

# CITY OF BELLE MEADE STORMWATER MANAGEMENT PROGRAM DOCUMENT

August 2024

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# Section I. Small Municipal Separate Storm Sewer Systems Permit Documents

The City of Belle Meade's Stormwater Management Plan (SWMP) includes both the state municipal separate storm sewer system (MS4) stormwater permit documents as well as the City's plans, policies, and procedures developed to address the state MS4 stormwater permit requirements. All of these items are pulled together in the SWMP to provide a central reference for the City's use. The permit documents and City documents developed related to the permit are included in appendices to allow for easy replacement of these items as updates are added that would make replacement appropriate.

### Section II. Minimum Control Measures

Note that Public Education and Outreach was combined with Public Participation and Involvement in the Notice of Intent (NOI). Both are identified as #1 in this document to keep the BMP labels consistent with the NOI and to show permit-specific requirements under their respective heading.

### 4.2.1. Public Education and Outreach

Permittees shall develop and implement an education and outreach program that includes public education and outreach on stormwater impacts as a component of the stormwater management program. The objective of this program is to reduce or eliminate behaviors and practices that cause or contribute to the impacts of stormwater discharges on water bodies and the steps that the audiences can take to reduce pollutants in stormwater runoff to the maximum extent practicable.

This program will be designed to reach three major audiences:

- (1) the public (4.2.1.1),
- (2) engineering and development community (4.2.1.2), and
- (3) employees (4.2.1.3).

The Public Information and Education (PIE) plan shall include:

- Specific public information/education activities that are designed to meet the management measure;
- b. Identification of job categories and applicable management measures for employee education (see subpart 4.2.1.3);
- c. Schedule/calendar of events for each year; and
- d. Methodology to evaluate components to assess overall effectiveness and the need for improvement.

- **4.2.1.1 Public Management Measure:** Conduct activities as described in the PIE plan targeted to address the following issues:
  - a. General awareness of the impacts on water quality;
  - Awareness of the importance of maintenance activities for operators of permanent Best Management Practices (BMPs)/Stormwater Control Measures (SCMs);
  - c. Awareness of the proper storage, use, and disposal of pesticides, herbicides, fertilizers oil and other automotive-related fluids; and
  - d. Awareness of identifying and reporting procedures for illicit connections/discharges, sanitary sewer seepage, spills, etc.

Measura	able Goals	Annual Report Requirement			
minimum number of	duct and/or sponsor a activities (as identified each of issues identified	- Total Number of activities conducted			
under "management m year.	easures" every reporting	Provide the details of each activity including:			
MS4 Population at NOI submittal	Minimum Number of activities conducted	description; date; management measures addressed;			
Population ≤10,000	Per 5 year permit term 2	- specifically targeted audience and - approximate number of that - audience that was reached.			
10,001 ≤ Population ≤25,000	Per each reporting year 1	For sponsored activities only:			
25,001 ≤ Population ≤ 50,000	Per each reporting year 3	monetarily or as a donation in kind			
Population greater than or equal to 50,001	Per each reporting year 6				

- **4.2.1.2 Engineering and Development Community Management Measure:** Conduct activities as described in the PIE plan targeted to address the following issues:
  - a. Awareness of the stormwater ordinances, regulations, and guidance materials related to long-term water quality impacts; and
  - b. Awareness of stormwater ordinances, regulations, and guidance materials related to construction phase water quality impacts.

Measura	able Goals	Annual Report Requirement
number of activities (a address each of is	ct or sponsor a minimum as identified below) that sues identified under es" every reporting year.	- Total Number of activities conducted  Provide the details of each activity including:
MS4 Population at NOI submittal	Minimum Number of activities conducted	description; date; management measures addressed;
Population ≤10,000	Per 5 year permit term 1	- specifically targeted audience and;
10,001 ≤ Population ≤25,000	Per 5 year permit term 2	approximate number of that audience that was reached.
25,001 ≤ Population ≤ 50,000	Per each reporting year 1	
Population greater than or equal to 50,001	Per each reporting year 2	

# **4.2.1.3 Employees Management Measure:** Conduct activities as described in the PIE plan targeted to address the following issues:

- a. Awareness of water quality impacts from daily operations;
- b. Pollution Prevention and Good Housekeeping (see subpart 4.2.6); and
- c. The awareness of identifying and reporting procedures for illicit connections/discharges, sanitary sewer diversions or seepages, spills, etc.

Measurable Goals	Annual Report Requirement
	MS4 or new to the job category: provide the total number of employees NOT educated in

### 4.2.2. Public Involvement/Participation

Public Involvement/Participation Permittees must develop and implement a program for public involvement and participation as a component of the stormwater management program. The objective is to promote, publicize, and facilitate citizen's participation in the development and implementation of the stormwater management program in order to reduce the discharge of pollutants to the maximum extent practicable.

This program will be designed to reach two major audiences:

- (1) the general public (4.2.2.1); and
- (2) the commercial and industrial community (4.2.2.2).

This program must include the following at a minimum:

- a. Specific public involvement/participation activities that are designed to meet the management measures;
- b. Schedule/calendar of events for each year;
- c. Methodology to evaluate components to assess overall effectiveness and the need for improvement;
- d. A mechanism for citizen reporting of illegal spillage, dumping, or otherwise illicit disposal of materials into the MS4 system;
- e. Publicity plan for public involvement and participation opportunities by methods designed to reach the intended audience;
- f. Permittees shall create opportunities for the public to participate in the decision-making processes for developing, implementing, and updating the Stormwater Management Program;
- g. Mechanisms, procedures, and processes for public access to information on new development and redevelopment projects and receiving and considering comments from the public on those new development and redevelopment projects;
- h. Develop and implement a public notice process in accordance with subpart 4.4.1; and
- i. Permittees shall track and maintain records of public involvement and participation opportunities.

