City of Milton Stormwater Management Program Plan (SWMP)

Foreword:

The city of Milton originally submitted its Storm Water Management Plan (SWMP) to the West Virginia Division of Environmental Protection, Department of Water and Waste Management (DWWM) in March 2007, which was subsequently approved. In recent years, however, the city did not have a dedicated Stormwater Program Coordinator to implement the plan. In 2017, the city received a Notice of Violation from the DWWM requiring an update to the SWMP and continued efforts to minimize pollution. Although the previous administration did not supply a new Stormwater Program Coordinator after the posting of the violation, the current administration has since placed a new Stormwater Program Coordinator to remedy any violation imposed by WVDEP. This updated SWMP has been prepared in response to that Notice of Violation and outlines the city's renewed commitment to effective stormwater management.

CERTIFICATION

By completing and submitting this application, I have reviewed and understand and agree to the terms and conditions of #WV0116025 small MS4 General Permit issued on June 22, 2009. I understand that the provisions of the MS4 general permit are enforceable by law. Violations of any term and condition of the general permit are enforceable by law. Violations of any term and condition of the general permit and/or other applicable law or regulations lead to enforcement action.

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 knowing violations.

Authorized Signature: _____

Printed Name: Shane Evans

Title: Mayor of the City of Milton, West Virginia

Date: _____

I. INTRODUCTION

A. General Information

This Stormwater Management Program (SWMP) Plan has been developed to comply with Part II, Paragraph A of the West Virginia Division of Environmental Protection (WVDEP) General NPDES Permit No. WV0116025 for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s). The purpose of this plan is to maintain or improve water quality of the receiving streams. The city of Milton has been designated by the Environmental Protection Agency (EPA) under Code of Federal Regulations (CFR) 40.122.32(a)(1) as a Phase II MS4 to be regulated under the NPDES permit program.

The city of Milton was originally registered under the General Permit on April 15, 2003. Under the requirements of this registration, the city prepared a SWMP and submitted it to WVDEP. WVDEP approved the SWMP on March 8, 2007. Following approval of the SWMP, DEP reissued the NPDES permit on January 22, 2009.

The city of Milton is located primarily on the north bank of the Mud River in Cabell County, West Virginia. The city was founded in 1876. The city is easily accessible via Interstate 64 and/or US Route 60 that dissects the city and runs parallel to Mud River. As of the census of 2023, there were 2,773 people, 1,217 households, and 628 families residing in the town. The population density was 1,400.0/mi². There were 1,494 housing units at an average density of 708.2/mi². The census of 2020 estimates that the current population has increased to 2,811. The area inside the city Boundary is approximately 1.58 square miles.

The census of 2020 median income for a household in the town was estimated at $29,555.

Milton is noted for its historic covered bridge across the nearby Mud River. In 2002, the covered bridge was moved to nearby Pumpkin Park. The town is also known for Blenko Glass, which is located across the street from Pumpkin Park.

Milton is served by the schools of the Cabell County Board of Education. In 1994, the Board consolidated most of its schools into a few large facilities. Primary education is given at Milton Elementary, while middle school students attend Milton Middle School. High school students began attending Cabell Midland High School, a facility resulting from the consolidation of Barboursville High School and Milton High School in the fall of 1994. Cabell Midland High School is in Ona.

Milton is currently the host of the county fair of Cabell County, West Virginia. Milton is also noted for its annual Pumpkin Festival, held in early October. The festival has occurred regularly since 1985.

There are drainage areas outside the city Boundary that conceivably produce surface water runoff that naturally drains into the city. These areas include the hollows along Newmans Branch, Johns Creek, Kilgore Creek, and Indian Fork. The watershed area outside the city Boundary is approximately 11,695 acres (18.3 square miles).
The total watershed area is approximately 12,706 acres (19.9 square miles).

There are five receiving streams in the city Watershed. They are:

- Mud River
- Newmans Branch
- Johns Creek
- Kilgore Creek
- Indian Fork

The Mud River is on the WVDEP's Section 303(d) Total Maximum Daily Load (TMDL) Priority List as being biologically impaired with a pollutant of concern being Selenium. Johns Branch and Kilgore Creek are also on the 303(d) TMDL Priority List for CNA-biological (conditions not allowable – biological) impairment.

The city has a map of its existing storm sewer system.

Prior to the preparation of a storm sewer system map, the city estimates that its storm sewer system currently has approximately 8,605 feet of storm sewer, seventy-five (75) catch basins, and six (6) storm water outfalls. The city also estimates that there are approximately 1.5 miles of open ditches in the watershed.

All outfalls discharge to the Mud River inside the jurisdictional watershed. Most of the discharge points are submerged and cannot be monitored for discharges.

There currently are no stormwater retention (permanent stormwater) facilities in the Watershed. There is a natural low area which acts as a de facto detention (short-term storage of stormwater) facility with a capacity of approximately 267,800 cubic gallons in the Watershed.

Two of the storm sewer lines, Glenwood Avenue and Washington Avenue, are interconnected to Interstate 64. Two receiving streams, John’s Creek and Newman’s Branch are also interconnected to Interstate 64. The rest are not interconnected to any stormwater systems owned or operated by the Division of Highways for Interstate 64 or US Route 60.

The city sanitary sewer system is designed as a separate system and does not have any known combined sewer overflows (CSOs).

The city of Milton is scheduled to construct a floodwall system in 2028 to improve protection against extreme flood events. The project will include an 8,300-foot levee/floodwall, two pump stations, a gate closure, and a 1,000-foot relocation of the Mud River. Once completed, the

system is designed to provide protection against floods up to the 250-year level of risk, significantly enhancing the city's overall stormwater and flood management capabilities.

B. Permit Information

The city of Milton was granted registration under the General NPDES Permit on July 22, 2009. Pertinent information on this permit is as follows:

General NPDES Permit No.: WVXXXXXXX
Registration No.: WVRXXXXXX
Permit Effective Date: MM-YY-YYYY
Permit Expiration Date: MM-YY-YYYY
Permit Holder: Milton Municipal Utilities Commission
1139 Smith Street
Milton WV 25541

C. Contact Information

The person responsible for implementation of this plan is the city of Milton Stormwater Coordinator. Contact information for this person is as follows:

Name: Noah Harshbarger
Title: City of Milton Stormwater Coordinator
Address: City of Milton 1139 Smith Street, Milton, WV 25541
Telephone: 304-743-3032 (Ext. 209)
Fax: 304-743-1872
Email: nharshbarger@cityofmiltonwv.com

Note: It is the responsibility of the designated Stormwater Coordinator to ensure that all pertinent departments and department heads within the MS4 are made aware of any required information, activities or functions associated with permit compliance. Other program designees may include (but are not limited to):

- Elected Officials
- Public Works Director
- Water and Sewer Department Managers
- Other Relevant Departments

II. STORMWATER MANAGEMENT PROGRAM PLAN

This SWMP is based on the Federal Stormwater Phase II Rule, issued on December 8, 1999 (64FR68722), which requires small municipal separate storm sewer system (MS4) owners and operators to develop a Stormwater Management Program. There are six program elements designed to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). The program elements, titled Minimum Control Measures (MCMs), include:

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

This document describes each MCM and the Best Management Practices (BMPs) that will be implemented to maintain compliance with the permit. Responsibilities to achieve and sustain compliance are clearly defined for each BMP. The work will be coordinated by the city Stormwater Coordinator.

