



HarrisburgNC

Stormwater Management Plan
Town of Harrisburg, NC
NCS0000513

April 2024

Table of Contents

PART 1: INTRODUCTION.....	1
PART 2: CERTIFICATION	2
PART 3: MS4 INFORMATION	3
PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION.....	11
PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM.....	18
PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM	21
PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	22
PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM	26
PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM.....	28
PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS	34

List of Tables

Table 1: Summary of MS4 Mapping

Table 2: Summary of MS4 Receiving Waters

Table 3: Summary of Approved TMDLs

Table 4: Summary of Federally Listed Species/Habitat Impacted by Surface Water Quality

Table 5: NPDES Stormwater Permitted Industrial Facilities

Table 6: Non-Stormwater Discharges

Table 7: Summary of Target Pollutants and Sources

Table 8: Summary of Responsible Parties

Table 9: Shared Responsibilities

Table 10: Co-Permittee Contact Information

Table 11: Program Administration BMPs

Table 12: Summary of Target Pollutants & Audiences

Table 13: Public Education and Outreach BMPs

Table 14: Public Involvement and Participation BMPs

Table 15: Illicit Discharge Detection and Elimination BMPs

Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program

Table 17: Construction Site Runoff Control BMPs

Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program

Table 19: Summary of Existing Post-Construction Program Elements

Table 20: Post Construction Site Runoff Control BMPs

Table 21: Pollution Prevention and Good Housekeeping BMPs

PART 1: INTRODUCTION

The purpose of this Stormwater Management Plan (SWMP) is to establish and define the means by which the Town of Harrisburg will comply with its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and the applicable provisions of the Clean Water Act to meet the federal standard of reducing pollutants in stormwater runoff to the maximum extent practicable.

This SWMP identifies the specific elements and minimum measures that the Town of Harrisburg will develop, implement, enforce, evaluate, and report to the North Carolina Department of Environmental Quality (NCDEQ) Division of Energy, Minerals and Land Resources (DEMLR) in order to comply with the MS4 Permit number NCS0000513, as issued by NCDEQ. This permit covers activities associated with the discharge of stormwater from the MS4 as owned and operated by the Town of Harrisburg and located within the corporate limits of the Town of Harrisburg.

In preparing this SWMP, the Town of Harrisburg has evaluated its MS4 and the permit requirements to develop a comprehensive 5-year SWMP that will meet the community's needs, address local water quality issues, and provide the minimum measures necessary to comply with the permit. The SWMP will be evaluated and updated annually to ensure that the elements and minimum measures it contains continue to adequately provide for permit compliance and the community's needs.

Once the SWMP is approved by NCDEQ, all provisions contained and referenced in this SWMP, along with any approved modifications of the SWMP, are incorporated by reference into the permit and become enforceable parts of the permit. Any major changes to the approved SWMP will require resubmittal, review and approval by NCDEQ, and may require a new public comment period depending on the nature of the changes.


PART 2: CERTIFICATION

By my signature below I hereby 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 fines and imprisonment for knowing violations.

I am also aware that the contents of this document shall become an enforceable part of the NPDES MS4 Permit, and that both the Division and the Environmental Protection Agency have NPDES MS4 Permit compliance and enforcement authority.

- I am a ranking elected official.
- I am a principal executive officer for the permitted MS4.
- I am a duly authorized representative for the permitted MS4 and have attached the authorization made in writing by a principal executive officer or ranking elected official which specifies me as (*check one*):
 - A specific individual having overall responsibility for stormwater matters.
 - A specific position having overall responsibility for stormwater matters.

<i>Signature:</i>	
<i>Print Name:</i>	Rob Donham, P.E.
<i>Title:</i>	Town Manager
Signed this <u>8</u> day of <u>May</u> 2024.	

3.2 Existing MS4 Mapping

The current MS4 mapping includes pipes, ditches, inlets, catch basins, manholes, and outfall inventory information as well as dry weather inspection data and flow directions.

<https://gis.dukes.com/map.ashx?key=13704220822070444395>

Table 1 - Summary of MS4 Mapping

Percent of MS4 Area Mapped	100	%
No. of Major Outfalls* Mapped	159	total

**An outfall is a point where the MS4 discharges from a pipe or other conveyance (e.g. a ditch) directly into surface waters. Major outfalls are required to be mapped to meet permit requirements. A major outfall is a 36-inch diameter pipe or discharge from a drainage area > 50-acres; and for industrial zoned areas a 12-inch diameter pipe or a drainage area \geq 2-acres.*

3.3 Receiving Waters

The Town of Harrisburg MS4 is located within the Yadkin-PeeDee River Basin and discharges directly into receiving waters as listed in Table 2 below. Applicable water quality standards listed below are compiled from the following NCDEQ sources:

- [Waterbody Classification Map](#)
- [Impaired Waters and TMDL Map](#)
- Most recent NCDEQ Final [303\(d\) List](#)

Table 2 - Summary of MS4 Receiving Waters

Receiving Water Name	Stream Index / AU Number	Water Quality Classification	303(d) Listed Parameter(s) of Interest
Mallard Creek	13-17-5b	C	Per Final 2022 303(d) List, listed for Benthos (Nar, AL, FW) and Fish Community (Nar, AL, FW).
Coddle Creek	13-17-6-(5.5)	C	Per the Final 2022 303(d) List, Turbidity (50 NTU, AL, FW miles), Benthos (Benthos (Nar, AL, FW)
McKee Creek	13-17-8-4	C	Per the Final 2022 303(d) List, listed for Benthos (Nar, AL, FW).
Rocky River	13-17b1	C	Per the Final 2022 303(d) List, listed for standard violation of copper, turbidity and Benthos.
Back Creek	13-17-7	C	Per the Final 2022 303(d) List, listed for Benthos (Nar, AL, FW).
Reedy Creek	13-17-8	C	Per the Final 2022 303(d) List, listed for Benthos (Nar, AL, FW).
Fuda Creek	13-17-7-1	C	None

3.4 MS4 Interconnection

The Town of Harrisburg MS4 is not interconnected with another regulated MS4 and directly discharges to the receiving waters as listed in Table 2 above.

3.5 Total Maximum Daily Loads (TMDLs)

The TMDL(s) listed in Table 3 below have been approved within the MS4 area, as determined by the map and list provided on the [NCDEQ Modeling & Assessment Unit web page](#). The table also indicates whether the approved TMDL has a specific stormwater Waste Load Allocation (WLA) for any watershed directly receiving discharges from the permitted MS4, and whether a Water Quality Recovery Program has been implemented to address the WLA.

Table 3: Summary of Approved TMDLs

Water Body Name	TMDL Pollutant(s) of Concern	Stormwater Waste Load Allocation (Y/N)	Water Quality Recovery Program (Y/N)
McKee Creek	Fecal Coliform	N	N

The McKee Creek and Clear Creek TMDL was developed in 2002, and approved in August 2003, prior to the issuance of an MS4 permit to the Town of Harrisburg. As such, the Town is not specifically identified as part of the waste load allocation in the TMDL. Recognizing the timing of TMDL development in 2002 and the issuance of an MS4 permit to the Town in 2005, the Town performed a risk assessment in 2012 regarding its potential contribution to the current and future waste load in the TMDL watershed. HDR Engineering, Inc of the Carolinas identified the Town having a low potential for waste load contribution since the Town has only 80 acres of jurisdiction in the watershed. Current annexation laws may limit the Town’s ability to regulate development in balance of the watershed.

