

# Memphis-Shelby County Airport Authority COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN

For Contractors Performing
Construction Activities at the
Charles W. Baker Airport
Under Permits TNR10-0000 and TNR\_\_\_-\_TBD\_\_\_

## **Comprehensive Storm Water Pollution Prevention Plan**

**Appendix A: Figure** 

**Appendix B: Permit and Forms** 

**Appendix C: Best Management Practices Appendix D: Spill Response Notification** 

**Appendix E: Inspection Form** 

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# COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN CERTIFICATION PAGE

Name of Construction Project:	Charles Baker Terminal Project
Location of Facility:	Charles W. Baker General Aviation Airport 3870 Fite Road Millington, Tennessee 38053
N	MANAGEMENT CERTIFICATION
direction or supervision in accord properly gathered and evaluated persons who manage the syst information, the information sub- and complete. I am aware that	nat this document and all attachments were prepared under my dance with a system designed to assure that qualified personnel the information submitted. Based on my inquiry of the person or tem, or those persons directly responsible for gathering the mitted is, to the best of my knowledge and belief, true, accurate, there are significant penalties for submitting false information, d imprisonment for knowing violations.
Loui Morris	4/9/2024
Signature: Lori Morris PE Memphis-Shelby County Airport A MSCAA Manager of Environmenta	•
	CONTRACTOR CERTIFICATION
referenced above. Based on my and/or my inquiry of the person the information submitted is acc described construction activity su activities on-site are thereby reg	I have reviewed this document, any attachments, and the SWPPP inquiry of the construction site owner/developer identified above directly responsible for assembling this NOI and SWPPP, I believe turate. I am aware that this NOI, if approved, makes the above-bject to NPDES permit number TNR100000, and that certain of my ulated. I am aware that there are significant penalties, including onment for knowing violations and for failure to comply with these
On file	<del></del>
Signature	Date
Printed Name	Title
Company Name	Phone Number
Company Address	

#### 1.0 INTRODUCTION

The State of Tennessee Department of Environment and Conservation, Division of Water Pollution Control (TDEC-DWPC) has authorized the discharges of storm water from the Project titled **Charles Baker Pavement Improvements – Construction** at the Charles W. Baker Airport under the Tennessee General Permit No. TNR10-0000 and the Project Permit Tracking No. TNR - **TBD** provided that the permit provisions are adhered to and the State of Tennessee (the state) receives formal application 30 days before groundbreaking from the parties responsible for the construction. Under these permits, both the Memphis-Shelby County Airport Authority (MSCAA) and the contractors performing the construction activities are responsible for complying with the permits. MSCAA has developed this Comprehensive Storm Water Pollution Prevention Plan (SWPPP) to assist contractors in complying with the provisions of their permit and to coordinate the compliance responsibilities of the contractors and subcontractors engaged in construction activities on properties owned or managed by MSCAA.

#### 1.1 Construction Activities at Charles W. Baker Airport

Charles W. Baker Airport is a full-scale 317-acre air transportation facility with tenants that provide executive flight service, aircraft maintenance, fueling, and storage for private aircraft. The airport primarily services general aviation aircraft, single-wheel, maximum weight of 25,000 pounds. Site buildings include a terminal building, private and public (rented monthly) hangars, and associated equipment, such as aircraft fueling stations, equipment storage, and new/used fueling aboveground storage tanks.

Of the 317 acres at Charles W. Baker, up to **4** acres are expected to be disturbed by construction during the term of this permit.

#### 1.2 Areas Covered Under Your Permit

Construction projects covered under this permit include, but are not limited to, runway/taxiway expansion and construction, parking construction, support facilities construction and relocation, and terminal expansions/renovations. Equipment staging areas, storage areas, excavated materials holding and/or disposal areas and borrow areas are also covered, and are subject to all of the provisions of TNR10-0000, whether the areas are contiguous to the main construction area or at remote locations. These areas, the activities to be conducted in these areas, and the storm water pollution control measures to be implemented must be incorporated into the site-specific Erosion Prevention and Sediment Control Plan (EPSCP). When one or more of these areas are operated by and/or utilized by more than one contractor, the

pollution control provisions for that area shall be coordinated so that the effectiveness of the pollution control provisions are not compromised.

Appendix A is the "Storm Drainage" map that shows storm drainage basins, outfalls, storm drainage features, tenants, and industrial National Pollutant Discharge Elimination System (NPDES) permit information.