The city recognizes that polluted stormwater runoff is often transported to MS4s and ultimately discharged into local rivers and streams without treatment. Common pollutants include oil and grease from roadways, pesticides from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging recreational use of the resource, contaminating downstream water supplies, and interfering with the habitat for fish, or other aquatic organisms, and wildlife.

The city also recognizes that the Mud River, Johns Branch and Kilgore Creek are on the WVDEP 303(d) TMDL list as impaired streams. The Mud River is listed for selenium. Johns Branch and Kilgore Creek are listed as biologically impaired.

Based on the foregoing areas of concern, the city will tailor its program to include Best Management Practices (BMPs) to address the following contaminants:

- Oil and grease from roadways and industrial sites.
- Trash and other floatables
- Suspended solids from construction sites.
- Nutrients such as nitrogen and phosphorus.

A. Testing and Sample Data

The MS4 general permit requires that the owner/operator sample from one representative outfall twice a year. The city has chosen the storm sewer that discharges between Glenwood and Washington Streets. This storm sewer picks up much of a densely populated area served by city streets and numerous catch basins. This outfall was chosen as it will be just stormwater being sampled whereas most of the other city outfalls are combined with perennial streams. The coordinates of this outfall are:

38° 26’ 15” N

82° 07’ 53” W

The total list of contaminants that will be sampled at this outfall is:

- Total Kjeldahl Nitrogen (TKN)
- Nitrate Nitrogen
- Nitrite Nitrogen
- Total Phosphorus

In addition to sampling for these contaminants, the city will also conduct upstream and downstream sampling and testing for the following contaminants:

- BOD-5
- TSS
- Oil & Grease
- Fecal Coliform
- Ammonia Nitrogen
- pH

Samples will be taken during April and September. The samples will be grabbing samples and will be taken during the first thirty (30) minutes of a storm event causing a discharge from the system.

The samples will be taken by the Stormwater Program Coordinator.

The sampling and testing program will be managed by Noah Harshbarger, Milton Stormwater Program Coordinator. Mr. Harshbarger will coordinate the collection and delivery of the samples to a certified laboratory for analysis.

In addition to sampling the representative outfall, the city will take a grab sample upstream of the city watershed on the Mud River to document the same contaminants as they enter the city watershed. The city will also take a grab sample at least 100 feet downstream of the last storm sewer outfall and have it tested for the same contamination. The test results will allow the city to ascertain any impact it has on the water quality of the Mud River.

B. Accomplishments to Date

The purpose of this updated SWMP is to provide a written plan that restates the objectives the city intends to meet and to provide updates to the plan approved on March 8, 2007, by WVDEP. While this updated SWMP provides certain BMPs needed to meet the six MCMs, some of the BMPs that meet the city's objectives have already been accomplished. These include:

Stormwater Coordinator: The city recognized within the current administration that it needed to provide someone solely to oversee the MS4 program, so it created the position of Stormwater Program Coordinator and hired a part-time person to fill this position. Mr. Donald Hill served as Stormwater Coordinator until approximately March 2009 at resignation. The city replaced Mr. Hill with Mr. Edward R. Rutledge as the next Stormwater Coordinator. The position was filled

in October 2010 until resignation. Since then, the seat has remained vacant until the current administration, appointing Noah Harshbarger (Floodplain Manager) as the Stormwater Program Coordinator as of August 2025. The term 'Stormwater Coordinator' will be referenced as the former and 'Stormwater Program Coordinator' throughout this document, and they should be recognized synonymously.

Minimum Control 1: As part of an ongoing progression of public outreach, outreach has been targeted to facilities and partnerships that have been underutilized: the Cabell County (Milton) library, the Scouts, and revitalized partnerships with Pace Analytics and the WVDEP.

Minimum Control Measure 6: As part of the implementation of Best Management Practices for this measure, the city has started implementing use of the streetsweeper on a regular basis. A schedule has been created (biweekly) for the street-sweeper to clear debris from main/commercial roads, residential areas, and critical waterways for the year.

C. Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts

The city's Public Education and Outreach control measure will target the public, businesses including home-based and mobile businesses, homeowners, landscapers, property managers, engineers, contractors, developers, review staff, and land use planners. The city believes that an informed and knowledgeable community is crucial to the success of the stormwater management program. The city believes that as the public becomes aware of the personal responsibilities expected of them and others in the community, including the individual actions they can take to protect or improve the quality of area waters, increased compliance with the stormwater program is anticipated. The city's plan has two major initiatives: the formation of partnerships and the use of educational materials.

The SWMP approved by WVDEP on March 8, 2007, included two BMP's for addressing Public Education and Outreach. These were: 1) create a stormwater website; and 2) distribute brochures and fact sheets related to stormwater quality for distribution to one third (1/3) of the customer base each year as well as creating a stormwater hotline and storm drain stenciling program.

No formal partnerships have been established at this time. The city, in an initiative to involve the public more, will likely pursue the creation of a Mud River Watershed Workshop Series leading into the formation of the Mud River Watershed Association. Following will be the formal creation of the Citizen's Action Group to assist with organizing partnerships and educating the public on stormwater issues. The city will pursue the creation of a Mud River Watershed Association, and other groups, if possible, to educate the public about stormwater management issues. OBJ

1.1 Description of Minimum Control Measures

The Public Education and Outreach MCM consists of BMPs that focus on the development of educational materials designed to inform the public about the impacts that stormwater discharges have on local water bodies. The educational materials will contain specific actions as to how the public, as individuals or collectively as a group, can participate in reducing pollution and their impact on the environment. The Public Education and Outreach Program BMPs, in combination, are expected to reach constituents within the MS4 boundary. The target pollutant sources are construction site runoff, impacts from new and re-development projects, and illicit discharges. The education and outreach strategy to reach the public will be comprised of several methods to distribute the information. The city will develop information regarding the city's MS4, storm water management, pollution prevention, illicit discharges and other information of interest to the public regarding storm water management and pollution prevention. This information will be distributed through brochures developed by the city supplemented by commercially prepared brochures for such purposes as articles in the local *Miltonian* newsletter, posters, and placement of information on the city Stormwater Web Page.