Despite this low potential the Town developed a waste load reduction plan for the McKee Creek and Clear Creek should future development occur in the watershed. This plan focuses on working within the MS4 permit control measures to reduce fecal coliform loading. Proposed Best Management Practices (BMPs) include encouraging the use of fecal coliform reducing structural stormwater control measures (SCMs) for new development, performing public education and outreach about the TMDL to residents and business in the watershed, consideration of a pet waste ordinance or collection requirements for development common areas, and evaluation of opportunities for SCM retrofits.

3.6 Endangered and Threatened Species and Critical Habitat

Significant populations of threatened or endangered species and/or critical habitat are identified within the regulated MS4 urbanized area, as determined by a review of the Listed species believed to or known to occur in North Carolina as provided by the U.S. Fish and Wildlife Service. Of those species listed, Table 4 summarizes the species that may be significantly impacted by the quality of surface waters within their habitat.

Table 4: Summary of Federally Listed Species/Habitat Impacted by Surface Water Quality

Scientific Name	Common name	Species Group	Federal Listing Status
Haliaeetus Leucocephalus	Bald Eagle	Vertebrate	BGPA
Myotis Septentrionalis	Northern Long-eared bat	Vertebrate	T
Lasmigona decorate	Carolina Heelsplitter	Invertebrate	E
Helianthus Schweinitzii	Shweinitz’s sunflower	Vascular Plant	E

3.7 Industrial Facility Discharges

The Town of Harrisburg MS4 jurisdictional area includes the following industrial facilities which hold NPDES Industrial Stormwater Permits, as determined from the NCDEQ NPDES Active Stormwater Permit Data.

Table 3 - NPDES Stormwater Permitted Industrial Facilities

Permit Number	Facility Name
NCG210353	Tarheel Bark
NCG030099	Galvan Industries
NCG030696	Edsco Fasteners LLC
NCG030253	Mauser USA, LLC
NCG050074	Wilbert Plastic Services
NCS000057	Venator Chemicals LLC
NCS000597	Galvan Industrues
NCG140384	Blue DOT Readi-Mix LLC

3.8 Non-Stormwater Discharges

The Town of Harrisburg enforces the stormwater ordinance, including section 53.011 which specifies that no person shall cause or allow the discharge, emission, disposal, pouring or pumping directly or indirectly into any stormwater conveyance, the waters of the state or upon the land in a manner and amount that the substance is likely to reach a stormwater conveyance or the waters of the state, any liquid, solid, gas or other substance, other than stormwater.

Street washing discharges are addressed under the Pavement Management Program in Part 10 of this SWMP. The Division has not required that other non-stormwater flows be specifically controlled by the Town of Harrisburg.

Wash water associated with car washing that does not contain detergents or does not discharge directly into the MS4 is considered incidental. However, these types of non-stormwater discharges that do contain detergents have been evaluated by the Town of Harrisburg to determine whether they may significantly impact water quality.

The water quality impacts of non-stormwater discharges have been evaluated by the Town of Harrisburg. Non-stormwater discharges associated with the following activities, as specified in 40 CFR 122.26, are allowed, provided that they do not significantly impact water quality:

- Other non-stormwater discharges for which a valid NPDES discharge permit has been approved and issued by the state of North Carolina, and provided that such discharges to the municipal separate storm sewer system shall be authorized by the Town. Prohibited substances include, but are not limited to, oil, anti-freeze, chemicals, animal waste, paints, garbage and litter. Illicit discharges are addressed in further detail in Part 7: Illicit Discharge Detection and Elimination Program.

Table 6 – Non-Stormwater Discharges

Non-Stormwater Discharge	Water Quality Impacts
Water line and fire hydrant flushing	Incidental
Landscape irrigation	Incidental
Diverted stream flows	Incidental
Rising groundwater	Incidental
Uncontaminated groundwater infiltration	Incidental
Uncontaminated pumped groundwater	Incidental
Uncontaminated potable water sources	Incidental
Foundation drains	Incidental
Air conditioning condensate	Incidental
Irrigation waters	Incidental
Springs	Incidental
Water from crawl space pumps	Incidental
Footing drains	Incidental
Lawn watering	Incidental
Residential and charity car washing	Incidental
Flows from riparian habitats and wetlands	Incidental
Dechlorinated swimming pool discharges	Incidental
Street wash water	Incidental
Flows from firefighting activities	Incidental

3.9 Target Pollutants and Sources

In addition to those target pollutants identified above, the Town of Harrisburg is aware of other contributions to water quality issues within the permitted MS4 area. These include bacteria, turbidity/metals, Phosphorous, nitrogen, organics, surfactants, hydrocarbons, and pH altering/toxic compounds. Likely sources as well as known issues contributing to these sources can be found in Table 7.

Table 7 summarizes the water quality pollutants identified throughout Part 3 of this SWMP, the likely activities/sources/targeted audiences attributed to each pollutant, identifies the associated SWMP program(s) that address each, and issues contributing to the pollutant source. The Town of Harrisburg has evaluated schools, homeowners and businesses as target audiences that are likely to have significant stormwater impacts.

Table 7 – Summary of Target Pollutants and Sources

Target Pollutant(s)	Targeted Pollutant Source	Likely Source(s)/Target Audience(s)	SWMP Program Addressing Target Pollutant(s)/Audience(s)	Issues Contributing to the Pollutant Source
Bacteria (Fecal Coliform Bacteria is the Indicator)	Human Waste, Pet Waste	Residential & Commercial	<ul style="list-style-type: none"> Public Education and Outreach Program 	<ul style="list-style-type: none"> Illicit connections to Surface Waters Illegal Dumping Disposal of Cooking Grease to Sanitary Sewer Failure to Properly Dispose of Pet Waste Discharges from Kennels/Pet Boarding Facilities
Turbidity/Metals	Sediment	Residential & Commercial	<ul style="list-style-type: none"> Construction Site Runoff Control Program Post-Construction Site Runoff Control Program 	<ul style="list-style-type: none"> Improper Erosion Control Measures at Land Development Sites Inadequate Post-Construction Stormwater Controls Inadequate Buffers and Unstable Stream Channels
Phosphorus, Nitrogen, Organics	Fertilizers, Pesticides, Yard Waste	Residential, Commercial and Institutional	<ul style="list-style-type: none"> Public Education and Outreach Program 	<ul style="list-style-type: none"> Improper Application, Handling and Storage of Lawn Care Products. Improper Disposal of Grass Clippings and Leaves Use of Non-Native Vegetation

