the extent practical.

Small scrap items such as automotive batteries will be stored indoors or under cover until removed from the facility.

4.1.8 Illicit Connections and Improper Discharge Elimination

Illicit connections include direct pipe or other conveyance tie-ins to the stormwater drainage system. Improper discharges include the dumping of non-permitted non-stormwater materials into the stormwater drainage system.

Floor drains that connect to the stormwater drainage system are illicit connections that provide an avenue for an improper discharge. Floor drains connected to the stormwater drainage system must be plugged. Personnel must be instructed not to pour non-stormwater materials into catch basins, drop inlets, ditches, and other portions of the stormwater drainage system.

Hand sinks that discharge to the ground or stormwater drainage system are illicit connections. These hand sinks must be re-routed to the sanitary sewer system. Label hand sinks with instructions prohibiting the entry of hazardous substances.

4.1.9 Sediment and Erosion Control

Areas where bare soil is exposed to water, wind, or ice can erode and cause sediment pollution. The facility should promptly stabilize any bare area that could become a source of pollution. If an area is persistently bare and causing erosion, the Town can employ one or more of the following:

- Prevent runoff from flowing across the exposed areas by diverting the flow to vegetated areas.
- Slow down the runoff flowing across the area by using level spreaders or terraces.
- Provide check dams in drainage ways to decrease flow velocities.
- Use grassed swales rather than paved channels.
- Remove sediment from stormwater runoff before it leaves the site by allowing it to sheet flow through vegetative buffers.

The Town will also ensure that all grading and site-disturbing activities that occur at the facility comply with the requirements of Town Code Chapter 23, Article 2 "Erosion and Sediment Control."

4.1.10 Stormwater Management

Stormwater management includes (1) practices that reduce the amount of impervious surface cover and maximize the amount of pervious area where stormwater can naturally infiltrate into the soil and (2) structural controls that capture and treat pollutants once they are already in the stormwater. The need for additional structural controls will be based on an assessment of the nature of the specific pollutants to be controlled, site specific conditions such as soil and topography, and the reductions required by the Town's performance criteria. In addition, the need for any structures will be assessed in the context of overall Town stormwater management targets, including but not limited to those in

the Town's Chesapeake Bay TMDL Action Plan. Finally, the Town will also ensure that all grading and site-disturbing activities that occur at the facility comply with the requirements of Town Code Chapter 23, Article 3 "Stormwater Management."

4.1.11 On-Site Contractor Responsibilities

The Town has developed and implemented standard contract language to inform all contractors that they are responsible for implementing the Town's SOPs and abiding by all local, state, and federal stormwater regulations and requirements, including this SWPPP.

4.1.12 Security Measures

An effective security system may prevent an accidental or intentional release of materials to the stormwater drainage system as a result of vandalism, theft, sabotage, or other improper uses of the property. Security includes fencing, keypads or swipe cards for entrance or use of equipment, and adequate lighting. Personnel should be trained to observe for potential security breaches, such as breaches to fencing or unidentified individuals on the site.

4.2 Site-Specific Measures

This section discusses procedures and control measures that are specific to the Nutley Street Maintenance Yard. Because they are site-specific, they should be frequently evaluated to ensure that they are effective at reducing potential non-stormwater discharges and sources of pollutants.

4.2.1 Pesticide and Herbicide Management

Pesticides and herbicides are stored in the main building for use on Town properties. The Town has adopted an SOP for Pesticides, Herbicides, and Fertilizers in order to minimize the potential for these materials to affect water quality. The SOP is provided in Appendix B. The storage, mixing, application, and clean-up of pesticides and herbicides must be done in accordance with the Virginia Pest Control Act (§3.2-3900 et seq of the Code of Virginia). This applies to both Town personnel and contractors.

Provisions of the SOP that are directly applicable to the Nutley Street Maintenance Yard include storage and mixing of material. The following will be implemented by all personnel:

Storage

- All materials, whether liquid or dry, should be properly stored under cover when not in use.
- Materials must be stored in an adequately ventilated and secured building to prevent unauthorized use or access.