The education and outreach strategy for targeting businesses, including home-based and mobile businesses, will include the distribution of information regarding the prevention of storm water pollution and run-off pollution due to business activities. Special target businesses will be car washes, garages, auto parts stores, businesses with parking lots, and home-based and mobile businesses. This information will be distributed through brochures developed by the city supplemented by commercially prepared brochures for such purposes as articles in the local *Miltonian* newsletter, posters, and placement of information on the city Stormwater Web Page. The education and outreach strategy targeting homeowners, landscapers, and property managers will include the distribution of information regarding storm water pollution from such activities originating from residential property such as excessive fertilizing, grass clippings, leaves, oil, surfactants from washing cars, etc. This information will be distributed through brochures developed by the city supplemented by commercially prepared brochures for such purposes, articles in the local *Miltonian* newsletter, posters, and placement of information on the city Storm Water Web Page. The education and outreach strategy targeting engineers, contractors, developers, review staff, and land use planners will include the distribution of the city's requirements for providing proper controls and BMPs for projects inside the MS4 boundaries. The information for engineers, contractors and developers will be placed on the city Stormwater Web Page as well as being included in all application packets provided for permits. Plan reviewers and land use planners will be educated via one-on-one education programs with the city Stormwater Coordinator who will conduct classes at least once per year to continue to educate on the importance of implementing BMPs and how to review plans to make sure such BMPs are included by engineers and contractors. Regular articles relating to proper storm water management practices will be included in each issue of *The Miltonian*, with each issue either targeting a different target group, or the articles will be providing information pertinent to all groups. Copies of the articles will also be available on the city Stormwater Web Page.

1.2 Best Management Practices

The city has selected the following BMPs to satisfy this MCM:

BMP 1.1: Stormwater Web Page

Measurable Goal: Maintain a dedicated stormwater page on the City of Milton website with updated information on the City's MS4 Program, pollution prevention practices, ordinances, permitting processes, and links to additional resources.

Responsible Person: Stormwater Coordinator

Justification: Provides public, businesses, contractors, and developers with easy access to stormwater information and compliance requirements.

Tracking: Document update dates, content added/revised, and track site traffic. Include screen captures in annual reports.

BMP 1.2: K-8 & Homeowner Stormwater Education Program

Measurable Goal: Provide stormwater education to at least 50% of K–8 students in Milton Elementary and Middle Schools every two years through presentations, workshops, and supporting materials (videos, handouts, and activities). Additionally, hold 2–3 homeowner workshops per year on Rain Barrel and Rain Garden practices to teach stormwater capture and runoff reduction techniques.

Person Responsible: Stormwater Coordinator

Justification: Builds early awareness of stormwater issues among students and engages homeowners in practical stormwater management practices to protect water quality.

Tracking: Record dates, materials used, number of students and homeowners reached, presenters involved, and any follow-up engagement or feedback.

BMP 1.3: Newsletter, Brochures and Social Media

Measurable Goal: Provide a brief article of interest for each issue of *The Miltonian*. *The Miltonian* is published six times per year, thus, six articles per year will be written. Implement articles every two months on

average. Post stormwater tips monthly on the City's Facebook page. Distribute educational brochures (EPA or state-approved) annually via utility bills or community events.

Person Responsible: Stormwater Coordinator and City Clerk

Justification: Provides consistent, repeated messaging to reach most residents and businesses with practical stormwater education.

Tracking: Keep copies of newsletters, brochures, and social media posts; track distribution numbers and engagement where possible.

Table 1 identifies the BMPs, schedule, measurable goals and responsible person(s) for the Public Education and Outreach minimum control measure.

1.3 Effectiveness Evaluation

This MCM is designed to inform the public about the impacts of stormwater issues and to gain their input on the programs needed to achieve this objective. Thus, the evaluation of the effectiveness will be:

- Tracking the number of visits to the web page.
- Tracking number of comments received on brochures
- Tracking number of comments received on articles in The Miltonian
- Tracking the number of calls received on the Hotline and the nature of the calls
- Monitoring attendance at public meetings
- Tracking requests for information

The effectiveness evaluation will be conducted annually by the Stormwater Coordinator.

TABLE 1

PUBLIC EDUCATION AND OUTREACH ELEMENTS

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Responsible Person(s)
1.1	Update outdated Stormwater Page on city website	Update/maintain on regular basis	Maintain & update at least quarterly	Stormwater Coordinator
1.2	K-8 / Homeowner Stormwater Education Program	Educate 50% of students in Milton Elementary & Middle Schools every 2 years; hold 2–3 workshops per year for homeowners teaching stormwater capture and slowing techniques	Students: every 2 years; Homeowners: 2–3 workshops per year	Stormwater Coordinator
1.3	Distribute stormwater education materials via print and social media	6+ newsletter articles per year, monthly FB posts	Newsletter: every 2 months; FB: monthly	Stormwater Coordinator and City Clerk

D. Minimum Control Measure 2: Public Involvement and Participation

The EPA believes that the public can provide valuable input and assistance to a regulated Small MS4 municipal stormwater management program and, therefore suggests that the public be given opportunities to play an active role in both the development and implementation of the program. An active and involved community is crucial to the success of a stormwater management program because it allows for:

- Broader public support since citizens who participate in the development and decision-making process are partially responsible for the program and, therefore, may be less likely to raise legal challenges to the program and more likely to take an active role in its implementation;
- Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of citizen volunteers;
- A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource, and
- A channel to other programs as citizens involved in the stormwater program development process provides important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a stormwater program on a watershed basis, as encouraged by EPA.

2.1 Description of Minimum Control Measure

The Public Involvement and Participation MCM consists of a set of BMPs that are focused on getting members of the local community involved in the MS4's municipal stormwater management program. Compliance with State and local public notice requirements will be maintained whenever public participation is sought out or required. The BMPs include several practices designed to seek public input on the SWMP and Annual Report accomplishments in addition to describing specific activities that encourage public participation. The target audiences for the public involvement program are key individuals and groups that may have an interest in the BMPs as well as the public located within the permitted boundary.