Target Pollutant(s)	Targeted Pollutant Source	Likely Source(s)/Target Audience(s)	SWMP Program Addressing Target Pollutant(s)/Audience(s)	Issues Contributing to the Pollutant Source
Surfactants	Waste from Car Washing, Pressure Washing, and other Cleaning Activities	Residential & Commercial	<ul style="list-style-type: none"> • Illicit Discharge Detection and Elimination Program • Public Education and Outreach Program 	<ul style="list-style-type: none"> • Mobile Car Wash Discharges • Discharges from Car Lots and other Commercial Automotive Activities • Discharges from Cleaning Buildings, Sidewalks, etc. • Illegal Connections to Surface Waters or Storm Drains
Hydrocarbons and Chemicals	Used Oil and other Automobile Fluids	Residential, Commercial & Institutional	<ul style="list-style-type: none"> • Illicit Discharge Detection and Elimination Program • Pollution Prevention and Good Housekeeping Program 	<ul style="list-style-type: none"> • Illicit Connections to Surface Waters and Storm Drains • Illegal Dumping • Poor Housekeeping at Commercial and Institutional Facilities
pH and Toxic Compounds	Chemicals & Hazardous Waste	Residential, Commercial & Institutional	<ul style="list-style-type: none"> • Illicit Discharge Detection and Elimination Program • Pollution Prevention and Good Housekeeping Program • Public Education and Outreach 	<ul style="list-style-type: none"> • Illegal Dumping • Poor Housekeeping at Commercial and Institutional Facilities

3.10 Target Audiences

Residential: This group has the ability to positively impact all of the issues contributing to the pollutant sources identified in Table above. They also have a significant potential to increase participation in volunteer programs for protecting and restoring water quality conditions. This is a large, targeted audience composed of many subsets, including but not limited to homeowners, renters, pet owners, community groups, scout troops, etc. The Town of Harrisburg, in partnership with the Regional Stormwater Partnership of the Carolinas, has developed educational materials for reaching these different subsets and will develop and implement outreach initiatives on an as needed basis to address specific water quality issues as they arise.

Commercial: This group, like the residential group, has a significant potential to positively impact water quality and has several subsets, including landscapers, grading contractors, building maintenance companies, mobile washers, automotive repair shops, etc. The Town of Harrisburg, in partnership with the Regional Stormwater Partnership of the Carolinas, has developed educational materials for reaching these subsets and will develop and implement outreach initiatives on an as needed basis to address specific water quality issues as they arise.

Institutional: This group predominantly includes schools and their related facilities. The Town of Harrisburg is not a home to any places of higher learning at this time. However, educational institutions have a significant potential to aid in the reduction of pollution sources as well as to expand volunteer programs. The Town of Harrisburg, in partnership with the Regional Stormwater Partnership of the Carolinas, conducts water quality educational presentations in school classrooms and many schools, colleges and universities have become involved in the volunteer programs

PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION

4.1 Organizational Structure

The Town of Harrisburg stormwater program falls under the Department of Engineering and Public Works. The Town of Harrisburg Town Manager is the signing official and the Town of Harrisburg Public Works Director is the authorized representative for program implementation.

The Stormwater Program Administrator is responsible for the overall coordination, implementation, and revisions to the plan. Much of the work is delegated to the Civil Engineer position with final review and approval by the Stormwater Program Administrator.

Figure 2 – Engineering Organizational Chart

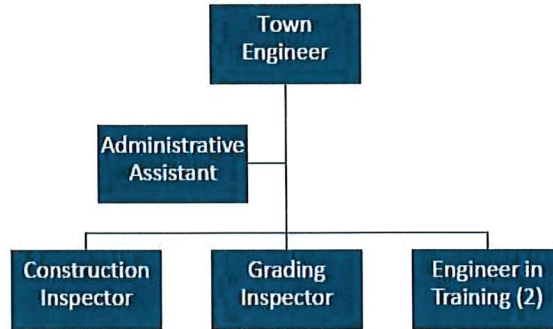


Figure 3 –Public Works Organizational Chart

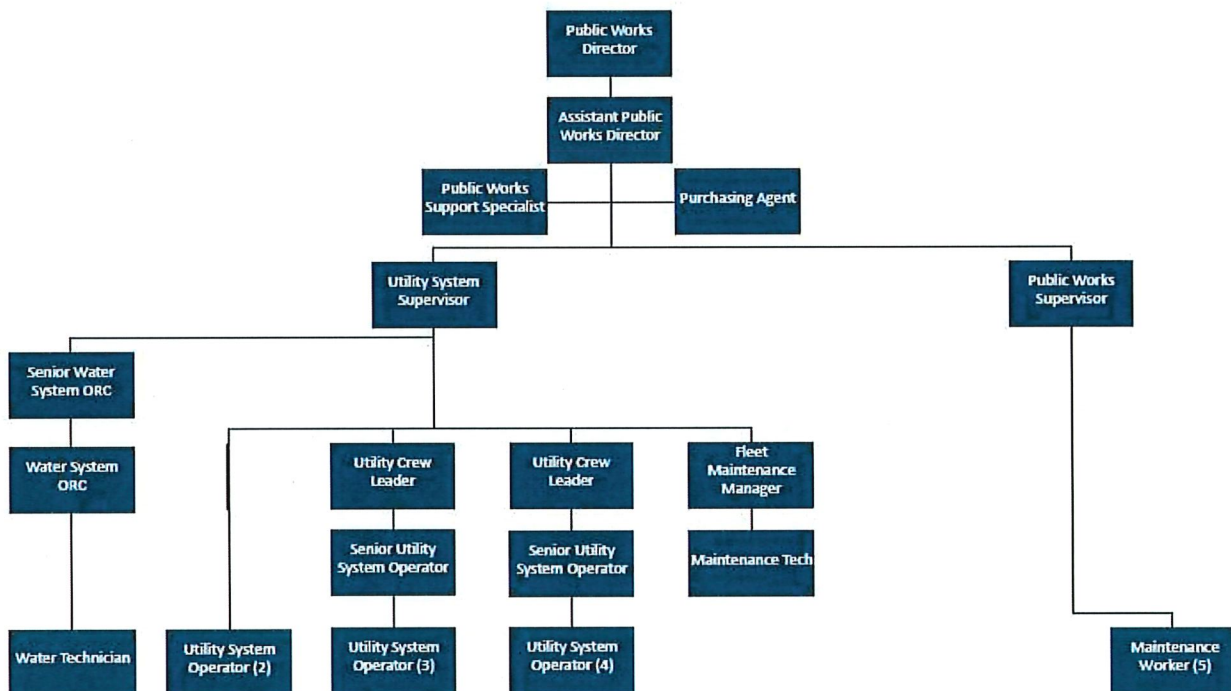


Table 8 – Summary of Responsible Parties

SWMP Component	Responsible Position	Staff Name	Department
Stormwater Program Administration	Town Manager	Rob Donham, P.E.	Town Administration
SWMP Management	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Public Education & Outreach	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Public Involvement & Participation	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Illicit Discharge Detection & Elimination	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Construction Site Runoff Control	Administered by NCDEQ		
Post-Construction Stormwater Management	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Pollution Prevention/Good Housekeeping for Municipal Operations	Director of Public Works	Mallory Hodgson, P.E.	Engineering & Public Works
Municipal Facilities Operation & Maintenance Program	Assistant Town Manager	J. Lee Connor	Town Administration
Spill Response Program	Assistant Director of Public Works	Corey Jones	Engineering & Public Works
MS4 Operation & Maintenance Program	Director of Public Works	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Municipal SCM Operation & Maintenance Program	Construction Grading Inspector	Brad Hill	Engineering & Public Works

Pesticide, Herbicide & Fertilizer Management Program	Assistant Director of Public Works	Corey Jones	Engineering & Public Works
Vehicle & Equipment Cleaning Program	Assistant Director of Public Works	Corey Jones	Engineering & Public Works
Pavement Management Program	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works
Total Maximum Daily Load (TMDL) Requirements	Town Engineer	Currently Vacant (default to Public Works Director)	Engineering & Public Works

4.2 Program Funding and Budget

In accordance with the issued permit, the Town of Harrisburg shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and comply with the requirements of the NPDES MS4 Permit. The budget includes the permit administering and compliance fee, which is billed by the Division annually.