- Materials must be stored under cover and, where possible, within a secondary containment structure, such as a concrete secondary containment structure, spill pallet, or similar structure.
- Keep materials properly covered and contained in tight fitting containers.
- Properly label all materials.
- Keep materials as far away as possible from bay doors or other places where a spill could reach an area outside area.

Mixing

- Mix materials inside a protected area with impervious secondary containment so that spills and leaks will not contact soil and will be easy to clean up.
- All mixed material containers shall be labeled with the specific contents.
- Mix the minimum amount of material needed for the immediate job.

The Town uses vinegar as a more environmentally friendly alternative to other chemical herbicides. In general, vinegar readily breaks down in the environment and does not pose a threat to aquatic habitats when diluted in water. However, vinegar is acid (acetic acid), with a pH level of approximately 2.5 depending on the type of vinegar used. As a result, a direct discharge of large quantities of vinegar can negatively impact water quality. Several totes and portable containers of vinegar are stored between the main building and the green house. The Town should consider moving these containers indoors or providing secondary containment in the case of a large spill.

4.3 Recommended Actions

The actions in Table 4B are based on the recommendations in Section 4.2 and a review of the site conducted on August 5, 2020. Additional actions may be added based on further review or identification of potential pollutants and/or non-stormwater discharges.

Table 4B – Procedures and Control Measures Action Plan

Location	Recommended BMP	Sec. Ref.	Implement Date
Spill Kits/Drip Pans	Consider a new spill kit with greater spill clean-up capacity. The current kit only contains absorbent rags. A kit should include granular absorbent, absorbent booms, drip pans, and used absorbent collection materials.	4.1.4	__/__/__
Waste Management	Replace broken lids on dumpsters and ensure that they remain closed when not being actively emptied.	4.1.5	__/__/__
Stockpiles	Consider installing additional bins (similar to the mulch bin) to better manage stockpiled materials (crumb rubber, dirt, etc.). For crumb rubber piles, consider placing all rubber in trash cans similar to the area immediately east of the water tower.	4.1.6	__/__/__
Scrap Materials	Remove any scrap or waste materials from the site in a timely manner if they are no longer in use.	4.1.7	__/__/__
Storm Drain Inlet	Sediment was observed collecting around the storm drain inlet at the southwestern corner of the site. Consider source controls (stabilization) and/or placement of filter fabric in the inlet structure.	4.1.8	__/__/__
Vinegar Storage	Consider moving vinegar totes and portable containers indoors or provide secondary containment if indoor storage is impractical.	4.2.1	__/__/__

5. TRAINING, INSPECTIONS, AND RECORDKEEPING

5.1 Training

Personnel training is essential to the effective performance of the SWPPP. Personnel at all levels of responsibility will be trained on the components and goals of the SWPPP, including employees who work in areas where high risk materials or activities are exposed to stormwater and employees responsible for implementing activities identified in the SWPPP.

In accordance with the Part I E 6 d (5) of the MS4 permit, personnel training for the SWPPP will occur at least every 24 months. Personnel from the facility will also be trained on other specific topics as required by the permit in the schedule presented in the MS4 Program Plan (BMP 6.3). The overall goal of this training program is to provide some level of training on a pollution prevention topic at least annually. A Training Documentation Sheet (Form 1) is provided in Appendix C and will be used to document SWPPP training.

5.2 Semi-Annual Site Inspections

In accordance with Part I E 6 d (7) of the MS4 permit, routine site inspections will be conducted on at least a semi-annual basis by a qualified individual. If the inspections reveal systemic issues, the SWPPT Leader will implement more frequent site inspections. A member of the SWPPT should either conduct or participate in the inspection. Inspections should be completed during a time of normal facility operations. A Semi-Annual Inspection Checklist (Form 2) is provided in Appendix C. The facility manager is responsible for verifying the scope and adequacy of these inspection reports.