2.2 Best Management Practices

The city has decided to organize a Watershed Workshop Series to help in both the development and implementation of its stormwater program. The city has also decided to promote city cleanup programs to help prevent stream pollution. The city will invite the public to participate in city Council meetings and Utility Board meetings to express its views on the stormwater program. It is the city's objective to involve stakeholder groups, including local businesses, watershed groups, and citizens, in making decisions about stormwater management priorities and programs. In addition, the Storm Water Coordinator will establish exhibits and kiosks/booths at special city events, such as the Pumpkin Festival where they will provide storm water brochures, posters, and educational information. The Storm Water Coordinator will also prepare a pledge

contract and will provide those at special events. The purpose of the pledge contract will be to solicit the public to sign the pledge stating that they will "buy-in" to the MS4 program established by the city and assist with policing the program.

The following BMPs have been selected by the city to satisfy the requirements of this MCM:

BMP 2.1: Community Watershed Workshop Series

Measurable Goal: Conduct quarterly workshops or meetings to educate residents, local businesses, and stakeholders on stormwater management, water quality protection, and pollution prevention. First workshop to be held on January 31, 2026; quarterly thereafter.

Responsible Person: Stormwater Coordinator

Justification: Engaging stakeholders' early fosters support for stormwater programs and provides a forum for questions, concerns, and suggestions before formal policy changes.

Tracking: Document workshop dates, topics covered, number of attendees, and feedback received. Maintain sign-in sheets and meeting notes for each session.

BMP 2.2: Advertise and Hold Public Meetings

Measurable Goal: Integrate stormwater program updates into two City Council or Utility Board meetings per year, providing the public an opportunity to discuss stormwater issues. First meeting is to be advertised by October 2025; second meeting is by March 2026.

Responsible Person: City Clerk and Utility Board

Justification: Public meetings increase awareness of stormwater issues, citizen responsibilities, program costs, and benefits.

Tracking: Maintain copies of meeting notices, agendas, and minutes. Record names and contact information for attendees who speak or provide feedback.

BMP 2.3: City Cleanup Campaigns

Measurable Goal: Hold two citywide cleanup campaigns annually (Spring and Fall) beginning in Fall 2025.

Responsible Person: Public Works Director/City Manager

Justification: Cleanup campaigns reduce debris that may enter receiving waters, engage the community, and promote stewardship of local waterways.

Tracking: Collect documentation such as campaign advertisements, photos of participation, and landfill tickets showing the volume of waste removed.

Table 2 identifies the BMPs, schedule, measurable goals and responsible person(s) for the Public Involvement/Participation minimum control measure.

2.3 Effectiveness Evaluation

The objective of this MCM is to gain public involvement. The desire is to gain public input on strategies and the direction the SWMP should take in future years. Accordingly, the effectiveness of this program will be measured by:

- The number and background involved in the Watershed Workshop Series
- An increase in attendance at city Council meetings and Utility Board meetings with interest in storm water issues.

The effectiveness evaluation will be conducted annually by the Stormwater Coordinator

TABLE 2
PUBLIC INVOLVEMENT PARTICIPATION

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Responsible Person(s)
2.1	Community Watershed Workshop Series	Conduct quarterly workshops or meetings for residents and local stakeholders to educate on stormwater impacts, water quality, and pollution prevention	First workshop by Jan 31, 2026; quarterly thereafter	Stormwater Coordinator
2.2	Advertise and hold two public meetings per year at city Council or Utility Board meetings.	Provide public opportunity to discuss stormwater program issues	Commence Oct 2025	City Clerk and Utility Board
2.3	City Cleanup Campaigns	Advertise and conduct city Cleanup Campaigns in the Spring/Fall of each year	Commence in Oct 2025	Public Works Director
2.4	Volunteer Storm Drain Marking Program	Mark 25% of city storm drains each year until complete.	Begin Sept 2025	Stormwater Coordinator

E. Minimum Control Measure 3: Illicit Discharge Detection & Elimination

Illicit discharges to MS4s are wastes and wastewaters that are not from storm water runoff and are not otherwise authorized by a NPDES permit. These discharges enter the system either through direct connections (wastewater piping connected to storm drains, for example) or through indirect connections (infiltration from leaky wastewater systems, spills, dumping into the storm drain, etc.). Examples of sources of illicit discharges include, but are not limited to:

- Sanitary wastewater leaks from sanitary sewer to the storm sewer.
- Runoff from car washes from residential sites and "fund-raising" sites.
- Car wash wastewater
- Improper oil disposal
- Radiator flushing disposal
- Laundry wastewater
- Spills from roadway accidents
- Improper disposal of auto and household toxics
- Highly chlorinated potable water system "flushouts" by water system operators.

The result of these sources entering MS4 are untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies.

3.1 Description of Minimum Control Measure

The Illicit Discharge Detection and Elimination (IDDE) MCM consists of BMPs that focus on the detection and elimination of illicit discharges located within the MS4. The BMPs describe outfall mapping and update procedures, the legal authority mechanism that will be used to effectively prohibit illicit discharges, enforcement procedures and actions to ensure that the regulatory mechanism is implemented, the dry weather screening program, procedures for tracking down and locating the source of any illicit discharges, procedures for locating priority areas, and procedures for removing the sources of illicit discharges.

The city's objective for illicit discharge detection and elimination (IDDE) is to eliminate non-stormwater discharges.

The city currently does not have an IDDE Program, thus, under this MCM, the city will develop such a program to detect and eliminate illicit discharges.

The city currently has an IDDE Ordinance which is Article 932 of the Milton City Code. This code currently does not address discharges from hyper-chlorinated water line flushing, lawn watering, irrigation runoff, street, parking lot, sidewalk wash water or building wash down. These items will be covered in the public education materials developed under other MCMs and will be covered by the written IDDE Program to be developed below.

3.2 Best Management Practices

The city has already enacted an ordinance addressing illicit discharges. This ordinance is Article 932 of the City Ordinances, called Stormwater Management and Surface Water Discharge Control. This Article authorizes the development and implementation of an IDDE program. While this article has already been prepared, it needs to be reviewed and updated to fully comply with the conditions of the NPDES Permit.

The following additional BMPs will be used for Illicit Discharge Detection and Elimination:

BMP 3.1: Mapping of Storm Drainage System

Measurable Goal: Maintain an up-to-date digital map of the city's storm drainage system, with periodic reviews and updates to reflect new construction, repairs, or system changes.

Responsible Person: Stormwater Coordinator

Justification: Keeping the drainage system map current ensures accurate planning, inspection, and emergency response, as well as supporting IDDE and other stormwater management programs.

Tracking: Document updates, revisions, and date of each review; store electronic copies in a centralized system accessible to relevant staff.

BMP 3.2: Develop and implement an IDDE program.

Measurable Goal: Maintain and implement a written IDDE program that includes routine outfall screening, investigation of complaints, and enforcement procedures. Review and update the written program at least once every 5 years or as regulations change.