There are currently five positions partially funded by the Stormwater Management Program. These positions include the Engineering and Public Works Director, Engineering Manager, Engineer in Training (2), and Grading Inspector.

Funding for stormwater is provided through Stormwater Fees which are assessed to commercial and residential property owners via the monthly water and sewer bill. The charge per equivalent residential unit (ERU) for FY22 is \$5.62 per month.

The total FY 22 annual budget (excluding capital improvement projects) for the NPDES stormwater management program is \$795,992. The Town's current stormwater utility is calculated using impervious area based on as-builts and a residential equivalent unit.

4.3 Shared Responsibility

The Town of Harrisburg shares the responsibility to implement the Construction Site Runoff Control and Public Education and Outreach minimum control measures. The Town of Harrisburg remains responsible for compliance if the other entity fails to perform the permit obligation and may be subject to enforcement action if neither the Town of Harrisburg nor the other entity fully performs the permit obligation. Table below summarizes who will be implementing the component, what the component program is called, the specific SWMP BMP or permit requirement that is being met by the shared responsibility, and whether a legal agreement to share responsibility is in place.

The Town relies on the Mooresville Regional office of the NCDEQ to provide erosion control and sedimentation review and inspection services, consistent with the Sedimentation Pollution Control Act of 1973 and the Title 15A Chapter 4: Sediment Control of the North Carolina Administrative Code. The Town works with Mr. Kenny Llewellyn, Regional Engineer, NCDEQ Mooresville Office to accomplish this minimum measure.

The Town receives a portion of its potable water supply from the City of Concord, which as part of its settlement of an Inter-basin Transfer (IBT) Agreement in 2010 instituted some additional regulatory and procedural requirements on riparian buffers and vegetated setbacks. The Town amended its riparian buffers and vegetative setback rules at the time to be consistent with the terms of the IBT agreement and continues to enforce those rules.

In addition, the Town is part of the Regional Stormwater Partnership of the Carolinas (RSPC) administered by the Infrastructure, Design, Environment and Sustainability (IDEAS) Center at UNC Charlotte. The Partnership is underwritten with dues from over 20 communities in the Metrolina area and serves as a forum for providing public education and outreach opportunities for its membership. The Town relies on the RSPC to primarily conduct the public education and outreach minimum measure. The Town observes the agreement with the RSPC via a foundation document that outlines contractual obligations, defines goals and establishes memberships.

Table 9 - Shared Responsibilities

SWMP BMP or Permit Requirement	Implementing Entity & Program Name	Legal Agreement (Y/N)
Construction Site Runoff Control	NCDEQ Mooresville Regional Office	N
Public Education and Outreach	Regional Stormwater Partnership of the Carolinas	Y

4.4 Co-Permittees

The are no other entities applying for co-permittee status under the NPDES MS4 permit number NCS0000513 for the Town of Harrisburg.

Table 10 – Co-Permittee Contact Information

Co-Permittee MS4 Name	Contact Person	Phone & E-Mail	Interlocal Agreement (Y/N)
N/A	N/A	N/A	N/A

4.5 Measurable Goals for Program Administration

The Town of Harrisburg will manage and report the following Best Management Practices (BMPs) for the administration of the Stormwater Management Program.

Table 11: Program Administration BMPs				
Permit Ref.	2.1.2 Program Implementation Measures to evaluate the performance and effectiveness of the SWMP program components at least annually. Results shall be used by the permittee to modify the program components as necessary to accomplish the intent of the Stormwater Program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#1.	Annual Self-Assessment			
	Evaluate the performance and effectiveness of the program components at least annually. Results shall be used to modify the program components as necessary to accomplish the intent of the Stormwater Program.	1. Prepare, conduct and document an annual evaluation of the program components.	1. Annually before August 31 st of Permit Years 1 – 5	1. Yes/No
#2.	Shared Responsibility (Permit Ref. 1.4)			

Table 11: Program Administration BMPs

	Establish and maintain Operation and Maintenance (O&M) Agreements with entities that require adherence to the Stormwater Management Plan on behalf of the Town of Harrisburg. Town to maintain inventory of entities which have stormwater infrastructure on site and ensure annual inspections are completed and maintenance is executed. Town to maintain records.	1. Review all agreements and confirm that they meet all requirements outlined in 1.4 of the MS4 permit.	1. Permit Year 1	1. Yes/No
#3.	Minimum Control Measures (Permit Ref. 2.2.2)			
	Maintain, and make available to NCDEQ upon request, written procedures for implementing the six minimum control measures	1. Develop and maintain written programs for all minimum control measures.	1. Permit Year 1	1. Yes/No
		2. Review written programs and modify/update.	2. Annually	2. Yes/No
#4.	Funding and Staffing (Permit Ref. 2.1.1)			
	The funding and staffing status of the program will be evaluated by appropriate Town staff to confirm that the program is meeting permit requirements.	1. Review and analyze the current funding and staffing of the program.	1. Annually	1. Adequate/inadequate
#5.	SWMP Availability			
	Make the latest SWMP and all ordinance/regulatory mechanisms available to NCDEQ and the Public.	1. Upload latest final SWMP to the Town's website	1. Permit Year 1 (and any subsequent updates)	1. Yes/No
		2. Ensure ordinances and regulatory mechanisms are available online, providing the legal authority necessary to implement and enforce requirements of the permit.	2. Permit Year 1	2. Yes/No
Permit Ref.	1.6: Permit Renewal Application Measures to submit a permit renewal application no later than 180 days prior to the expiration date of the NPDES MS4 permit.			

Table 11: Program Administration BMPs

BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#6.	Permit Renewal Application			
	Submit a permit renewal application and Draft SWMP no later than 180 prior to permit expiration.	1. Draft SWMP applicable to the proceeding 5 years following permit re-issuance.	1. Permit Year 5	1. Yes/No
		2. Certify the stormwater permit renewal application (Permit renewal application form and Draft SWMP for the next 5-year permit cycle) and submit to NCDEQ at least 180 days prior to permit expiration.	2. Permit Year 5	2. Date of permit renewal application submittal

PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM

The Town of Harrisburg will implement a Public Education and Outreach Program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and steps the public can take to reduce pollutants in stormwater runoff.

The target audiences and identified pollutants listed in Part 3.9 of this SWMP, which will be addressed by the Public Education and Outreach Program, are summarized in Table 10 below. In addition, the Town of Harrisburg is required to inform businesses and the general public of the hazards associated with illicit discharges, illegal dumping and improper disposal of waste.

Table 12: Summary of Target Pollutants & Audiences

Target Pollutants/Sources	Potential Sources	Target Audience(s)
Improper Disposal of Waste / Liter	Improper Disposal	General Public, Businesses, Municipal Employees
Pesticides/Herbicides/ Fertilizers/Nutrients	Lawn/Garden Chemicals and inappropriate application	Residents, Businesses, Schools
Bacteria	Inappropriate Pet Waste Disposal	Residents, Businesses, Schools
Illicit Discharges	Improper Disposal, Unidentified Leaks	General Public, Businesses, Municipal Employees
Illegal Dumping	Construction debris, excess materials	General Public, Businesses, Municipal Employees
Sediment	Erosion and Construction Site Runoff	General Public, Businesses, Municipal Employees
Household Hazardous Waste	Inappropriate Disposal	General Public, Businesses, Municipal Employees
Fats, Oils, and Grease	Inappropriate Disposal	General Public, Businesses, Municipal Employees

The Town of Harrisburg will manage, implement, and report the following public education and outreach BMPs. The Town of Harrisburg works with the Regional Stormwater Partnership of the Carolinas to implement certain components of the program commitments. Annual reporting metrics are available in Appendix A.

