

City of Bristol, Tennessee
NPDES Permit Tracking #: TNS075183
Small MS4 General Permit, Minimum Control Measure 5, Part 4.2.5.1.d
Post-Construction/Permanent Stormwater Management Implementation Plan
November 1, 2022

This document constitutes the Implementation Plan required by the State of Tennessee’s Small MS4 General Permit (TNS000000) Minimum Control Measure 5, Part 4.2.5.1.d for the City of Bristol, TN (City).

Current Permanent Stormwater Management Program

The City already has many of the program elements required by Part 4.2.5 of the small MS4 permit, including the requirement to meet the stormwater quality design standard of 80% total suspended solids (TSS) removal and requirements and standards for water quality buffers. **Tables 1 through 4** present highlights of the City’s current permanent stormwater management program relevant to Part 4.2.5 of the permit.

Table 1. Codes and Ordinance Development and Implementation (current program)

Program Element	Description
Ordinance	<p>The City regulates post-construction stormwater quality and water quality riparian buffers (herein called, vegetated buffers) under the Code of Ordinances of City of Bristol TN Chapter 75 (Utilities), Article VII <i>Post Construction Water Quality Management</i> (henceforth, ordinance). Relevant to Part 4.2.5 of the currently effective small MS4 permit, the ordinance establishes:</p> <ul style="list-style-type: none"> • the authority for the City Manager to administer the ordinance and establish policies, criteria, specifications, and standards to do so; • by reference, an enforceable policy manual titled <i>Water Quality BMP Manual</i>, henceforth called “BMP manual”; • the requirement for submittal and approval of a water quality management plan (WQMP) for new developments and redevelopments that disturb one (1) acre or greater of land or disturb less than one (1) acre but are part of a larger common plan of development or sale that disturbs one (1) acre or greater of land. The WQMP must be approved prior to undertaking any applicable new development or redevelopment activity; • requirements pertaining to adherence to the approved WQMP during construction and for its amendment for modifications to the design once the WQMP is approved; • the requirement to provide a protective covenant for post-construction BMPs and a right-of-way or easement for their maintenance, both to be recorded with the property’s plat/deed upon its approval • the requirement to prepare the WQMP in accordance with the post-construction water quality design standards provided in the BMP manual; • right of entry for City staff to inspect for compliance with the ordinance, during and after construction; • the requirement for owners of post-construction water quality BMPs to inspect and maintain them in keeping with the BMP manual, and to document inspection and maintenance activities, maintaining said documentation for at least three (3) years; and, • the authority to order or perform corrective actions; and other enforcement options and graduated actions for non-compliance, including reimbursement for corrective actions taken by the City, notices of violation, stop work orders, withholding of a certificate of occupancy, forfeiture of performance bonds, civil penalties ranging from \$50 to \$5,000 per day, and damage assessments.
Policy Manual	<p>The <i>Water Quality BMP Manual</i>, henceforth called “BMP manual”, establishes the design standards and WQMP requirements for stormwater quality and vegetated buffers. Relevant to Part 4.2.5 of the effective small MS4 permit, it includes the following:</p>

	<ul style="list-style-type: none"> • policies for development and submittal and revision of the WQMP and record drawings/certification, along with checklists of required elements for both; • a template for maintenance covenants; • establishment of 80% removal of total suspended solids (TSS) as the required design standard, the list of accepted SCMs and their % TSS removal efficiencies, the required equations and parameters to evaluate compliance, and permissible incentives to reduce the required treatment volume; • the requirement for third party confirmation of the % TSS removal efficiency for proprietary SCMs; • the requirement to establish, manage, maintain, and protect (during and after construction) vegetated buffers as set forth in the ordinance and policy manual; and, • the requirement to submit a record drawing/certification prior to obtaining a certificate of occupancy. The record drawing/certification must be prepared by a registered professional engineer and/or land surveyor and show that the constructed condition of post-construction water quality BMPs and vegetated buffers comply with the design shown in the approved WQMP.
--	---

Table 2. Procedures for Plans Review and Criteria for Approval (current program)

Program Element	Description
Plan Review and Approval	<ul style="list-style-type: none"> • Chapter 75 (Utilities), Article VII <i>Post Construction Water Quality Management</i> requires submittal and approval of a WQMP, which is the design plan that must show compliance with the design standards established in the BMP manual. • Criteria for WQMP approval is compliance with the design standards for 80% TSS Removal and vegetated buffers, as established in the ordinance and BMP manual (see Table 1 above). WQMPs are not approved until proof of compliance with the design standard is demonstrated. • City reviews of WQMPs are documented on TDEC form CN-1440 and QLP Coverage spreadsheet. Copies of approved WQMPs are kept on City of Bristol’s server.