Management Measure	Measurable Goals	Annual Report Requirement
Provide public access to	Make written	Provide the web address for the
the Stormwater	description of	Stormwater Management
Management Program	Stormwater	Program plan documentation
records, including a	Management Program	
written description of the	(e.g. plans)	or
Stormwater	Either	
Management Program,		Provide a brief description of the
available to the public at	- Available on the	public records request process
reasonable times during	MS4's webpage Or	
regular business hours		
	- (For MS4 without	
	webpage) make	
	available through the	
	MS4's public records	
	review process	
Develop and implement	Prior to the Second	- For years when the program is
a formal public notice	annual report due date	required to be formally placed
process including	complete the formal	on public notice, a copy of the
	public notice process	public notice and response to
- documenting and	for the entire	comments shall be submitted
responding to public	Stormwater	with the annual report. Or
comments	Management Program	
	including response to	- For years when the program is
- mechanism to identify	comments. For	<u>not</u> formally placed on public
major modification to the	subsequent years,	notice, indicate as such in the
Stormwater	formal public notice is	annual report.
Management Program	required only when	
that require a formal	major changes (see	
public notice process	subpart 4.4.1) are	5 . 1 . 1 . 1
(see subpart 4.4.1)	made to the	- Detail applicable changes as
	Stormwater	directed in subpart 4.4.1
	Management Program	
Mechanisms,	- Information for 100%	Yes/No Is information for all
procedures, and	of all construction site	construction site projects
processes for public	projects (see subpart	accessible to the public?
access to information on	4.2.4) is accessible to	
projects and receiving	the public	
and considering		

Management Measure	Measurable Goals	Annual Report Requirement
comments from the public on those projects. See subpart 4.2.4	- 100% of all comments from the public construction site projects (see subpart 4.2.4) are considered in accordance with the Stormwater Management Program	- # of comments received from the public on construction site projects  - Yes/No Are all comments from the public on construction site projects considered?
Encourage and promote citizen reporting of illegal spillage, dumping, or otherwise disposal of materials into the MS4 storm sewer system (see subpart 4.2.3)	Develop and implement a public reporting system e.g. a hotline (see subpart 4.2.3) to facilitate and track public reports of spills, discharges, and dumping to its storm sewer system.	- The number of reports received from the public

# **4.2.2.1 Public Management Measure:** Conduct activities as described in the plan targeted to address the following issues:

- a. Pollution Prevention;
- b. Impacts on water quality or local stormwater management issues;
- c. Storage, use, and disposal of household hazardous waste, automotive-related fluids, pesticides, herbicides, and fertilizers use; and
- d. Identifying and reporting procedures for illicit connections/discharges, sanitary sewer seepage, spills, etc.

Measur	able Goals	Annual Report Requirement
minimum number of below) that address	duct and/or sponsor a activities (as identified each of issues identified neasures" every reporting	- Total Number of activities conducted  Provide the details of each activity including:
MS4 Population at NOI submittal	Minimum Number of activities conducted each reporting year	description; date; management measures addressed; specifically targeted audience and;
Population ≤10,000	Per 5 year permit term 2	- approximate number of that audience that was reached. For sponsored activities only:
10,001 ≤ Population ≤25,000	Per each reporting year 1	Identify if the event sponsored monetarily or as a donation in kind
25,001 ≤ Population ≤ 50,000	Per each reporting year 3	
Population greater than or equal to 50,001	Per each reporting year 6	

# **4.2.2.2. Commercial and Development Management Measure:** Conduct activities as described in the plan targeted to address the following issues:

- a. Pollution Prevention; and
- b. Impacts on water quality or local stormwater management issues.

Measura	ble Goals	Annual Report Requirement
		- Total Number of activities conducted Provide the details of each activity including:
MS4 Population at NOI submittal	Minimum Number of activities conducted each reporting year	description; date; management measures addressed; specifically targeted audience and;
Population ≤10,000	Per 5 year permit term 1	- approximate number of that audience that was reached.
10,001 ≤ Population ≤25,000	Per 5 year permit term 2	audience that was reached.
25,001 ≤ Population ≤ 50,000	Per each reporting year 1	
Population greater than or equal to 50,001	Per each reporting year 2	

Table 1. Public Education and Outreach/Public Involvement and Participation Schedule.

BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
4.2.1.1.	Newsletter Minimum of 1 newsletter article per year, sent to all residences, will have stormwater related content.	Mary Samaniego	is				
4.2.1.2.	Workshop Presentation to engineers and development community on new stormwater ordinance and guidance materials related to long-term water quality impacts and construction phase water quality impacts.	Mary Samaniego	Mary Control of				
4.2.1.3.	Employee Education	Mary Samaniego					

MCM 1	and 2						
BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
	Monitor and document all required employee training through spreadsheet (Appendix P).						
4.2.2.1. 4.2.2.2.	Website Maintain website to inform stakeholders of actions that will result in behavior changes that will improve water quality.	Mary Samaniego					
4.2.2.1.	Complaint Log Stormwater related complaints will be recorded and responded to.	Mary Samaniego					
4.2.2.1. 4.2.2.2.	Stormwater Program Notice Development public notice process for entire stormwater program. Invite public to comment on stormwater issues on the website.	Mary Samaniego					
4.2.2.1. 4.2.2.2.	Permit System Access The public can review 100% of the stormwater permit activity through the CivicGov website. Record comments on active project in spreadsheet (Appendix K)						
4.2.2.1. 4.2.2.2.	Reporting Develop a reporting contact to report public notification of illicit spills, discharge, and dumping into the stormwater system. Convey information through website. Record reports in spreadsheet (Appendix M).	Mary Samaniego					
4.2.2.1. 4.2.2.2.	Update Public Information and Education (PIE) Plan Develop a PIE Plan with goals and public information events/activities for the remainder of the permit cycle.	Mary Samaniego					

# 4.2.3 Illicit Discharge Detection and Elimination (IDDE)

Permittee must develop, implement, and enforce a program to detect and eliminate illicit discharges into the storm sewer system. Stormwater discharges listed in subpart 1.3.3.2 above are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to waters of the state. The objective is to detect and eliminate illicit discharges to the maximum extent practicable. This program must include the following at a minimum:

- a Develop, if not already completed, a storm sewer system map, (see subpart 4.2.3.1 for minimum map requirements);
- b To the extent allowable under State, Tribal, or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges (unless allowed by sub-section 1.3.3.2) into the storm sewer system and implement appropriate enforcement response plan (ERP) (see subpart 4.5);
- Develop and implement a program to detect, investigate, and address nonstormwater discharges, including illegal dumping, to the system. This includes standard procedures and forms to be followed to investigate illicit discharges throughout the MS4 jurisdiction. This must include:
  - 1) Procedures for locating priority areas likely to have illicit discharges.
  - 2) Procedures for tracing the source of an illicit discharge.
  - 3) Procedures for removing the source of the discharge.
  - 4) Procedures for tracking, investigating, and addressing potential illicit discharges and confirmed Illicit discharges. The results of all illicit discharge investigations shall be individually tracked and documented and include the name of Owner/Operator, locations, description of findings, dates, times, parameters and sampling results, discharge source, description of enforcement action(s) including referrals to other agencies, the date the illicit discharge was resolved, and any other pertinent information.
  - 5) The permittee shall specify the timeframe for initiating complaint investigations within the ERP, but not to exceed seven (7) calendar days from the receipt of the complaint.
  - 6) Initial enforcement actions (including referrals to other regulatory agencies with appropriate jurisdiction) shall be taken within seven (7) calendar days of the investigation on confirmed illicit discharges in accordance with the ERP.
  - 7) Confirmed illicit discharges shall be eliminated as soon as practicable. If the elimination of the confirmed illicit discharge will take more than fourteen (14) calendar days (from owner/operator's notification of confirmed illicit discharge) a corrective action plan to eliminate identified illicit discharges shall be developed by the owner/operator of the source of the illicit discharge in concurrence with the MS4. The ERP shall include remedies to address failures by the owner/operator to complete the corrective action plan and eliminate the illicit discharge.
  - 8) If the responsible party or source of a confirmed illicit discharge cannot be identified after a comprehensive investigation in accordance with all stormwater management program IDDE investigation and tracing procedures, the illicit discharge shall be referred to the Division within fourteen calendar days of completing the investigation. All records and documentation of the investigation will be provided to the Division in the referral. Referrals shall be made to the local environmental field office identified in subpart 1.2.
- d Address the following categories of non-stormwater discharges or flows (i.e., illicit discharges) only if the permittee identifies them as a significant contributor of pollutants to the MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated groundwater infiltration (as defined

- at 40 C.F.R. 35.2005(b)(20)), uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water(including tunnel cleaning) (discharges or flows from firefighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to waters);
- e Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. The educational training for public employees as identified by job category in the PIE plan shall be tracked for each employee (see subpart 4.2.1.1; and
- f The permittee shall develop a mechanism for the public to report (e.g., via hotline or website), suspected illicit discharges.

Management Measure	Measurable Goals	Annual Report Requirement
Storm sewer map that contains all required data elements found in subpart 4.2.3.1	Continue to update mapping as new elements are identified.	Provide location for Spatial Rest Service Outfall Map Layer Or
		Submit the geodatabase/shapefile Or
		submit a copy of the system map
Identify and investigate the categories of non-stormwater discharges or flows (as indicated in subpart 4.2.3) only if the permittee identifies them as a significant contributor of pollutants to the MS4.	Maintain an inventory of non- stormwater discharges or flows (as indicated in subpart 4.2.3) that the permittee identified as a significant contributor of pollutants to the MS4.	- # of non-stormwater discharges or flows identified as a significant contributor of pollutants to the MS4 - Total # of non- stormwater discharges or flows investigated - Yes/No Were all
	non-stormwater discharges or flows (as indicated in subpart 4.2.3) that the permittee identified as a significant contributor of pollutants to the MS4	non-stormwater discharges or flows identified as a significant contributor of pollutants to the MS4 investigated?