Table 13: Public Education and Outreach BMPs				
Permit Ref.	3.2.2 and 3.2.4: Outreach to Targeted Audiences Measures to identify the specific elements and implementation of a Public Education and Outreach Program to share educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and how the public can reduce pollutants in stormwater runoff. The permittee shall provide educational information to identified target audiences on pollutants/sources identified in table 12 above, and shall document the extent of exposure of each media, event or activity, including those elements implemented locally or through a cooperative agreement.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#7.	Goals and Objectives			
	Define goals and objectives of the Public Education and Outreach Program that focuses on community wide issues. Document goals and objectives in the Public Education and Outreach Procedures document.	1. Reassess and revise, as needed, Public Education and Outreach Procedures document to determine if any goals have changed	1. Annually	1. Yes/No
#8.	Describe Target Pollutants and/or Stressors			

Table 13: Public Education and Outreach BMPs

	Maintain a description of the target pollutants and or/stressors and like sources. Document description in SWMP.	1. Reassess and revise, as necessary SWMP to determine if any items need to be updated	1. Annually	1. Yes/No
#9.	Describe Target Audiences			
	Maintain a description of the target audiences likely to have major stormwater impacts and why they were selected. Document description in SWMP.	1. Reassess to determine if any items need to be updated	1. Annually	1. Report targets and if any changes.
#10.	Describe Residential and Industrial/Commercial Issues			
	Describe issues such as pollutants, likely sources of those pollutants, impacts, and the physical attributes of stormwater runoff, in their education/outreach program. Document description in SWMP.	1. Reassess to determine if any items need to be updated	1. Annually	1. Report targets and if any changes.
Permit Ref.	2.1.7, 3.2.3 and 3.6.5(c): Web Site Measures to provide a web site designed to convey the program’s message(s) and provide online materials including ordinances, or other regulatory mechanisms, or a list identifying the ordinances or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of the permit and SWMP. The web page shall also provide developers with all relevant post-construction requirements, design standards, checklists and/or other materials.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#11.	Town Website			
	Promote and maintain a user-friendly website designed to share the program’s intent. Post the Town’s Stormwater Management Program	1. Promote website on outreach material and social media.	1. Annually	1. Yes/No
		2. Track annual number of visits to the site.	2. Annually	2. Number of visits to site.
Permit Ref.	3.2.5: Stormwater Hotline Measures for a stormwater hotline/helpline for the purpose of public education and outreach.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#12.	Hotline/Helpline			
	Maintain the customer service hotline/helpline. Advertise customer	1. Train customer service on how to transfer calls	1. As new staff join/As necessary	1. Report number of newly trained staff

Table 13: Public Education and Outreach BMPs

	service hotline for stormwater related complaints or concerns. Update phone number on website as necessary.	2. Document and track stormwater related complaints through the existing work order system	2. Continuous	2. Yes/No
		3. Promote hotline information on outreach material	3. Continuous	3. Yes/No
		4. Check phone number on website for accuracy	4. Annually	4. Yes/No

PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

This SWMP identifies the minimum elements and implementation of a Public Involvement and Participation Program that complies with applicable State, Tribal and local public notice requirements. The MS4name will manage, implement and report the following public involvement and participation BMPs.

Table 14: Public Involvement and Participation BMPs

Permit Ref.	3.3.1: Public Input Mechanisms for public involvement that provide for input on stormwater issues and the stormwater program.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#13.	On-Going Public Involvement Activities			
	Include and promote volunteer opportunities as part of the stormwater program designed to promote ongoing citizen participation.	1. Maintain a hotline/helpline for the purpose of public involvement and participation.	1. Start of permit cycle	1. Yes/No. Report number of generated Work Orders.
		2. Promote Public Involvement on the Town website.	2. Start of permit cycle	2. Report number of visits to site.
Permit Ref.	3.3.2: Volunteer Opportunities Measures to provide volunteer opportunities designed to promote ongoing citizen participation.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#14.	On-Going Public Involvement Activities			
	Provide and promote a mechanism for public involvement that provides	1. Facilitate 1 annual event	1. As applicable	1. Yes/No. Report number of participants.

Table 14: Public Involvement and Participation BMPs

	for input on stormwater issues and the stormwater program. Facilitate minimum of 1-event annually, such as a litter cleanup event or storm drain stamping event.	2. Use of social media to educate community on possible volunteer opportunities.	2. As applicable	2. Report number of volunteer opportunities.
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PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

The Town of Harrisburg will develop, manage, implement, document, report and enforce an Illicit Discharge Detection and Elimination Program which shall, at a minimum, include the following illicit discharge detection and elimination BMPs.

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.1: MS4 Map Measures to develop, update and maintain a municipal storm sewer system map including stormwater conveyances, flow direction, major outfalls and waters of the United States receiving stormwater discharges.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#15.	MS4 Mapping			
	Maintain a current map showing all stormwater conveyances, flow direction, major outfalls, waters of the US and receiving streams	1. Maintain MS4 Map	1. Continuous	1. Report on number of major outfalls
Permit Ref.	3.4.2: Regulatory Mechanism Measures to provide an IDDE ordinance or other regulatory mechanism that provides legal authority to prohibit, detect, and eliminate illicit connections and discharges, illegal dumping and spills into the MS4, including enforcement procedures and actions.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#16.	Legal Authorities			
	Maintain the IDDE ordinances or other regulatory mechanisms that provide adequate legal authority to prohibit illicit connections and discharges and enforce the approved IDDE program	1. Review the ordinance and make changes as necessary	1. Annually	1. Yes/No, and record of any changes

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.3: IDDE Plan			
	Measures to maintain and implement a written IDDE Plan to detect and address illicit discharges, illegal dumping and any non-stormwater discharges identified as significant contributors of pollutants to the MS4. The plan shall provide standard procedures and documentation to:			
	<ul style="list-style-type: none"> a) Locate priority areas likely to have illicit discharges, b) Conduct routine dry weather outfall inspections, c) Identify illicit discharges and trace sources, d) Eliminate the source(s) of an illicit discharge, and e) Evaluate and assess the IDDE Program. 			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#17.	Written Procedures			
	Develop a written IDDE Program Manual. Include provisions for program assessment and evaluation and integrating the program. Evaluate and update the IDDE Program Manual as determined necessary or when requested by NCDEQ	1. Review and update as needed.	1. Annually	1. Yes/No
		2. Review written procedures and update as necessary	2. Annually	2. Yes/No
Permit Ref.	3.4.4: IDDE Tracking			
	Measures for tracking and documenting the date(s) an illicit discharge, illicit connection or illegal dumping was observed, the results of the investigation, any follow-up of the investigation, the date the investigation was closed, the issuance of enforcement actions, and the ability to identify chronic violators.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#18.	Documentation of Illicit Discharges			
	Track illicit discharges observed and investigations, follow-up, notices of violation or enforcement actions, and date violation closed.	1. Update Database	1. As complaints or visits occur	1. Provide copies of Database Entries
		2. Update IDDE program procedures manual to include provisions for identifying chronic violators and lessons learned	2. Complete by 2025	2. Provide updated procedures
		3. Identify Chronic violators and initiate actions to reduce noncompliance	3. Annually	3. Report list of chronic violators and actions taken.