Responsible Person: Stormwater Coordinator

Justification: Illicit discharges can significantly degrade receiving water quality and threaten aquatic life and human health. An active IDDE program ensures detection, tracking, and elimination of non-stormwater discharges into the MS4.

Tracking: Keep records of inspections, outfalls screened, investigations conducted, IDDE events identified, violations issued, and actions taken each year.

BMP 3:3: Citizen Hotline for Illicit Discharge/Illegal Dumping

Measurable Goal: Maintain a hotline (phone and online reporting form) for citizens to report illegal dumping and suspicious discharges. Promote the hotline at least twice per year through city newsletter, website, and utility bill inserts.

Responsible Person: Stormwater Coordinator

Justification: Public reporting supplements municipal inspections and facilitates timely cleanup and remediation of dumping sites. It also raises community awareness of stormwater pollution prevention.

Tracking: Record the number and type of calls/reports received, dates, follow-up actions taken, and outcomes. Maintain copies of outreach materials used to advertise the hotline.

Table 3 identifies the BMPs, schedule, measurable goals and responsible person(s) for the Illicit Discharge Detection and Elimination minimum control measures.

3.3 Effectiveness Evaluation

The objective of this MCM is to eliminate illegal storm water discharges to the storm water sewer system. Given that the city has not tracked or kept a record of illicit discharges into the sewer in the past, there is no baseline for comparison. Thus, to evaluate the effectiveness of the program, the following criteria will be used:

- Track the first year IDDE violations and record the number
- Record subsequent IDDE violations
- Effectiveness will be measured by a reduction in violations
- Track the number of citizens reports received and investigated
- Track the number of outfalls screened annually for potential illicit discharges

The effectiveness evaluation will be conducted annually by the Stormwater Coordinator.

TABLE 3

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Responsible Person(s)
3.1	Mapping of Storm Drainage System	System mapped, digitizing/prioritizing in reference to 5.5	Completed, refer to 5.5 for next steps	Stormwater Coordinator
3.2	Develop and Implement IDDE Program	Maintain a written program; conduct routine inspections and investigations	Ongoing; review every 5 years	Stormwater Coordinator
3.3	Citizen Hotline	Maintain hotline; advertise at least twice per year; track reports	By April 1, 2011	Stormwater Coordinator

F. Minimum Control Measure 4: Construction Stormwater Management

Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. These pollutants may include the following:

- Sediment
- Solid and sanitary waste
- Phosphorus (fertilizer)
- Nitrogen (fertilizer)
- Pesticides
- Oil and Grease
- Concrete truck washout
- Construction chemicals
- Construction debris

Of those pollutants, sediment is usually the main pollutant of concern from construction sites. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. Thus, construction sites can be a significant source of sediment for MS4s, especially when installation and maintenance of erosion and sediment controls are not required or adequately enforced.

4.1 Description of Minimum Control Measure

The Construction Site Runoff MCM consists of BMPs that focus on the reduction of pollutants to MS4 from construction activities that result in land disturbance of greater than one acre. The BMPs describe the legal authority mechanism that will be used to require erosion and sediment controls, enforcement procedures and actions ensure compliance, requirements for construction site operators to implement appropriate erosion and sediment control BMPs, requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site, procedures for plan review which incorporate the consideration of potential water quality impacts, procedures for receipt and consideration of information received from the public, and procedures for site inspection and enforcement of control measures.

4.2 Best Management Practices

The city's objective for this MCM is to establish BMPs that set forth a set of minimum erosion and sediment control (ESC) requirements for construction sites that disturb one acre or more, including planning, installation, inspection and maintenance of ESC practices. Article 932 of the city's Ordinances addresses construction runoff including standards for treatment of stormwater, prevention of increased post-development discharge rates, required maintenance of permanent stormwater facilities, as well as the authority to conduct inspections on post construction structural BMPs. Article 932 currently does not regulate disturbance of one acre or more or disturbance of one acre or less if it is part of a larger common plan, thus, it will be necessary to

amend the Article in the future to cover such areas. The ordinance will also need to be updated to include requirements for construction site operators to implement BMPs and control waste, demonstrate they have appropriate NPDES registration, and authority for public input. The ordinance already requires proper sediment & erosion control BMPs, provides authority for site plan review, provides authority for site inspections & enforcement, and provides funding for inspections; however, these elements will be reviewed and updated as needed.

The following BMPs will be established to address the Construction Site Runoff Control MCM:

BMP 4.1: Review and Update Construction Site Runoff Control Ordinance

Measurable Goal: Maintain an ordinance requiring erosion and sediment control (ESC) plans for all construction sites with one acre or more of land disturbance. Review ordinance every 5 years (or as state/federal requirements change) to ensure it includes the nine minimum components: ESC BMPs, implementation requirements, NPDES coverage demonstration, plan review authority, public input, inspection/enforcement authority, adequate funding for enforcement, and construction site operator training.

Responsible Person: City Council/Mayor (implementation support by Stormwater Coordinator)

Justification: Small construction sites contribute comparable sediments per acre as large sites. Keeping ordinance requirements current ensures enforceable standards that prevent sediment from entering the MS4.

Tracking: Record dates of ordinance reviews/updates, council actions, and maintain copies of updated ordinances.

BMP 4.2: Perimeter Control Requirements for Construction Sites

Measurable Goal: Require all projects with one acre or more of disturbance to install and maintain appropriate perimeter controls. Review erosion and sediment control (ESC) plans for compliance and conduct site inspections to verify implementation.

Responsible Person: Stormwater Coordinator

Justification: Requiring effective perimeter controls and ensuring their maintenance reduces failure rates and helps maintain water quality standards.

Tracking: Record number of ESC plans reviewed, number of sites inspected, locations where ESC controls were implemented, inspection results, and follow-up actions taken.

BMP 4.3: ESC Plan Review and Inspection Checklist

Measurable Goal: Maintain and use a standardized checklist for plan reviews and site inspections. Review and update checklist annually to reflect best practices and regulatory changes.

Responsible Person: Stormwater Coordinator

Justification: A checklist ensures consistency and accountability in planning reviews and inspections and creates written documentation of compliance and corrective actions.

Tracking: Record number of plan reviews and inspections performed with the checklist; maintain copies of completed checklists, inspection reports, review memoranda, and approval letters.

Table 4 identifies the BMPs, schedule, measurable goals and responsible person(s) for the Post Construction Runoff Control minimum control measures.

4.3 Effectiveness Evaluation

The objective of this MCM is to prevent stream pollution caused by runoff and debris from construction sites. The program will be considered effective when:

- ESC requirements are consistently incorporated into site plans.
- The ESC review/inspection checklist is used for all applicable projects.
- Records demonstrate enforcement and follow-up on deficiencies.
- Annual program evaluation shows improvement in compliance rates.