Management Measure	Measurable Goals	Annual Report Requirement
Illicit discharge reporting and investigations	- track all potential illicit discharges reported, categorized by reporting source	- The number of potential illicit discharges reported by the public
		- The number of potential illicit discharges reported by internal personnel
	- Initiate 100% of all potential Illicit discharges investigations within 7 days of the receipt of the complaint.	- Total number of potential Illicit discharges reported (from any source) that are under investigation at the time of the annual report
		-Yes/No Were all potential illicit discharges investigated within 7 days of receipt?
	- 100% of all Initial enforcement actions shall be taken within seven (7) calendar days of the	-# of identified illicit discharges
	investigation on confirmed illicit discharges	- Yes/No Were all initial enforcement actions on confirmed illicit discharges taken within seven (7) calendar days of the investigation?
	- 100% of all corrective action plans are reviewed in accordance with procedures	- # of corrective actions plans received for confirmed illicit discharges.

Management Measure	Measurable Goals	Annual Report Requirement
		- Yes/No Were all corrective actions plans reviewed in accordance with established procedures?
As indicated in the PIE plan, the permittee must educate public employees, businesses, and the general public concerning the hazards and damage to water quality associated with illegal dumping and connections to the storm sewer, and the improper disposal of waste.	The Measurable Goals and Annual Reporting requirements for this management measures are located in subparts 4.2.1.1 & 4.2.1.3	
As indicated in the Public Involvement/Participate MCM (see subpart 4.2.2), the permittee must Encourage and promote citizen reporting of illegal spillage, dumping, or otherwise disposal of materials into the MS4 storm sewer system by developing and implementing a public reporting system e.g. hotline.	The Measurable Goals and Annual Reporting requirements for this management measures are located in subpart 4.2.2	

# **4.2.3.1. MS4 Storm System Map Measure:** Conduct activities as described in the plan targeted to address the following issues:

- a. MS4 Outfalls;
- Inputs into the storm sewer collection system, such as the inlets, catch basins, drop structures, flow(s) from adjacent MS4s or other defined contributing points to the storm sewershed of that outfall;
- c. Direction of stormwater flow through the system; and
- d. Receiving streams.

Table 2. Illicit Discharge Detection and Elimination Schedule.

	ILLICIT DISCHARGE DETECTION		ION	200			
BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
4.2.3.	Administer Enforcement Response Plan (ERP) Include the current enforcement practices and evaluate annually. (Appendix D)	Mary Samaniego					
4.2.3.	Update Outfall Map Update current map with newly identified outfalls and add locations of new inputs. (Appendix L)	Mary Samaniego					
4.2.3.	Dry Weather Outfall Screening and Outfall Map Annual Updates Screen 20% of City outfalls each year, and revise map as appropriate. (Appendix G and L)	Mary Samaniego					
4.2.3.	Distribute handout for landscape companies, pool maintenance companies, or other audience deemed necessary by the MS4 (pamphlet from TN stormwater association – Appendix Q)	Mary Samaniego					
4.2.3.	Maintain an illicit discharge tracking program to track its effectiveness (Appendix M)	Mary Samaniego					

### 4.2.4. Construction Site Stormwater Runoff Control

MS4s shall develop, continue to develop, implement and enforce a construction site stormwater runoff control program. Currently permitted MS4s shall continue to implement existing construction site stormwater runoff control program and must have any updates to the program completed within 24 months of coverage under this permit.

Your program must include the development and implementation of, at a minimum:

- a. An ordinance or other regulatory mechanism to require erosion prevention and sediment controls (EPSC), as well as sanctions to enforce compliance. The enforcement sanctions must be identified in an ERP as indicated in subpart 4.5.
- b. Requirements for construction site operators to implement appropriate erosion prevention and sediment control best management practices.
- Requirements for design storm for all waters as well as special conditions for unavailable parameters waters or exceptional Tennessee waters must be consistent with those of the current Tennessee Construction General Permit (TNR100000);

- d. An inventory of all active public and private construction sites that result in a total land disturbance as defined in section 4.2.4.
- e. Requirements for construction site operators to control waste materials: The MS4 must require that operators control wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site to avoid adverse impacts to water quality.
- f. Specific procedures for construction site plan (including erosion prevention and sediment controls) review and approval: The MS4 procedures must include an evaluation of plan completeness and overall BMP effectiveness.
- g. Mechanisms or plans for public access to information on new development and redevelopment projects and receiving and considering comments from the public on those new development and redevelopment projects;
- h. Procedures for site inspection and enforcement: The MS4 must have procedures in place for its inspectors to evaluate construction site compliance. The ERP must include specific enforcement steps to ensure construction sites are in compliance with the MS4's program.
- i. MS4 staff training: Inspectors must maintain certification under the Tennessee Fundamentals of Erosion Prevention and Sediment Control, Level 1 (or equivalent). Construction site plan reviewers must receive a certificate of completion from the Tennessee Erosion Prevention and Sediment Control Design Course, Level 2. It is recommended that MS4 staff receive training under both courses.
- j. The MS4 program must provide for the following:
  - Pre-construction meetings with construction-site operators for priority construction activities;
  - Inspections by the permittee of priority construction sites at least once per calendar month; and
  - Documentation of procedures, including related meetings and inspections.