Table 15: Illicit Discharge Detection and Elimination BMPs

		4. Maintain record of all illicit discharges reported, confirmed, and acted upon, including new construction illicit connections.	4. Continuous	4. Number of illicit discharge complaints received, number of NOV's issued, number of NOV's closed, number of enforcement actions taken.
#19.	IDDE Plan Development – Dry Weather			
	Conduct an outfall dry weather survey and follow suspected sources through the system. Identify and eliminate as many as possible. Follow procedures included in the IDDE Program Procedures Manual	1. Maintain standardized dry weather screening inspection form	1. Permit Year 1	1. Yes/No
		2. Record the number of MS4 outfalls screened, with a goal of 20% of the Town's MS4 outfalls screened annually plus all major outfalls annually.	2. Annually	2. Percentage of outfalls inspected provided in the annual report
		3. Maintain inspection data within Town's MS4 map	3. Continuous	3. Yes/No
Permit Ref.	3.4.5: Staff IDDE Training Measures to provide training for municipal staff and contractors who, as part of their normal job responsibilities, may observe an illicit discharge, illicit connection, illegal dumping or spills. Training shall include how to identify and report illicit discharges, illicit connections, illegal dumping and spills. Each staff training event shall be documented, including the agenda/materials, date, and number of staff participating.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#20.	Employee Training			
	Train employees in identifying illicit connections and how to report. All field crews should be trained to be able to identify illicit connections and customer service representatives should be trained on how to diagnose a potential illicit connection when a service call comes in and how to document/flag appropriately.	1. Train all necessary staff, including but not limited to, Public Works, Engineering, and Parks staff	1. Annually	1. Yes/No, and number of staff trained.
#21.	Spill Training			

Table 15: Illicit Discharge Detection and Elimination BMPs

	Train all field crews on how to identify, mitigate and report spills	1. Train all necessary staff, including but not limited to, Public Works, Engineering, and Parks staff	1. Annually	1. Yes/No, and number of staff trained.
Permit Ref.	3.4.6: IDDE Reporting Measures for the public and staff to report illicit discharges, illegal dumping and spills. The mechanism shall be publicized to facilitate reporting and shall be managed to provide rapid response by appropriately trained personnel.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#22.	IDDE Public Education			
	Inform public employees, businesses, and the general public of hazards associated with illicit discharges and improper disposal of waste	1. Present to a student group	1. Annually	1. Participation and contact hours
		2. Distribute public outreach materials	2. Annually	2. Include number of outreach materials distributed
		3. Continue Public Education social media accounts	3. Annually	3. Include number of impressions
#23.	Public Reporting Mechanism			
	Promote, publicize, and facilitate a reporting mechanism for the public and staff to report illicit discharges and establish and implement citizen request response procedures	1. Check phone number on website for accuracy	1. Annually	1. Yes/No
		2. Train customer service on how to transfer calls	2. As new staff join/As necessary	2. report number of newly trained staff
		3. Document and track stormwater related complaints through the existing work order system	3. Continuous	3. Yes/No
		4. Promote hotline information on outreach material	4. Continuous	4. Yes/No

PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

In accordance with 15A NCAC 02H .0153, the Town of Harrisburg relies upon the North Carolina Sedimentation Pollution Control Act (SPCA) of 1973 and the NCG010000 permit for construction activities as qualifying alternative programs to meet the NPDES MS4 Permit requirements for all construction site runoff control measures to reduce pollutants in stormwater runoff from construction activities that result in land disturbance of greater than or equal to one acre and any construction activity that is part of a larger common plan of development that would disturb one acre or more.

The Town provides and promotes a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems. The Town utilizes the existence of the NCDENR, Division of Land Resources “Stop Mud” hotline to meet the requirements of this section.

Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program

Permit Reference	State or Local Program Name	Legal Authority	Implementing Entity	Meets Whole or Part of the Requirement
3.5.1 - 3.5.4	State Implemented SPCA Program	15A NCAC Chapter 04	NCDEQ	Whole

The Town of Harrisburg also implements the following BMPs to meet NPDES MS4 Permit requirements.

Table 17: Construction Site Runoff Control BMPs				
Permit Ref.	3.5.6: Public Input Measures to provide and promote a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#24.	Municipal Staff Training			
	Train municipal staff who receive calls from the public on the protocols for referral and tracking of construction site runoff control complaints.	1. Train municipal staff on proper handling of construction site runoff control complaints.	1. Annually Permit Years 1-5	1. Document and report number of staff trained, training date(s) and topics covered.
#25.	Erosion Complaint Hotline			
	Provide a mechanism for public to share complaints about erosion and sediment loss	1. Check phone number on website for accuracy	1. Annually	1. Yes/No
		2. Train customer service on how to transfer calls	2. As new staff join/As necessary	2. Report number of newly trained staff

Table 17: Construction Site Runoff Control BMPs

		3. Document and track stormwater related complaints through the existing work order system	3. Continuous	3. Yes/No
		4. Promote hotline information on outreach material	4. Continuous	4. Yes/No
Permit Ref.	3.5.5: Waste Management Measures to require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impact to water quality.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#26.	Contractor Education			
	The Town shall provide construction site operators with educational materials regarding construction waste management.	1. Develop fact sheet to share with contractors	1. Once Permit Year 1	1. Yes/No
		2. Distribute fact sheet at pre-construction meetings	2. Continuously Permit Years 1-5	2. Yes/No
#27.	Land Disturbance Inspections			
	Ensure construction site operators to control waste through staff inspections	1. Perform staff inspections of construction site within Town limits	1. Continuously Permit Years 1-5	1. Report number of issues documented and communicated to developer.

PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

This SWMP identifies the minimum elements to develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that are located within the Town of Harrisburg and discharge into the MS4. These elements are designed to minimize water quality impacts utilizing a combination of structural Stormwater Control Measures (SCMs) and/or non-structural BMPs appropriate for the community and ensure adequate long-term operation and maintenance of SCMs.

In accordance with 15A NCAC 02H .0153 and .1017, the Town of Harrisburg would implement any State post-construction program requirements, to satisfy the NPDES Phase II MS4 post-construction site runoff control requirements as Qualifying Alternative Programs (QAPs) in the MS4 area(s) where they are implemented. At this time, the Town of Harrisburg is not implementing any QAPs on a local level.

Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program

State QAP Name	State Requirements	Local Ordinance / Regulatory Mechanism Reference
None	N/A	N/A

Town of Harrisburg has existing requirements other than Qualifying Alternative Program(s) for implementation of the NPDES Phase II MS4 post-construction program requirements. These existing requirements are codified in local ordinance(s), and implementation is further defined in guidance, manuals and/or standard operating procedure(s) as summarized in Table 19 on page 30.