Effectiveness evaluation will be conducted annually by the Stormwater Coordinator.

TABLE 4
CONSTRUCTION RUN-OFF CONTROL

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Responsible Person(s)
4.1	Construction Runoff Control Ordinance	Maintain ordinance with nine minimum components; review/update every 5 years	Ongoing	City Council/Mayor
4.2	Perimeter Control Requirements	Require ESC controls on all sites ≥1 acre; review ESC plans and inspect for compliance	Ongoing	Stormwater Coordinator
4.3	ESC Checklist	Use standardized checklist for all plan reviews and inspections; review annually	Ongoing	Stormwater Coordinator

G. Minimum Control Measure 5: Controlling Run-off from New Development and Redevelopment

Post-Construction stormwater management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving waterbodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction stormwater discharges is the most cost-effective approach to stormwater quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the waterbody during storms. Increased impervious surfaces (e.g., parking lots, driveways, and rooftops) interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include streambank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property.

The city of Milton owns and operates its own drinking water treatment plant and uses the Mud River as its source of raw water supply. One of the city's major goals in the preparation of this SWMP is the protection of the city's drinking water supply. Under the new Homeland Security policies, Milton no longer releases information to the public on the location of the raw water intake and all information regarding this intake will be kept confidential and made only available to WVDEP when requested in writing.

5.1 Description of Minimum Control Measure

The Post-Construction Stormwater Management MCM consists of BMPs that focus on the prevention or minimization of water quality impacts from both new and re-development projects that disturb one acre or more.

New development and significant redevelopment projects offer a host of opportunities to install structural runoff controls. The city's objective for this MCM is to reduce the volume and improve the quality of stormwater runoff by reducing impervious surfaces and installing and maintaining structural controls.

5.2 Best Management Practices

The Post-Construction Stormwater Management MCM consists of BMPs that focus on the prevention or minimization of water quality impacts from both new and re-development projects that disturb once acre or more. The BMPs describe structural and/or non-structural practices, the legal authority mechanism that will be used to address post-construction runoff from new development and redevelopment projects, and procedures to ensure long-term operation and maintenance of BMPs.

The Milton city Code, Article 932, as well as other ordinances dealing with runoff from subdivisions and other new development or redevelopment projects will incorporate the following six watershed protection elements in the ordinance:

1. Minimizing impervious surfaces
2. Preserving ecologically sensitive areas
3. Reducing thermal impacts
4. Reducing or avoiding hydro modification
5. Tree protection
6. Protection of native soils, prevention of compaction of soils

Article 932 of the Milton city Code, as well as the subdivision regulations, will be reviewed and revised as needed to require that site design standards include managing the first one inch of rainfall in a 24-hour storm following 48 hours without rain. Management practices such as canopy interception; soil amendments; evaporation; rainfall harvesting; engineered infiltration; extended infiltration; and evapotranspiration will all be included as possible management practices. The regulations will also be reviewed to ensure that there is an enforcement mechanism in place to make sure that these practices are included in the plan at the design stage and constructed as a part of the construction phase.

Article 932 of the Milton city Code, as well as the subdivision regulations will be reviewed and revised as needed to provide provisions for reducing pollutant loadings for stormwater discharges from “Hot Spots”. The regulations will be amended to ensure that if the “Hot Spot” cannot meet water quality treatment with on-site controls, that provisions for proper disposal of stormwater discharges at a treatment/disposal facility is included.

The city of Milton Building Department currently reviews subdivision plans and new development plans, when submitted, to ensure compliance with the current building codes established by the city. This process will be amended immediately to ensure that the Storm Water Coordinator is also included in the review team so that they may review all designs pertaining to stormwater controls, treatment, mitigation, and compliance with this SWMP. The new process will include:

1. Procedures for review and approval of a pre-application concept plan
2. Procedures for site plan review and approval
3. Submittal of as-built drawings

4. Post construction verification
5. An educational program targeting internal staff and external project proponents about stormwater management requirements.

The city's current subdivision regulations and city Code Article 932 further do not include provisions for inventory and tracking of stormwater control practices once they have been approved during plan reviews or conceptual review. The city will incorporate provisions for tracking these controls and the tracking system will accommodate: Source control practices; treatment practices; GIS locations; digital photographs; maintenance requirements; and inspection data.

The following BMPs will be implemented to address this MCM:

BMP 5.1:	Post-Construction Runoff Controls Program
Measurable Goal:	Develop a program to require all new and redevelopment projects to incorporate structural controls managing the first inch of rainfall in a 24-hour storm. Review and amend city Code Article 932 and applicable subdivision regulations to support this requirement.
Responsible Person:	Stormwater Coordinator/Building Department/City Council
Justification:	Maintaining runoff at current levels will reduce overall stormwater impacts.
Tracking:	Record program documentation and the number of projects reviewed and approved with structural controls.

BMP 5.2:	Code and Subdivision Regulation Updates
Measurable Goal:	Review Article 932 of the Milton City Code and subdivision regulations and revise as needed to provide provisions for reducing pollutant loadings from Hot Spots. Ensure that if water quality treatment cannot be achieved on-site, proper disposal at a treatment/disposal facility is required.
Responsible Person:	Stormwater Coordinator/Building Department/City Council
Justification:	Reduction of polluted stormwater being discharged upstream of the city's raw water intake.
Tracking:	Maintain documentation of updated ordinances and approvals.

BMP 5.3:	Development Plan Review Process

Measurable Goal: Include the Stormwater Coordinator in new development and redevelopment plan reviews to ensure proper stormwater controls, mitigation, and compliance. The process will include pre-application review, site plan review, as-built submittal, post-construction verification, and educational outreach for staff and project proponents.

Person Responsible: Stormwater Coordinator/Building Department

Justification: Ensures compliance with post-construction runoff requirements and proper oversight of structural controls.

Tracking: Record number of reviews completed and documentation of Coordinator involvement.

BMP 5.4: Structural Control Inspection Program

Measurable Goal: Develop and implement a simple inspection checklist for structural controls and conduct inspections on a semi-annual basis, focusing on high-priority sites. The checklist will track source control practices, treatment practices, GIS locations, digital photographs, maintenance requirements, and inspection results.

Responsible Person: Stormwater Coordinator

Justification: Structural controls must be maintained properly to function as designed. A standardized checklist ensures inspections are consistent and provides documentation of proper operation and maintenance.

Tracking: Record date checklist was created, dates inspections were conducted, inspector names, site or control ID, and follow-up actions taken. Maintain a centralized file with all completed checklists and inspection reports.

BMP 5.5: Inventory existing catch basins.