Management Measure	Measurable Goals	Annual Report Requirement
Regulatory mechanism are required to be consistent with the currently effective Tennessee Construction General Permit (CGP, TNR100000). Note: This reporting element won't be seen in the annual report until after the subsequent CGP has been issued.	NPDES general permit for construction stormwater runoff with an effective after September 30, 2026, modifications to ordinances or other regulatory mechanisms for construction site runoff control must be effective and implemented within 18 months of the effective date of a Tennessee Construction General Permit (CGP, TNR100000);	Identify if the regulatory mechanisms for construction site runoff control have been updated to be consistent with CGP and are effective & implemented within 18 months of the effective date of the subsequent CGP

Management Measure	Measurable Goals	Annual Report Requirement
An inventory of actively permitted public and private construction sites that result in a total land disturbance as defined in subpart 4.2.4.d	Maintain an up-to-date inventory with all information identified subpart 4.2.4.d	-total number of active construction activities
		Total number of active non-priority construction activities with incomplete inventory information
Construction site plans review and approval	Establish policies and/or procedures for review and approval (or denial) of all plans and review 100% of all new development and redevelopment projects accordingly	- Total number of new development and redevelopment projects reviewed in accordance with established policies and procedures  - Yes/No Were all new development and redevelopment projects reviewed in accordance with the established policy and procedure?
Mechanisms or plans for public access to information on new development and redevelopment projects and receiving and considering comments from the public on those new development and redevelopment projects.	The Measurable Goals ar requirements for this ma implemented Public Invo reported under subpart	nagement measures are
Procedures for permittee inspectors to evaluate and document construction site compliance.	Inspect a minimum of 10% of active non- priority construction sites in accordance	- Total number of active non-priority construction activities

Management Measure	Measurable Goals	Annual Report Requirement
	with Stormwater Management Program	- Yes/No Were all non- priority active construction activities inspections conducted accordance with Stormwater Management Program
Priority construction activities;	-Conduct Pre- construction meetings at 100% of Priority Construction Activities	- Total Number of Priority Construction Activities  - Yes/No Did all Priority Construction Activities that have Pre- Construction meetings?
	- Inspect 100% of all of Priority Construction Activities at least once per calendar month	- Yes/No Were all priority Construction Activities inspected at least once per calendar month?

Table 3. Construction Site Stormwater Runoff Control Schedule.

MCM 4	MCM 4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL								
BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5		
4.2.4.	Revise stormwater ordinance to meet new MS4 permit and CGP requirements and add provision for requiring revised application if site conditions change Revise stormwater ordinance to meet new MS4 permit and CGP requirements (within 18 months following CGP reissuance) and require revised application if needed. Annually evaluate ordinance effectiveness.	Mary Samaniego							

MCM 4	CONSTRUCTION SITE STORMWA	TER RUNOFF	CONTRO				
BMP Task	Title - Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
4.2.4.	Require Land Disturbance Permit per the Stormwater Ordinance Require a land disturbance permit for activities meeting the ordinance criteria and follow application review procedures, adding the requirement for a revised application if site conditions change.	Mary Samaniego					
4.2.4.	Inspections / Enforcement Inspect priority construction sites a minimum of once per month. If enforcement actions are needed based on inspections, use ERP actions (Appendix D)	Mary Samaniego					
4.2.4.	Staff Training Maintain TDEC Level I training, participation in TNSA, TDEC Level II training for staff as necessary. (Appendix P)	Mary Samaniego					
4.2.4.	Maintain Site inventory for >1 acre disturbance sites containing specific permit-required information  Maintain an inventory of all active public and private construction sites that result in a total land disturbance as defined in section 4.2.4. (Appendix J)	Mary Samaniego					

# 4.2.5. Post-Construction/Permanent Stormwater Management in New Development and Redevelopment

Permits issued to entities that operate a municipal separate storm sewer system (MS4) shall include the following to manage post-construction stormwater at all new development and redevelopment projects that disturb one acre or more of land, or less than one acre if part of a larger common plan of development, and discharge into the permittee's MS4:

# 4.2.5.1. Permanent Stormwater Management Program Measure:

- a. The permittee shall develop and implement a permanent stormwater management program to reduce pollutants in stormwater discharges through management practices, control techniques, and systems, design, and engineering practices implemented to the maximum extent practicable (MEP).
- b. The permanent stormwater management program shall include plans review, site inspections, and a means to ensure that permanent stormwater control measures (SCMs) are adequately operated and maintained.

- c. The permittee must develop and implement, and modify as necessary, an ordinance or other regulatory mechanism to address permanent stormwater management at new development and redevelopment projects.
- d. The permittee must submit an implementation plan for its permanent stormwater management program not later than 90 days after the effective date of the first new or revised permit issued after the effective date of Tennessee Rule 0400-40-10-.04. The implementation plan shall include a brief description of the main components of the permittee's permanent stormwater management program, which should include: codes and ordinance development and implementation; procedures for plans review and criteria for approval; procedures for conducting and tracking site inspections; SCM operation and maintenance policies; and a timeline to develop and implement the program. If the permittee has implemented a permanent stormwater management program that complies with all requirements of the new or revised permit, the permittee may submit an implementation plan explaining how its program complies and identifying any new or modified elements of its program.

## 4.2.5.2. Permanent Stormwater Standards Measure:

- a. The permanent stormwater management program must require new development and redevelopment projects to be designed to reduce pollutants to the MEP.
- b. SCMs must be designed to provide full treatment capacity within 72 hours following the end of the preceding rain event for the life of the new development or redevelopment project. The permittee shall identify a suite of SCMs to be used in various situations. Information relevant to identified SCMs should be made readily available. Application of innovative SCMs is encouraged. If the permittee decides to significantly limit the number of SCM options, it must be documented in the stormwater management program how the performance standards of Tennessee Rule 0400-40-10-.04 can be met with the limited set of control measures that are allowed.