Table 19: Summary of Existing Post-Construction Program Elements

Permit Requirements for Plan Review and Approval	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(a) Authority	CO Chapter 53, Section 002	5/11/2009
3.6.3(a) & 15A NCAC 02H.0153(c) Federal, State & Local Projects	CO Chapter 53, Section 005	1/13/2020
3.6.3(b) Plan Review	UDO Article 3, Sections 3.2.8 and 3.6	1/10/2005
3.6.3(c) O&M Agreement	CO Chapter 53, Section 061	1/13/2020
3.6.3(d) O&M Plan	CO Chapter 53, Section 061	1/13/2020
3.6.3(e) Deed Restrictions/Covenants	UDO Article 3, Section 3.4.7	1/10/2005
3.6.3(f) Access Easements	CO Chapter 53, Section 060(C)	1/13/2020
Permit Requirements for Inspections and Enforcement	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(b) Documentation	CO Chapter 53, Section 020	1/13/2020
3.6.2(c) Right of Entry	CO Chapter 53, Sections 061(A) and 061(B)	1/13/2020
3.6.4(a) Pre-CO Inspections	CO Chapter 53, Section 022(C)	5/11/2009
3.6.4(b) Compliance with Plans	CO Chapter 53, Section 022(C)	5/11/2009
3.6.4(c) Annual SCM Inspections	CO Chapter 53, Section 060(B)	1/13/2020
3.6.4(d) Low Density Inspections	CO Chapter 53, Section 041	1/13/2020
3.6.4(e) Qualified Professional	CO Chapter 53, Section 060(B)	1/13/2020
Permit Requirements for Fecal Coliform Reduction	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.6(a) Pet Waste	CO Chapter 53, Section 110	9/13/2021
3.6.6(b) On-Site Domestic Wastewater Treatment	Cabarrus County Development Ordinance Chapter 15, Section 7*	1/19/2021

*Cabarrus County Health Alliance onsite wastewater rules: <https://www.cabarrushealth.org/132/Onsite-Wastewater>

The annual reporting metrics for the post construction program are provided in Table 18: Post Construction Site Runoff Control BMPs below.

The annual reporting metrics for the post construction program are provided in Table 20: Post Construction Site Runoff Control BMPs below.

Table 20: Post Construction Site Runoff Control BMPs

Permit Ref.	3.6.5(a), 3.6.5(b), and 4.1.3: Minimum Post-Construction Reporting Requirements			
	Measures to document activities over the course of the fiscal year (July 1 – June 30) including appropriate information to accurately describe progress, status, and results.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#28.	Standard Reporting			
	Implement standardized tracking, documentation, inspections and reporting mechanisms to compile appropriate data for the annual self-assessment process. Data shall be provided for each Post-Construction/Qualifying Alternative Program being implemented as listed in Tables 18 and 19.	1. Track number of low density and high density plan reviews performed.	1. Continuously Permit Years 1-5	1. Number of plan reviews performed for low density and high density.
		2. Track number of low density and high density plans approved.	2. Continuously Permit Years 1-5	2. Number of plan approvals issued for low density and high density.
		3. Maintain a current inventory of low density projects and constructed SCMs including SCM type or low density acreage, location and last inspection date.	3. Continuously Permit Years 1-5	3. Summary of number and type of SCMs added to the inventory; and number and acreage of low density projects constructed.
		4. Track number of SCM inspections performed.	4. Continuously Permit Years 1-5	4. Number of SCM inspections.
		5. Track number of low density inspections performed.	5. Continuously Permit Years 1-5	5. Number of low density projects inspected.
		6. Track number and type of enforcement actions taken.	6. Continuously Permit Years 1-5	6. Number of enforcement actions issued.
Permit Ref.	3.6.2: Legal Authority			
	Measures to maintain adequate legal authorities through ordinance or other regulatory mechanism to: (a) review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained, (b) request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program, and (c) enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with the Post-Construction Stormwater Management Program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#29.	Legal Authority			
	This permit requirement is fully met by the existing post-construction ordinance.			

Table 20: Post Construction Site Runoff Control BMPs

Permit Ref.	3.6.3: Plan Review and Approval			
	Measures to maintain plan review and approval authority, standards and procedures to: (a) Require Federal, State, and local government projects to comply with Post-Construction Program requirements throughout the entire MS4 permitted area, unless the entity is subject to its own NPDES MS4 permit or a qualifying alternative program, (b) Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre, and sites that disturb less than one acre that are part of a larger common plan of development or sale for compliance with 15A NCAC 02H .1017 and the qualifying alternative programs that apply within your jurisdiction, (c) Ensure that each project has an Operation and Maintenance Agreement that complies with 15A NCAC 02H .1050(12), (d) Ensure that each project has an Operation and Maintenance Plan that complies with 15A NCAC 02H .1050(13), (e) Ensure that each project has recorded deed restrictions and protective covenants, that require the project to be maintained consistent with approved plans, and (f) Ensure that each SCM and associated maintenance accesses be protected in a permanent recorded easement per 15A NCAC 02H 1050 (9) and (10).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#30.	Plan Review and Approval			
	This permit requirement is fully met by the existing post-construction ordinance, see references provided in Table 20.			
Permit Ref.	3.6.4: Inspections and Enforcement			
	Measures to maintain inspection and enforcement authority, standards and procedures to: (a) Conduct post-construction inspections prior to issuing a Certificate of Occupancy or a Temporary Certificate of Occupancy. Alternatively, the project owner may provide a surety bond to guarantee compliance with the approved plan(s), (b) Ensure that the project has been constructed in accordance with the approved plan(s), (c) Ensure annual inspection of each permitted SCM to ensure compliance with the approved Operation and Maintenance Agreement, (d) Ensure inspection of low density projects at least once during the permit term, and (e) Require that inspections be conducted by a qualified professional.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#31.	Inspection and Enforcement Strategies			
	Implement strategies to identify chronic violators, track issuances of NOVs and enforcements, ensure stormwater measures are being maintained.	1. Post Construction Stormwater Inspection	1. Prior to Closeout or Acceptance	1. Number of closeout inspections completed, number of issues addressed
		2. Documentation of Enforcements and Violations, with indicators to show chronic violators	2. Continuously	2. Number of enforcement actions and number of violations
		3. Follow up inspection	3. As Required	3. Number of follow up inspections and number of issues resolved

Table 20: Post Construction Site Runoff Control BMPs

#32.	Inspections			
	Ensure all stormwater control measures meet the Town’s performance standards and are being maintained pursuant to the maintenance agreement. Develop and implement a written inspection program for structural stormwater controls installed pursuant to the Town’s post-construction program. Document and maintain records of inspections, findings and enforcement actions.	1. Implemented inspection program for structural stormwater controls prior to issuing a certificate of occupancy or temporary certificate of occupancy	1. Annually, once per permit term minimum	1. Report number of inspections
#33.	Issuance of Reminder Letters			
	Implement program to effectively communicate with operation and maintenance agreement holders, establish reporting forms and implement schedule for inspections. The Town will issue reminder letters to all O+M Agreement holders to increase compliance.	1. Increase in percentage of compliant sites with reminder letters	1. Annually	1. Number of reminder letters sent
		2. Development of reporting mechanisms and inspection templates	2. Annually	2. Yes/No
#34.	Mechanism for Long-term operation and maintenance			
	Require an operation and maintenance plan for the long-term operation of the SCMs required by the program. Require that the Owner of each SCM perform and maintain a record of annual inspections	1. Develop SCM agreement	1. Once	1. N/A
		2. Ensure that inspections are completed, documented, and performed by a qualified professional.	2. Annually	2. Yes/No
#35.	Inventory of Projects with Post-construction Structural Stormwater Control Measures			
	Maintain an inventory of projects with post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites within the Town’s corporate limits that are covered by post-construction ordinance requirements	1. Updated inventory tracked in the GIS	1. Continuously	1. Report on the number of projects included in this inventory
Permit Ref.	3.6.6: Fecal Coliform Reduction Measures to control, to the maximum extent practicable, sources of fecal coliform per 15A NCAC 02H .1017(7). At a minimum, the program shall include: (a) A pet waste management component, which may be achieved by revising an existing litter ordinance, and (b) An on-site domestic wastewater treatment system component, if applicable, which may be coordinated with local county health department, to ensure proper operation and maintenance of such systems.			