Measurable Goal: Inventory all major public catch basins to track inspections and maintenance needs. Begin digitizing and creating GIS layers for identification and future tracking.

Person Responsible: Stormwater Coordinator

Justification: Ensures catch basins are maintained to prevent sediment and floatables from entering the MS4.

Tracking: Document inventory completion, GIS updates, and ongoing maintenance schedule.

Table 4 identifies the BMPs, schedule, measurable goals and responsible person(s) for the Post Construction Runoff Control minimum control measure.

5.3 Effectiveness Evaluation

The objective of this MCM is to prevent stream pollution due to runoffs and debris from construction sites through inspections and enforcements. The BMPs designed for this MCM will be deemed effective when the following has been accomplished:

- Developers begin incorporating ESC into their construction
- Inspection review checklists are used as an aid for compliance inspections
- The number of violations decline after the initial implementation of the program
- Record-keeping has been developed to document inspections, violations, and checklists are being used.
- The city Ordinances and regulations have been amended to include the requirements contained herein.

The effectiveness evaluation will be conducted annually by the Stormwater Coordinator.

TABLE 5
POST CONSTRUCTION SITE RUN-OFF CONTROL

Element ID	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Responsible Person(s)
5.1	Require new/redevelopment projects to consider post-construction runoff controls	Program developed and communicated to developers	By June 30, 2026	Stormwater Coordinator/Building Department/City Council
5.2	Update city Code and subdivision regulations to include basic runoff treatment for priority sites	Ordinances and regulations amended to require simple post-construction runoff controls for new and redevelopment projects	By September 30, 2026	Stormwater Coordinator/City Council
5.3	Develop a simple inspection checklist for structural controls	Review and inspection process amended	By August 31, 2026	Stormwater Coordinator/Building Department
5.4	Conduct inspections of structural controls (focus on high-priority sites)	Checklist developed and being used	Starting October 2026, then ongoing	Stormwater Coordinator
5.5	Inventory major catch basins (public only) for tracking inspections	Inventory complete. Begin digitizing/creating layer for identification	By December 31, 2026	Stormwater Coordinator

H. Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

Pollution Prevention/Good Housekeeping for municipal operations minimum control measure is a key element of the small MS4 stormwater management program. The measure requires the small MS4 operator to examine and subsequently alter their own actions to help ensure a reduction in the amount and type of pollution that: 1) collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and 2) results from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems.

While this measure is meant to primarily improve or protect receiving water quality by altering municipal or facility operations, it also can result in cost savings for the small MS4 operator, since proper and timely maintenance of storm sewer systems can help avoid repair costs from damage caused by age and neglect.

6.1 Description of Minimum Control Measure

The Pollution Prevention and Good Housekeeping MCM consists of BMPs that focus on training and on the prevention or reduction of pollutant runoff from municipal operations.

6.2 Best Management Practices

The city owns and operates several city facilities that will require pollution prevention plans. These include city Hall, a city maintenance garage, and the city water treatment facility. The city no longer operates a wastewater treatment facility and now pumps all its wastewater into a nearby public service district for treatment and disposal. The city will develop a maintenance program for city Hall which will include measures to control pollution from the lawn area due to grass cutting and fertilizing. The maintenance program will also include provisions for stormwater pollution management and stormwater controls for the paved parking areas around the building. Since this is an office site only, no maintenance of equipment occurs at this site and the only pollution control measures that will need to be addressed will be those pertaining to maintenance of the lawn and plantings, and pollution prevention from parked cars and paved areas at this facility. The city will develop a site pollution prevention plan for the city maintenance garage. The city currently contracts out all vehicle maintenance to outside vendors except for one vehicle. The written plan will address pollution control measures for this facility that must be followed for maintenance of the building, lawn and vehicles, and provide review opportunities in the event the city decides to perform all vehicle maintenance in-house. The city will develop a site pollution prevention plan for the water treatment plant. There are several areas of pollution control that will be addressed including the safe and proper handling of chemicals used in the treatment process, maintenance of the lawn surrounding the treatment plant, maintenance of the parking lot, and handling of accidental spills that could be discharged into nearby storm drains. The city currently does not have a training program to educate its

employees on stormwater pollution prevention or stormwater management. The Stormwater Coordinator will develop an education program and train city employees per the schedule to be included in the program. The city recently purchased a new street sweeper to keep city-owned facilities swept to prevent pollution from city streets and city parking lots. The Stormwater Coordinator will meet with the Public Works Director and develop a regular schedule for sweeping city streets and parking lots and maintaining records of the sweeping activities such as dates swept, tonnage of debris and material swept, etc. The city will examine and alter its actions to help ensure a reduction in the amount and type of pollution that: 1) collects on city streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways; and 2) results from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems.

The city will implement the following BMPs to address this MCM:

BMP 6.1: Street and Parking Lot Litter/Debris Reduction

Measurable Goal: Establish an annual street-sweeping schedule and monitor/document debris removal with each cleaning cycle.

Responsible Person: Stormwater Coordinator

Justification: Regularly removing debris reduces floatables and pollutants from entering structural controls and receiving water.

Tracking: Maintain records of sweeping dates, operator, streets/parking lots cleaned, and quantity of debris collected.

BMP 6.2: Pollution Prevention/Good Housekeeping Training Program

Measurable Goal: Develop a workshop for city employees responsible for streets, grounds, and landscaping by September 30, 2025. Provide annual workshops thereafter for new employees and crew managers.

Responsible Person: Stormwater Coordinator

Justification: Training city employees ensures they understand the importance of good housekeeping and preventing pollutants from entering the stormwater system

Tracking: Document workshop materials, dates provided, and attendance sign-in sheets.

BMP 6.3: Stormwater Pollution Prevention Plans (SWPPP) for City-Owned Facilities

Measurable Goal: Develop written SWPPP and pollution prevention plans for City Hall, Maintenance Garage, and Water Treatment Plant by October 31, 2025. Include employee training schedules for operation and maintenance of each facility.

Responsible Person: Stormwater Coordinator/Public Works Director

Justification: Written plans demonstrate the city's commitment to stormwater pollution prevention and ensure continuous implementation at city-owned facilities.

Tracking: Record date plans are developed and maintain documentation that employees have been trained.

Table 6 identifies the BMPs, schedule, measurable goals and responsible party(s) for the Pollution Prevention/Good Housekeeping minimum control measure.

6.3 Effectiveness Evaluation

The objective of this MCM is for the city to lead, by example, and develop good housekeeping habits. The BMPs developed for this MCM will be deemed effective when the following have been achieved:

- The city has a street sweeping program that is maintained except in inclement weather.
- The city can document the amount of street/parking lot debris reviewed with each sweeping.
- City employees begin practicing good housekeeping and preventing illicit discharges from city-owned facilities.
- Written pollution prevention plans have been written and being followed.