# 4.2.5.3. Stormwater Mitigation and Public Stormwater Fund Measure:

a. A permittee may choose to develop an offsite mitigation program or payment in lieu into a public stormwater fund, or both, to offset the portion of the WQTV that cannot be treated on site to the MEP. The program must ensure that off-site stormwater mitigation will be accomplished within the same USGS 12-digit hydrologic unit code watershed as the new development or redevelopment project, if practicable, and will treat a minimum of 1.5 times the portion of the WQTV not treated on site. The permittee may identify priority areas within the watershed in which stormwater mitigation projects are to be completed. The program must have a mitigation project approval procedure, and all projects must meet all requirements in this permit. Procedures and requirements in the offsite mitigation and payment in lieu programs should be documented as part of the stormwater management program and available for review.

b. If the permittee allows payment into a public stormwater fund, the permittee assumes responsibility to provide the required mitigation projects. The public stormwater fund should be used to fund public mitigation projects. The payment amount into a public stormwater fund must be sufficient to design, install, and maintain the stormwater mitigation measures.

# 4.2.5.4. Water Quality Riparian Buffers Measure:

Permittees shall develop and implement a set of requirements to establish, protect, and maintain permanent water quality riparian buffers to provide additional water quality treatment in riparian areas of new development and redevelopment projects that contain streams, including wetlands, ponds, and lakes. Riparian buffers must meet the following minimum standards:

a. Stormwater discharges should enter the water quality riparian buffer as sheet flow, not as concentrated flow, where site conditions allow.

### 4.2.5.5. Codes and Ordinances Review and Update Measure:

Current permittees shall continue to implement the existing permanent stormwater management program and update legal instruments according to the compliance schedule in subpart 4.2.5.1d

**4.2.5.6. Development Project Plan Review, Approval, and Enforcement Measure:** The permittee shall develop and implement project plan review, approval, and enforcement procedures applicable, at a minimum, to all new development and

redevelopment projects, which shall include:

- a. Procedures for review and approval of site plans, including inter-departmental consultations and a re-submittal process when modifications to the project require changes to an approved site design plan;
- b. A plans review process that requires SCMs to be properly designed, installed, and maintained to meet the performance standards established in Tennessee Rule 0400-40-10-.04. The process must also include incentives adopted by the permittee as authorized by subpart 4.2.5.2, if any, along with water quality buffers as required by subpart 4.2.5.4; and
- c. A verification process to document that SCMs have been installed per design specifications within 90 days of installation. Verification shall include submission of as-built plans to the permittee, permittee inspection, or inspection by a qualified design professional. The verification process shall include enforcement procedures to bring noncompliant projects into compliance, which shall be detailed in the enforcement response plan.

**4.2.5.7. Maintenance of Permanent Stormwater Control Measure Assets Measure:** Permanent SCMs, including SCMs used at mitigation projects, must be installed, implemented, and maintained to meet the performance standards of subpart 4.2.5.2, and provide full treatment capacity within 72 hours following the end of the preceding rain event. The permittee must develop and implement a program to require implementation of appropriate SCM maintenance procedures to sustain pollutant reduction efficiency for the life of the new development or redevelopment project. All

procedures, reports, and documentation must be maintained as part of the stormwater management program. The program must include at a minimum:

- a. The development and documentation of maintenance and inspection procedures and frequencies for approved SCMs, which shall require all SCMs to be inspected at least once every five years by the permittee, a licensed professional engineer, a licensed landscape architect, or other qualified professional familiar with applicable SCM design and maintenance requirements;
- b. The development and documentation of the procedure the permittee will use to verify that SCMs are being inspected and maintained including any written reports from the responsible party;
- c. A clear, documented, legally binding agreement assigning SCM maintenance responsibility to the owner/operator, a third party, or the permittee as appropriate. For SCMs designed to manage stormwater from multiple properties, appropriate deed restrictions shall be recorded; and
- d. An allowance or agreement for permittee personnel to access the SCMs for inspections and provide for enforcement action for failure to maintain SCMs according to agreement.

# 4.2.5.8. Inventory and Tracking of Permanent Stormwater Control Measure Assets Measure:

- a. Existing permittees must continue to implement and maintain a system to inventory and track the status of all public and private SCMs installed on new development and redevelopment projects. New permittees must implement the system within 24 months of coverage.
- b. The inventory and tracking system must be a searchable database, either paper or electronic, that retrieves SCM information by location or other similar identification. The system must be made available to the Division or to members of the public upon request. Other than the basic information of location and project identification, the system should include information and records the permittee will use to demonstrate that SCMs are properly maintained, including but not limited to:
  - 1. A brief description of the type of SCM and basic design characteristics;
  - 2. The responsible party contact information;
  - 3. Inspection schedules (both permittee and responsible party);
  - 4. A brief description of or reference to maintenance procedures and frequency;
  - 5. Photographs of the installed SCMs; and
  - 6. Maintenance and inspection records.