Table 20: Post Construction Site Runoff Control BMPs

BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#36.	Fecal Coliform Ordinance			
	This permit requirement is fully met by the existing post-construction ordinance, see references provided in Table 20.			

PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS

This SWMP provides a comprehensive pollution prevention and good housekeeping strategy for the Town of Harrisburg municipal facilities and operations. Pollution prevention and good housekeeping is accomplished through the implementation of seven required programs, which collectively address the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as parks and open space maintenance, fleet and building maintenance, new construction and land disturbances, and municipal storm sewer system maintenance.

Pollution prevention and good housekeeping for municipal operations includes the following programs:

1. Municipal Facilities Operation and Maintenance Program
2. Spill Response Program
3. MS4 Operation and Maintenance Program
4. Municipal SCM Operation and Maintenance Program
5. Pesticide, Herbicide and Fertilizer Management Program
6. Vehicle and Equipment Maintenance Program
7. Pavement Management Program

The Town of Harrisburg will manage, implement, and report the pollution prevention and good housekeeping BMPs as specified in Table 21 below for each required program.

Table 21: Pollution Prevention and Good Housekeeping BMPs				
Permit Ref.	3.7.1: Municipal Facilities Operation and Maintenance Program Measures to manage facilities that are owned and operated by the permittee and have the potential for generating polluted stormwater runoff. The permittee shall maintain a current inventory of municipal facilities; perform facility inspections and routine maintenance; establish specific frequencies, schedules, and standard documentation; provide staff training on general stormwater awareness and implementing pollution prevention and good housekeeping practices.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
#37.	Municipal Facilities			
	Develop and maintain an inventory of facilities and operations maintained by the Town with the potential for generating polluted runoff	1. Maintain inventory of municipal facilities and inspect facilities annually.	1. Annually	1. Number of municipal facilities and number of inspections.
#38.	Staff Training			
	Implement training sessions for employees involved in activities that have the potential to generate pollution	1. Train employees in pollution prevention and good housekeeping as needed	1. Annually or as necessary	1. Yes/No, number of staff trained.

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.2: Spill Response Program			
	Measures for facilities and operations that store and/or use materials that have the potential to contaminate stormwater runoff if spilled. The permittee shall maintain written spill response procedures and train staff on spill response procedures.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#39	Spill Response Program			
	Develop written spill response procedures for municipally owned or operated facilities	1. Develop spill response procedures, implement, update procedures as needed	1. Permit Year 1, annual review	1. Yes/No
Permit Ref.	3.7.3: MS4 Operation and Maintenance Program			
	Measures to minimize pollutants in the stormwater collection system. The permittee shall provide operation and maintenance staff training on stormwater awareness and pollution prevention, perform MS4 inspections, maintain the collection system including catch basins and conveyances; and establish specific frequencies, schedules, and standard documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#40	O&M Program for Stormwater System			
	Maintain and implement an O&M Program for the stormwater sewer system including catch basins and conveyance system that the Town owns and maintains	1. Maintain the storm sewer system	1. Continuously	1. Number of work orders completed
		2. Evaluate the Stormwater System O&M plan and revise as needed	2. Annually	2. Yes/No
Permit Ref.	3.7.4: Municipal SCM Operation and Maintenance Program			
	Measures to manage municipally-owned, operated, and/or maintained structural stormwater control measures (SCMs) that are installed for compliance with the permittee's post-construction program. The permittee shall maintain a current inventory of SCMs, perform SCM inspections and maintenance, and shall establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#41	O&M for Municipally Owned or Maintained SCMs			
	Maintain and implement an O&M program for municipally owner or maintained SCMs. Ensure that this document specifies the frequency of inspections and routine maintenance requirements	1. Perform and document scheduled inspections	1. Annually	1. Report the number of inspections completed in the reporting year
		2. Evaluate SCM O&M plan and revise as necessary	2. Annually	2. Y/N
#42	SCM Inventory			

Table 21: Pollution Prevention and Good Housekeeping BMPs

	Maintain a current inventory of municipally owned or operated structural stormwater controls	1. Maintain an inventory	1. Continuously	1. Total number of municipally owned SCM's
Permit Ref.	3.7.5: Pesticide, Herbicide and Fertilizer Management Program Measures to minimize water quality impacts from the use of landscape chemicals. The permittee shall provide routine pollution prevention and chemical use, storage and handling training, and shall ensure compliance with permits and applicator certifications.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#43	Evaluation of Materials and Methods			
	Ensure all employees and contractors are trained and permits, certifications and other measures for applicators are followed	1. Ensure contracted applicators are licensed	1. Annually, with contract renewal	1. Yes/No
		2. Provide proper training and ensure licensed applicators are up-to-date on licensing.	2. Annually, or as certifications require	2. Number of licensed applicators
Permit Ref.	3.7.6: Vehicle and Equipment Maintenance Program Measures to prevent and minimize contamination of stormwater runoff from areas used for municipal vehicle and equipment maintenance and/or cleaning. The permittee shall ensure that municipal industrial facilities subject to NPDES industrial permitting comply with those permit requirements, provide routine pollution prevention training to staff, perform routine inspections, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#44	Vehicle and Equipment Cleaning			
	Describe and implement measures to prevent or minimize contamination of stormwater runoff from all areas used for vehicle and equipment cleaning	1. Develop an inspection checklist to ensure that vehicle and equipment facilities are following proper procedures to minimize water quality impacts from vehicle and equipment cleaning and maintenance.	1. Once Permit Year 1	1. Yes/No
		2. Perform inspections of appropriate facilities using inspection checklist and follow-up on any corrective actions needed. Perform re-inspection of any facility that required corrective action.	2. Bi-annually Permit Years 1-5	2. Yes/No, number of inspections

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.7: Pavement Management Program Measures to reduce pollutants in stormwater runoff from municipally-owned streets, roads, and parking lots within the permittee's corporate limits. The permittee shall implement measures to control litter, leaves, debris, particulate and fluid pollutants associated with vehicles, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
#45	Reduction of polluted stormwater runoff from municipally owned streets			
	Establish BMPs to eliminate and reduce polluted stormwater runoff from municipally owned streets	1. Establish written O&M Plan for Municipal streets, roads, and parking lots	1. Once Permit Year 1	1. Yes/No
		2. Street sweeper program	2. Annually	2. Mileage of roadways swept.
		3. Evaluate effectiveness of existing and new BMPs based on cost and the estimated quantity of pollutants removed	3. Annually Permit Years 1-5	3. Yes/No