5.3 Annual Comprehensive Site Compliance Evaluation

In accordance with Part I E 6 d (6) of the MS4 permit, a comprehensive site compliance evaluation will be conducted annually. The evaluation may take place at the same time as one of the semi-annual inspections in Section 5.2.

The evaluation will determine if the pollution prevention measures in this SWPPP have been implemented and will assess their effectiveness. The evaluation will include an assessment of: the accuracy of the site map; the accuracy of the SWPPP and related records; the accuracy of potential pollutant sources, the effectiveness of stormwater pollution prevention procedures, and the overall effectiveness of the SWPPP. Each site will be reviewed for changes in operations and potential non-stormwater discharges. Records and files will be reviewed for completeness. The SWPPP will be updated to reflect changes in operations that have the potential to affect stormwater quality and any

new procedures necessary to reduce and prevent pollutant discharges. Updates may take the form of short narratives attached at the end of the SWPPP.

A Comprehensive Site Comprehensive Evaluation (Form 3) is provided in Appendix C.

5.4 Spill Records

In accordance with Part I E 6 d (8) of the MS4 permit, the SWPPP must include a log of each unauthorized discharge, release, or spill incident in accordance with Part III G. The site should use the Spill Incident Report (Form 4) in Appendix C.

Smaller spills not subject to Part III G should be logged using the Small Spill Log (Form 5) in Appendix C. This information is used by the SWPPT Leader to reinforce good housekeeping practices and to identify potential issue areas.

Part III G of the MS4 permit requires each facility to report any unauthorized discharges into state waters or discharges that may reasonably be expected to enter state waters. The facility must also report non-compliance that endangers human health or the environment. Both situations require the SWPPT Leader or Town Manager to notify DEQ. For an unauthorized discharge, the Town must notify DEQ immediately upon discovery, but in no case later than 24 hours. For non-compliance, the Town must notify DEQ within 24 hours from the time the Town becomes aware of the circumstances.

Table 5A – Emergency Spill Contacts

Contact	Contact Number
Fairfax County Fire and Rescue	911 – Active spill event (703) 246-4386 – Not active spill event, no immediate hazard – work hours (703) 691-2131 – Not active spill event, no immediate hazard – after hours number
Department of Environmental Quality, Northern Regional Office	(703) 583-3800
Town of Vienna Department of Public Works	(703) 255-6380

Table 5B – 24-Hour Reporting Requirements

Regular Business Hours and Online Reporting	
DEQ, Northern Regional Office	(703) 583-3800
	DEQ Reporting Form: https://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx
Nights, Holidays, and Weekends	
Virginia Department of Emergency Management	1 (800) 468-8892

A written report must be submitted to DEQ within five days to 13901 Crown Court, Woodbridge, Virginia 22193. The written report must contain the information in Table 5C.

Table 5C – Written Report Requirements

Unauthorized Discharges	Non-Compliance
<ol style="list-style-type: none"> 1. A description of the nature and location of the discharge; 2. The cause of the discharge; 3. The date on which the discharge occurred; 4. The length of time that the discharge continued; 5. The volume of the discharge; 6. If the discharge is continuing, how long it is expected to continue; 7. If the discharge is continuing, what the expected total volume of the discharge will be; and, 8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by a permit. 	<ol style="list-style-type: none"> 1. A description of the noncompliance and its causes; 2. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time said non-compliance is expected to continue; and, 3. Steps taken or planned to reduce, eliminate, and prevent