Management Measure	Measurable Goals	Annual Report Requirement <sup>7</sup>
Stormwater Mitigation and Public Stormwater Fund as outlined in subpart 4.2.5.3 (note this management measure is only required if the permittee has developed	100% of all mitigation projects must be completed	- Brief status description status description of Stormwater Mitigation and Public Stormwater Fund
such a fund)		- # of uncompleted mitigation projects at the end of the previous reporting period
		- # of mitigation projects completed during the reporting period
	,	-# of uncompleted Projects at the end of the current reporting period
		- # of uncompleted projects at the end of the reporting period that began more than 24 months prior to the end of the reporting period
	100% of all mitigation projects in the Stormwater Mitigation and Public Stormwater Fund are completely funded	- \$ in Public Stormwater Fund at the end of the reporting period

Management Measure	Measurable Goals	Annual Report Requirement <sup>7</sup>
		- # of uncompleted projects due to lack of funds
Develop and implement a set of requirements to establish, protect, and maintain permanent water quality riparian buffers	-100% of projects must have the buffer as required by subpart 4.2.5.4	-Yes/No Did all of the projects approved meet the buffer requirements of subpart 4.2.5.4?
	If applicable: -100% of projects with permanent alternative buffer widths must be in accordance	-# of project approved with alternative width Buffer
	with the procedures and criteria approved by the Division	- Date Alternative buffer width procedures and criteria most recently approved by Division
Complete Code and Ordinance Review in accordance with subpart 4.2.5.5a (New Permittees Only)	EPA Water Quality Scorecard must be completed and submitted within one year of the effective date on the notice of coverage	A completed copy of the Scorecard shall be submitted with the subsequent annual report. (Note: this is a one-time requirement)
Develop, implement, and enforce policies and procedures for the submittal and review of plans as required by 4.2.5.60	Establish policies and/or procedures for review and approval (or denial) of all plans and review all new development and redevelopment projects accordingly	- Total number of all new development and redevelopment projects reviewed
4,2,3,00	accordingly	- Number of new development and redevelopment projects reviewed in accordance with the established policy and procedure

Management Measure	Measurable Goals	Annual Report Requirement <sup>7</sup>
Develop, implement, and enforce policies and procedures for SCM	Verify that 100% of SCMs are installed per design specifications in accordance with	- Total number of sites verified
Installation verification as required by subpart 4.2.5.60	approved plan within 90 days of installation	- Yes/No Were all SCMs are installed per design specifications in accordance with approved plan within 90 days of installation
Establish and maintain adequate legal authority assigning SCM maintenance responsibility and personnel access to the	The permittee must have the legal authority to access SCMs and assigned maintenance responsibility for 100% of all SCMs	Yes/No Does the permittee have adequate legal authority as required by 4.2.5.7 for all SCMs installed?
SCM and provide for enforcement action as required by subpart 4.2.5.70	The permittee must enforce as directed in the appropriate legal authority, for 100% of all SCMs that have not been properly maintained	# of SCMs that have not been properly operated or maintained
		Yes/No Have enforcement actions been taken in accordance with the appropriate legal authority or ERP?
Implement and maintain a system to inventory and track the status of all public and private SCMs	The system must be made available to the Division or members of the public upon request.	Total number of requests for inventory
as required by subpart 4.2.5.8	100% of all SCMs must be included in the inventory tracking system with complete information	- Yes/No Are all SCMs in the inventory tracking system?
		<ul> <li>Yes/No Do all SCMs in the inventory tracking system have complete information?</li> </ul>

Management Measure	Measurable Goals	Annual Report Requirement <sup>7</sup>
		Beginning in the year 3 (2025) annual report submit the SCM inventory tracking system information as a geodatabase or as a file type that is generally accessible e.g. excel, csv, xml, or division supplied EDD, etc.
		note: - Files may be submitted in a manner approved by the division.

Table 4. Permanent Stormwater Management in New Development and Redevelopment Schedule.

	Redevelopment Schedule.						
	PERMANENT STORMWATER MAN	IAGEMENT IN	NEW DE	VELOPM	ENT AND		
BMP Task	ELOPMENT  Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
4.A	Revise stormwater ordinance to meet new permit requirements for water quality buffers and for permanent stormwater management to accommodate green infrastructure BMPs Perform in conjunction with BMP 4A, Year 2. Review stormwater ordinance and develop revised ordinance to meet new permit requirements. Implement the new ordinance requirements.	Mary Samaniego					
4.B	Follow procedures for reviewing and approving permanent (post-construction) stormwater runoff plans incorporating changes to the permanent stormwater management requirements when adopted in a revised ordinance (within 48 months of coverage under the new permit) Follow land disturbance permit application review process.	Mary Samaniego					

	PERMANENT STORMWATER MAN ELOPMENT	NAGEMENT IN	NEW DE	VELOPM	ENT AND		
BMP Task	Title - Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
4.C	Owner / Operator Inspections Required By Stormwater Ordinance Follow land disturbance permit application review process.	Mary Samaniego					
4.D	Inventory & Tracking Of Permanent Stormwater Management Controls Review existing permanent stormwater management controls database and determine if revisions are necessary for the new permit requirements. If needed, revise within 180 days of permit issuance. Maintain database per the new permit.	CEC					
4.E	Verification to document that SCMs have been installed within 90 days of installation. Review existing permanent stormwater management controls database and determine if revisions are necessary for the new permit requirements.	Mary Samaniego					

# 4.2.6. Pollution Prevention/Good Housekeeping for Municipal Operations

The permittee must develop and implement an operation and maintenance program that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

## 4.2.6.1. Employee Training

This program must include an employee training program for employees responsible for municipal operations at facilities within the jurisdiction of the permittee that handle, generate, and/or store materials which constitute a potential pollutant of concern for MS4s. The goal of the training program should be to identify pollutants and prevent and/or reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. The program must identify all applicable job categories for training and include these job categories and associated training management measures in the PIE plan (see subpart 4.2.1.b.). New employees must be trained within six months of their employment or movement into an applicable job category. All responsible employees must receive training and/or retraining within the permit term.