The effectiveness evaluation will be conducted annually by the Stormwater Coordinator.

TABLE 6
POLLUTION CONTROL/GOOD HOUSEKEEPING

Element ID	Description of BMP	Measurable Goals	Schedule for Implementation	Responsible Person(s)
6.1	Reduce street and parking lot litter/debris	Conduct street sweeping on scheduled dates; document debris removal	By Sept 30, 2025, then ongoing annually	Stormwater Coordinator and Public Works Department
6.2	Develop pollution prevention/housekeeping training program for city employees	Conduct first workshop and provide annual workshops for all relevant employees	By Sept 30, 2025, then ongoing annually	Stormwater Coordinator
6.3	Develop SWPPP and control plans for city Hall, city Maintenance garage, and city Water Treatment plant.	Written plans have been completed, and all affected city employees have been trained on the plan.	By Oct 31, 2025	Stormwater Coordinator/ Public Works Director.

APPENDIX A – GLOSSARY

GENERAL DEFINITIONS

Best Management Practices (BMPs) – Activities or structural improvements that help reduce the quantity and improve the quality of stormwater runoff. BMPs included public education and outreach, treatment requirements, operating procedures, and practices to control runoff, spillage, leakage, sludge and waste disposal, and drainage from raw material storage.

Clean Water Act – Amendments made to the Federal Water Pollution Control Act in 1972 to establish water quality standards and to create the National Pollutant Discharge Elimination System to protect the waters and waterways of the U.S. by regulating the discharge of pollutants from point source discharges and municipal separate storm sewer systems.

Combined Sewer System – A sewer system designed to convey both sanitary wastewater and stormwater in the same pipes.

Detention Pond – A pond that stores a volume of water for a given period of time and then discharges the water downstream.

Discharge - An outflow of water from a stream, pipe, ground water system or watershed.

Ecosystem – All of the plants and animals in an area that interact to make up the local environment.

Erosion – The overall process of the transport of material on the earth's surface including the movement of soil and rock by agents such as water, wind, or gravity.

Groundwater – All of the water contained in void space beneath the earth's surface.

Heavy Metals – Metal such as zinc, copper, lead, mercury, chromium, cadmium, iron, manganese, nickel, molybdenum and silver that, even in low concentrations can be toxic or lethal to humans, animals and aquatic life.

Illicit Discharge – The term refers to any discharge to a MS4 that is not composed entirely of stormwater unless authorized by an NPDES permit or otherwise excluded from regulation. Thus, not all illicit discharges are illegal or prohibited.

Industrial Waste – Unwanted materials from an industrial operation, this may include liquids, sludge, solids, or hazardous waste.

Maintain or Improve Water Quality – This statement is to mean that no MS4 shall allow for an increase in turbidity to local waters that will cause a substantial visible contrast to natural conditions; the MS4s shall not allow suspended, colloidal and settleable solids from sewage, industrial wastes or other wastes that will cause deposition or impair local waters for their best usages; and no MS4 shall allow residue from oil and floating substances attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules or grease.

Maximum Extent Practicable (MEP) – A water quality standard that applies to all MS4 operators under NPDES permits. The standard has no exact definition, as it was intended to be flexible to allow operators to tailor their stormwater programs to their particular site.

Municipal Separate Storm Sewer Systems (MS4) – Areas with a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, gutters, ditches, man-made channels, and storm drains) that are not a combined sewer or part of a publicly owned treatment system and are owned or operated and regulated by a municipality or authorized agency. MS4s may be small, medium or large with the size determined by population.

Non-Point Source Pollutants (NPS) – Pollution coming from many diffuse sources whose origin is often difficult to identify. This pollution occurs as rain or snowmelt travels over the land surface and picks up pollutants such as fertilizer, pesticides, and chemicals from cars. This pollution is difficult to regulate due to its origin from many different sources. These pollutants enter waterways untreated and are a major threat to aquatic organisms and people who fish, use waters and waterways for recreational purposes or as an untreated drinking water source.

National Pollutant Discharge Elimination System (NPDES) – The EPA's regulatory program to control the discharge of pollutants to waters and waterways of the United States. Notice of Intent (NOI) – An application to notify the permitting authority of a facility's intention to be covered by a general permit. This exempts a facility from having to submit an individual or group application.

Notice of Violation (NOV) – A written notice issued to the permittee by DWWM that the permittee has violated certain requirements of the NPDES permit.

Ordinance – A law based on state statutory authority developed and approved by a governmental agency to allow them to regulate the enforcement of criteria contained within the specific law and to invoke sanctions and other enforcement measures to ensure facilities comply with the criteria.

Outfall – The point where a sewer or drainage discharges into a receiving waterway.

Retention Pond – Pond that stores a volume of water without allowing it to discharge downstream.

Runoff - Any drainage that leaves an area as surface flow.

Sanitary Sewer – An underground pipe system that carries sanitary waste and other wastewater to a treatment plant.

Storm Drain – An underground pipe system that carries runoff and drainage.

Stormwater – Stormwater or snow melt runoff, and surface runoff and drainage.

Stormwater Management – Any measure associated with the planning, maintenance, and regulation of facilities which collect, store or convey stormwater.

Stormwater Management Plan - A written plan showing how the MS4 operates intends to provide Stormwater Management of the MS4.

Surface Runoff – Any water that remains on the earth's surface, such as ponds, rivers, streams, impoundments, wetlands, oceans, etc.

Total Maximum Daily Load (TMDL) – A regulatory limit of the maximum amount of a pollutant type that can be released into a body of water in a twenty-four-hour period without adversely affecting the water quality.

Tributary – A stream which drains into another larger stream or body of water. Watershed A geographic area in which water flowing across the surface will drain into a certain stream or river and flow out of an area via that stream or river, or all of the land that drains to a particular body of water, also known as a catchment, catch basin, or drainage basin.

Wetlands – An area of land where part of the surface is covered with water or the soil is completely saturated with water for a large majority of the year.

APPENDIX B – COMMONLY USED ABBREVIATIONS

BMPs – Best Management Practices

CWA – Clean Water Act

DWWM – [West Virginia] Division of Water and Waste Management

EPA – Environmental Protection Agency

MCM – Minimum control measure

MEP – Maximum extent practicable

MS4 – Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPDES – National Pollutant Discharge Elimination System

POC – Pollutants of concern

SMO –Stormwater Management Officer

SOP – Standard Operating Procedure

SWMP – Stormwater Management Program

SWPP – Stormwater Pollution Prevention

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

APPENDIX C – WATERSHED MAP