5.5 Release of Stormwater from Secondary Containment

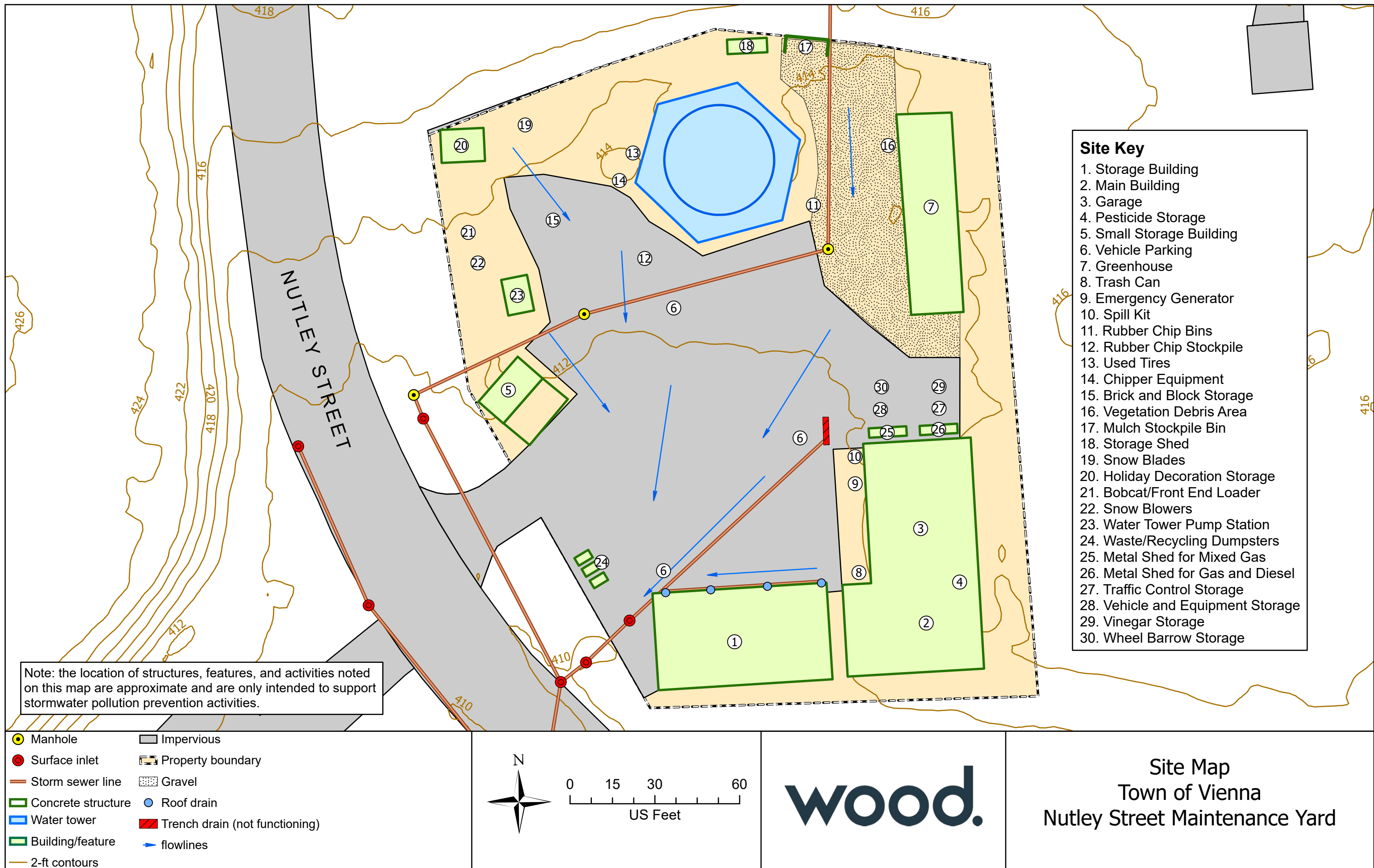
Should the site implement outdoor secondary containment, accumulated rainwater should only be released once it has been visually confirmed that there is no contamination (such as sheen). Such releases will use Secondary Containment Release Documentation (Form 6) in Appendix C. If contamination is evident, then the contamination will be removed prior to the release.

5.6 Documentation

All completed forms and other documentation will be included with this SWPPP as Appendix D.