Table 3. Procedures for Conducting and Tracking Site Inspections (current program)

Program Element	Description
Site Inspections	<ul style="list-style-type: none"> • Chapter 75 (Utilities), Article VII <i>Post Construction Water Quality Management</i> provides right of entry to City staff for the purposes of site inspections and enforcement (see Table 1) where non-compliance issues are present. • Inspections of (post-construction) water quality BMP construction are documented on City of Bristol monthly inspection form. Inspection documentation is kept on City of Bristol’s server. • A final inspection of constructed water quality BMPs is performed Notice of Termination is filed. Inspection documentation is kept on City of Bristol’s server. Also, the stamped record drawing/certification must demonstrate that post-construction water quality BMPs are constructed in keeping with the approved WQMP.

Table 4. SCM Operation and Maintenance Policies (current program)

Program Element	Description
Inspection & Maintenance	<ul style="list-style-type: none"> • Chapter 75 (Utilities), Article VII <i>Post Construction Water Quality Management</i> requires SCM owners to maintain SCMs to their full and intended function and provides right-of-entry to City staff to inspect SCMs and require corrective actions for non-compliance. • The City maintains an inventory of all public and private SCMs, which tracks inspection and enforcement.

	<ul style="list-style-type: none"> • SCM inspections and maintenance are performed by the SCM owner. Records of maintenance shall be retained for 3 years and subject to inspection from the City upon request. • In partnership with the cities of Johnson City and Elizabethton TN, the City has contracted with a consultant to develop a guidance manual on stormwater control measures (SCM) inspection and maintenance for SCM owners. Development of the manual is already underway.
--	---

Future Permanent Stormwater Management Program

While the City’s current program already contains most of the program elements required in Part 4.2.5 of the currently effective small MS4 General Permit, there are several modifications required. Primarily, the current method for compliance with the 80% TSS removal design standard must be modified to the approach required by the permit. Other, more minor program gaps will also need to be identified and resolved, such as SCM inspections during construction, final SCM inspection timeframes, and post-construction SCM inspection policies. The City has already taken steps to modify their program by entering into an agreement with a municipal stormwater consultant to assist with planning resolution strategies for program gaps, revision of Municipal Code Chapter 74 Article VII, revision of the BMP manual, and completion of guidance manual for owner/maintainer inspection and maintenance of SCMs.

Table 5 conveys the milestones for update of the current program to comply with the requirements of Minimum Control Measure 5, Part 4.2.5 of the effective small MS4 permit. A timeline is shown in the right column of the table, showing that program updates will be completed by the permit required deadline of September 1, 2024. *Interim milestones shown between the dates of submittal of this NOI and September 1, 2024 are subject to change depending on the needs of program update activities.*

Table 5. Milestones to Update the Permanent Stormwater Program

Program Elements	Milestones	Milestone Dates
Ordinance, Policies, Procedures, and Support Tools	<ul style="list-style-type: none"> • Regulations, policies, and procedures will be examined in light of the requirements of the new permit. These include compliance proof, execution, documentation, and tracking of plan review, site inspection, and post-construction SCM inspection and maintenance. • The policies and support tools in the draft guidance manual for SCM inspection and maintenance will be completed to meet the requirements of Part 4.2.5 of the small MS4 permit. • Chapter 75 (Utilities), Article VII <i>Post Construction Water Quality Management</i> will be revised as necessary to comply with permit conditions. Other City codes may also be revised to support the permit’s design standard and related incentives, or to support fee-in-lieu and/or office mitigation programs. • The <i>Water Quality BMP Manual</i> (to be renamed SCM manual) will be revised to re-establish the design standard, required calculations and WQMP/record drawing elements, water quality buffer standards, and construction termination requirements. • Three draft versions of the ordinance and design manual will be produced and reviewed before finalization and adoption. Ordinance adoption will, by reference, enact the revised SCM manual and the new SCM inspection and maintenance manual. 	SCM inspection & maintenance guidance manual completion: Summer 2023 Draft 1 documents: August 2023 Draft 2 documents: October 2023 Draft 3 documents: January 2024 Procedural changes will be made throughout the above listed timeline. City Council adoption of final ordinance no later than September 1, 2024