## 1.3 Tennessee General Permit for Construction Activities Requirements

TNR10-0000, included as Appendix B, authorizes the discharge of storm water from sites that are under construction, provided that the permit provisions are adhered to and TDEC receives formal application from the parties responsible for the construction. Under this general permit, both the owner/developer of the property and the contractors performing the construction activities are responsible for complying with the permit. MSCAA has developed this SWPPP and application to comply with the provisions of TNR10-0000 and to coordinate the compliance responsibilities of the contractors and subcontractors engaged in construction activities on properties owned or managed by MSCAA.

Charles W. Baker drains into the Loosahatchie River, a river impacted by Escherichia coli, mercury, chlordane, PCBs, dioxin, phosphorus, siltation, and other habitat alterations. Therefore, the parties to this permit may be subject to additional requirements for erosion and sediment control. These additional requirements will be provided to the contract in your project-specific permit.

The parties subject to this permit include the owner/developer of the construction site (MSCAA) and all contractors and subcontractors who have either the authority to make or modify the plans and specifications or the day-to-day responsibility for execution of the plans and/or compliance with the specifications.

Table 1-1 summarizes TNR10-0000 permit requirements at Charles W. Baker Airport:

#### Table 1-1 Permitted Storm Water Discharges

Permit Number/ Discharges Tracking Covered Number  Storm Water Associated w ith C	Permit Required Activities  onstruction Activity
Storm Water Under Construction General Permit (CGP): 50 acres or less disturbed at any one time	Contractor must conduct all activities in compliance with the CGP, including but not limited to: sign NOI and SWPPP, keep SWPPP on site, and update SWPPP as needed; hire a qualified person to conduct biweekly erosion prevention and sediment control inspections (72 hours apart) and keep site inspector's certification on site; make corrections to site before next rain event but in no case more than 7 days after the need is identified; update SWPPP within 7 days of correction to site; document twice weekly inspections on TDEC form and maintain inspection file and SWPPP at the construction site a quality assurance site assessment of erosion prevention and sediment controls must be conducted by a P.E. or other qualified individual at each outfall involving drainage totaling 5 or more within a month of construction commencing at each portion of the site that drains the 5 or more acres stabilize soils (temporary or permanent) 14 days after construction ceases; post a copy of the notice of permit coverage, contact information, project description and location of the SWPPP at the construction site; install and maintain a rain gauge at the site; maintain a form on-site that tracks the acreage of disturbed area each day

## 2.0 ACQUIRING PERMIT COVERAGE AT CHARLES W. BAKER AIRPORT

To acquire permit coverage, contractors must:

- submit a complete sub-project Notice of Intent (NOI)
- submit a site-specific EPSCP
- have a full understanding of this SWPPP and the requirements of TNR10-0000 and have the ability to be in compliance with permit terms and conditions

#### 2.1 Notice of Intent

Contractors wishing coverage must first develop an EPSCP specific to the construction activities being contracted, and submit the site plan and a properly signed NOI to the state and the city <u>via MSCAA</u>. An NOI (prefilled with MSCAA-specific information) is included at the end of Appendix B with all of the permit forms. MSCAA will review the NOI and site plan for completeness and, if these are found to be complete, forward the original copy of the NOI and site plan to TDEC-DWPC.

Contractors performing construction activities at Charles W. Baker Airport are required to be signatories on the NOI if they have either the authority to make or modify the plans and specifications or have the day-to-day responsibility for execution of the plans and/or compliance with the specifications. The MSCAA requires the following responsibilities of these signatories.

#### The MSCAA must:

- Ensure the project specifications the contractors develop meet the minimum requirements of Section 3 of this SWPPP and all other applicable conditions.
- Ensure that the site plan for the contracted project indicates the areas of the project where contractor has design control (including the ability to make modifications in specifications).
- Ensure all other permittees implementing portions of the SWPPP for their part of the project that will be impacted by any changes signatories make to the plan are notified of such modifications in a timely manner.
- Ensure that all common facilities (e.g., sediment treatment basin and drainage structures) that are necessary for the prevention of erosion or control of sediment are maintained and

effective until all construction is complete and all disturbed areas in the entire project are stabilized.

- If parties with day-to-day operational control of the construction site have not been identified at the time the SWPPP is initially developed, the MSCAA shall be considered to be the responsible party until such time the supplemental NOI is submitted, identifying the new operator(s). These new operators (e.g., general contractor, utilities contractors, subcontractors, erosion control contractors, hired commercial builders) are considered secondary permittees. The EPSCP must be updated to reflect the addition of new operators as needed to reflect operational or design control.
- Ensure that all operators on the site have permit coverage and are complying with the SWPPP.