APPENDIX A

SITE MAP



APPENDIX B

STANDARD OPERATING PROCEDURES

APPENDIX C

INSPECTION CHECKLISTS AND FORMS

TRAINING DOCUMENTATION SHEET	FORM 1
SEMI-ANNUAL INSPECTION CHECKLIST	FORM 2
COMPREHENSIVE SITE COMPLIANCE EVALUATION	FORM 3
SPILL INCIDENT REPORT	FORM 4
SMALL SPILL LOG	FORM 5
SECONDARY CONTAINMENT RELEASE DOCUMENTATION.....	FORM 6

FORM 1

TRAINING DOCUMENTATION SHEET

Training Name:	Date:	
Location:		
Instructor:		

Employee Name	Initials	Title/Dept.

FORM 1



Town of Vienna Semi-Annual Inspection Checklist

Date:	Nutley Street Maintenance Yard	Inspector:
-------	--------------------------------	------------

1. Good Housekeeping Procedures	Yes	No	N/A	Observations/Required Actions
Are work areas and floors clean and dry?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are brooms, dust pans, and mops easily on hand for easy access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all areas been inspected for visible leaks or potential discharges of significant materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are dumpsters closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the site free of litter and debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are catch basins and other inlets to the storm drain system free from trash?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Materials Handling and Storage	Yes	No	N/A	Observations/Required Actions
Is there adequate aisle space and organization in all storage areas so that any corrosion or leaks can be detected early?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all containers labeled with contents on the appropriate label?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are Safety Data Sheets available for all chemical substances?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are all containers that are not in use closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are containers stored indoors and away from entrances whenever practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are maintenance activities conducted indoors whenever practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FORM 2

If outdoors, are containers protected from precipitation and runoff whenever practical?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are containers protected from vehicular traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all containers been inspected and are they generally in good condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do all containers have secondary containment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Spill Prevention and Response	Yes	No	N/A	Observations/Required Actions
Is emergency/contingency equipment accessible in close proximity to storage areas (spill kits, drip pans, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all spills been properly cleaned up and disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have all vehicles and equipment been inspected and found to be free of leaking fluids?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is there any build-up of pollutants in vehicle parking areas, and if so, is there a plan for removal in accordance with the SWPPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6. Scrap Metal Storage	Yes	No	N/A	Observations/Required Actions
Have scrap parts and empty drums no longer in use been removed from the property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Erosion and Sediment Controls	Yes	No	N/A	Observations/Required Actions
Is the facility free of bare areas that could result in soil erosion?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Has any accumulated sediment near the storm drain inlet been cleaned up?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
8. Material Stockpiles	Yes	No	N/A	Observations/Required Actions
Are material stockpiles contained in a way to manage stormwater run-on (bins, tarps, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have areas surrounding stockpiles been swept to prevent migration of materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FORM 2

Are stockpile deliveries managed to ensure that only the minimum amount needed is stored outside?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
9. Other Indicators of Illicit Discharges	Yes	No	N/A	Observations/Required Actions
Is the facility clear of any signs of potential illicit discharges such as odors, staining, sheen, residue, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
10. Personnel Training and Record Keeping	Yes	No	N/A	Observations/Required Actions
Is a program in place to train employees on pollution prevention and the Town's good housekeeping SOPs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are employees trained on proper spill prevention and response for the materials that they handle?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

FORM 2

COMPREHENSIVE SITE COMPLIANCE EVALUATION

Site Name:	
Evaluator:	

1. Accuracy of Site Map

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Identification and location of outfalls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Watershed boundaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Direction of runoff flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buildings and impervious areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exposed material storage areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

2. Accuracy of SWPPP and Related Records

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Pollution prevention team members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outfall characteristics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed employee training records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed semi-annual inspection checklists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completed spill records	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

FORM 3**COMPREHENSIVE SITE COMPLIANCE EVALUATION (Continued)****3. Accuracy of Potential Pollutant Sources**

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Main building and storage building	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle parking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment and material storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material stockpiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waste containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water tower pump station	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