# 4.2.6.2. Operation and Maintenance (O&M) Program Measure:

The permittee must develop an operation and maintenance (O&M) program detailing the activities and procedures the permittee will implement so that the MS4 infrastructure is maintained to reduce the discharge of pollutants from the MS4 for each of the following municipal operations as applicable:

- a. streets, roads, highways;
- b. municipal parking lots;
- c. maintenance and storage yards;
- d. fleet or maintenance shops with outdoor storage areas;
- e. salt/sand storage locations;
- f. snow disposal areas operated by the permittee; and
- g. waste disposal, storage, and transfer stations.

(note: see subpart 4.2.5 for requirements specific to SCMs)

The O&M program must include the following management practices at a minimum:

- a. Minimize or Prevent Exposures of Materials to Precipitation;
- b. Good Housekeeping;
- c. Preventative Maintenance;
- d. Spill Prevention and Response;
- e. Erosion and Sediment Control;
- f. Management of Runoff;
- g. Control Measure Maintenance; and
- h. Facility Site Inspections (conducted at least once every 12 months).

An O&M Facility Plan for each applicable municipal facility shall be developed and implement and must include the following at a minimum:

- a. Inventory of management practices on site;
- b. Procedures and documentation for the implementation of the management practices on site; and
- c. Maintenance Procedures and Frequencies for each Stormwater Control Measure (or type of SCM).

The permittee must keep record of the implementation of the management practices and document the record keeping requirements in the O&M Plan. An O&M Facility Plan does not need to be developed for a facility if the permittee has either a no exposure certification for the discharge under the Tennessee Multi-Sector General Permit (TMSP) or the discharge is authorized under another NPDES permit, e.g. TMSP.

Management Measure	Measurable Goals	Annual Report Requirement			
Employee training program for employees responsible for municipal operations at facilities	The Measurable Goals and Annual Reporting requirements for this management measures are implemented Public Education MCM and reported under subpart 4.2.1				
Develop and implement an O&M Facility Plan	All applicable Municipal operations must have an O&M Facility Plan	- # Municipal Operations Facilities  Yes/No Do all Municipal Operations Facilities have a O&M Facility Plan?			
Facility Site Inspections	Conduct a facility site inspection in accordance with the Stormwater Management Program at all municipal operation facilities at least once every 12 months	- # Municipal Operations Facilities NOT inspected in accordance with the Stormwater Management Program in the previous 12 months			

Table 5. Pollution Prevention/Good Housekeeping for Municipal Operations Schedule.

Schedule								
MCM 6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS								
BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5	
4.2.6.1.	Regular Stormwater Management Program meetings The City will hold at least two internal stormwater staff meetings each year to coordinate activities and gauge the progress and effectiveness of the stormwater program in light of the goals and milestones detailed in the NOI and/or modified in subsequent annual reports.	Mary Samaniego						
4.2.6.1.	Employee Education Monitor and document all required employee training through spreadsheet (Appendix P).	Mary Samaniego						
4.2.6.1.	Staff Training Maintain TDEC Level I training, participation in TNSA, TDEC	Mary Samaniego						

MCM 6 P	OLLUTION PREVENTION/GOOD	HOUSEKEEPII	NG FOR I	MUNICIPA	AL OPER	ATIONS	
BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
	Level II training for staff as necessary. (Appendix P)		Sil				
4.2.6.2.	Maintain and follow O&M Plan Maintain plan and inspect public facilities annually and log.	Mary Samaniego					
4.2.6.2.	Maintain Stormwater Management Program (SWMP) document Revise the current written SWMP document to reflect additions / modifications as required by the new permit and as otherwise needed. Continue to update and maintain the SWMP document, as necessary.	Mary Samaniego					
4.2.6.2.	Stream clean-up Continue annual stream clean-up project at road crossings, as deemed necessary, to maintain conveyance at the crossings. Use the annual assessment of the stream conditions at the crossings as a means of checking on the condition of outfalls in the vicinity and presence of illicit discharges.	Mary Samaniego					
4.2.6.2.	Street sweeping & vacuuming Contract with street sweeping / vacuuming contractor to perform regular street sweeping and vacuuming.	Mary Samaniego					
4.2.6.2.	Test for E Coli In streams that have unavailable parameters for pathogens.	Mary Samaniego					
4.2.6.2.	Test for Benthic Maco Invertebrates Test all streams for pathogen, siltation, or nutrients.	Mary Samaniego					×
4.2.6.2.	Visual Stream Assessment Continue annual stream clean- up project at road crossings, as deemed necessary, to maintain conveyance at the crossings. Use the annual assessment of the stream conditions at the crossings as a means of checking on the condition of	Mary Samaniego					

MCM 6 P	OLLUTION PREVENTION/GOOD	HOUSEKEEPII	NG FOR I	MUNICIPA	AL OPER	RATIONS	
BMP Task	Title – Activity Description	Activity Owner	PY1	PY2	PY3	PY4	PY5
	outfalls in the vicinity and presence of illicit discharges.						

General Compliance. The City will submit an annual report every year by September 30<sup>th</sup>.