4. Effectiveness of Procedures and Control Measures

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Good housekeeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preventive maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spill prevention and response	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle and equipment parking and storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waste/recycling containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Material stockpiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scrap material storage and stockpile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illicit connections	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion and sediment control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FORM 3

COMPREHENSIVE SITE COMPLIANCE EVALUATION (Continued)

4. Effectiveness of Procedures and Control Measures (Continued)

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Onsite contractor responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pesticide and herbicide management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

5. Overall Effectiveness of the SWPPP

	No Action <u>Required</u>	Action <u>Required</u>	Not <u>Applicable</u>
Overall effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Required Action: _____

Signature:	Date:	
Title:		

FORM 3

FORM 4

SPILL INCIDENT REPORT

Part 1. Facility (Division) Originating Report									
Name				Phone			Fax		
Address	247 Nutley Street, NW		City	Vienna	State	VA	Zip	222180	
Part 2. Incident Description									
Date/Time Started (24 hr clock):				Date/Time Ended (24 hr clock):					
Cloud Cover				Precipitation Conditions					
Temperature (°F)				Wind Direction & Speed					
Incident Location									
Type Material Spilled/Released									
Damages or Injuries? NO <input type="checkbox"/> YES <input type="checkbox"/> (if yes, describe):									
Release/Spill To (check applicable box(es)):				Containment <input type="checkbox"/>		Ground <input type="checkbox"/>		Sewer <input type="checkbox"/>	
<i>Amount released to each area checked:</i>									
<i>Amount recovered from each area checked:</i>									
<i>Product/material source container(s):</i>									
<i>Total capacity of spill source container(s):</i>									
If spill entered storm sewer inlet, was spill contained within the system?						YES <input type="checkbox"/>		NO <input type="checkbox"/>	
Did spill impact adjacent properties? NO <input type="checkbox"/> YES <input type="checkbox"/> (if yes, describe):									
Description of Cause (check all that apply):				<input type="checkbox"/> INADEQUATE PROCEDURES					
<input type="checkbox"/> PERSONNEL ERROR				<input type="checkbox"/> EQUIPMENT/COMPONENT FAILURE					
<input type="checkbox"/> LACK OF TRAINING				<input type="checkbox"/> OTHER (describe):					
Comments:									
Long-Term Corrective Action(s) Taken:									
Part 3. Notifications									
Agency & Telephone #			Contact Name			Date		Time	
<i>Local Emergency: 911</i>								am/pm	
<i>Virginia DEQ: (703) 583-3800</i>								am/pm	
<i>NRC: (800) 424-8802</i>								am/pm	
<i>Other:</i>								am/pm	
Instructions Given By Agencies									
Part 4. Review and Approval									
Preparer of Spill Report (Print Name)				Signature				Date	

FORM 4

SMALL SPILL LOG

_____ Reporting Individual		_____ Individual Responsible for Clean-Up
_____ Date of Spill	_____ Material Spilled	_____ Approximate Amount
_____ Location of Spill		
_____ Cause of Spill		
_____ Action Taken		

_____ Reporting Individual		_____ Individual Responsible for Clean-Up
_____ Date of Spill	_____ Material Spilled	_____ Approximate Amount
_____ Location of Spill		
_____ Cause of Spill		
_____ Action Taken		

FORM 5

SECONDARY CONTAINMENT RELEASE DOCUMENTATION

Complete this form each time that accumulated rainwater is to be released from an exposed secondary containment structure.

Date:	Time	
Location	Nutley Street Maintenance Yard	
Containment Structure		
SWPPT Member		

Visual Observation of Accumulated Rainwater

Check yes or no, and provide details under comments.

ITEM	YES	NO	COMMENTS
COLOR			
FOAM			
CLOUDY			
OUTFALL STAINING			
OIL SHEEN			
OTHER			

If accumulated rainwater appears contaminated, list actions taken to remove contaminants:

After the release of the accumulated rainwater, was the secondary containment drain valve properly closed?

☐ YES

☐ NO

Comments:

FORM 6

APPENDIX D

COMPLETED FORMS