Tenants and contractors with day-to-day operational control must:

- Ensure that the SWPPP for portions of the project where they are operators meets the minimum requirements of Section 3 of the SWPPP and identify the parties responsible for implementation of control measures identified in the plan.
- Ensure that measures in the SWPPP are adequate to prevent erosion and control sediment that may result from their earth-disturbing activity.
- Permittees with operational control over only a portion of a larger construction project are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on their portion of the construction site. This includes, but is not limited to, implementation of Best Management Practices (BMPs) and other controls required by the SWPPP.

NOIs must be filed at least 30 days prior to the start of the construction project activities or the addition of a new party to the permit. If there is a change in contractor responsibilities, an NOI must be filed at least 48 hours before responsibilities are transferred from one contractor to another. To the extent possible, all of the contractors filing NOIs for a scope of work should be joint signatories to a single NOI.

#### 2.2 Storm Water Pollution Prevention Plan

Contractors wishing to obtain coverage under this permit must develop and submit a site-specific EPSCP with their NOI. This submittal must be conducted through the MSCAA to TDEC-DWPC. This SWPPP constitutes the comprehensive SWPPP addressing all construction-related activities from the date construction commence at Charles W. Baker Airport to the date of termination of permit coverage.

## 2.3 Permit Application Fees

The Contractor will be responsible for paying all permit application fees for each construction project at the airport.

#### 2.4 Notice of Coverage

TDEC-DWPC will review the NOI for completeness and will issue a Notice of Coverage (NOC) to the MSCAA for each project identified on the NOI form. Each project will be independently tracked by TDEC-DWPC with a project tracking number. Before initiation of construction activities, copies of the NOI, this SWPPP, the EPSCP, and the NOC must be located at each construction site management office. The NOC must be posted along with the following information:

- name, company name, e-mail address (if available), telephone number, and address of the project site owner or a local contact person
- a brief description of the project
- the location of the SWPPP if the site is inactive or does not have an onsite location to store the plan

Necessary copies of the NOC and the project-specific EPSCP will be distributed by MSCAA to all parties' assigned responsibility for oversight of the construction project.

#### 2.5 Notice of Termination

Individual contractors who have completed their responsibilities must submit a Notice of Termination (NOT) to be relieved of their responsibilities under the permit. Upon completion of the project, MSCAA, in conjunction with the contractors covered by the permit, is to submit a NOT. NOT forms are included at the end of Appendix B with the permit forms. NOTs are to be submitted to the contracting official at MSCAA. MSCAA will forward the NOTs to TDEC-DWPC.

Contracted projects must retain permit coverage until all construction within the site (including, but not limited to, infrastructure, common areas, storm water drainage structures, sediment control basin, etc.), is completed, all disturbed soils have been finally stabilized, and temporary erosion and sediment control measures have been removed.

TDEC-DWPC will notify MSCAA of the final decision within 30 days from receipt of a complete NOT and may deny termination of coverage if there are any existing deficiencies.

#### 2.6 Permitted Discharges

Your permit authorize discharges of storm water from construction activities such as clearing, grading, filling, and excavation activities in preparation for paving or construction activities on projects sized 1 acre or greater. It also authorizes storm water discharges from support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided the support activity is primarily related to a construction site that is covered under this permit; that the owner/contractor of the support activity is the same as the owner/contractor of the construction site; that the support activity is not a commercial operation serving multiple unrelated construction projects by different contractors and does not operate beyond the completion of the construction activity at the last construction project it supports; and that appropriate storm water pollution prevention controls and measures are identified in a SWPPP covering the discharges from the support activity areas.

The following non-storm water discharges from active construction sites are authorized by your permit, provided the non-storm water component of the discharge is in compliance with the permit: dewatering of work areas of collected storm water and groundwater; waters used to wash vehicles (of dust and soil, not process materials such as concrete) where detergents are not used and detention and/or filtering is provided before the water leaves the site; water used to control dust; potable water sources including waterline flushings; routine external building wash-down that does not use detergents; uncontaminated groundwater or spring water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

Discharges of storm water or wastewater authorized by and in compliance with a different NPDES permit (other than this permit) may be mixed with discharges authorized by this permit. All non-storm water discharges authorized by this permit must be free of sediment or other solids and must not cause erosion of soil or the stream bank, or result in sediment impacts to the receiving stream.

TNR10-0000 does not authorize storm water or other discharges that would result in a violation of state water quality standards (the TDEC Rules, Chapters 1200-4-3, 1200-4-4). Such discharges constitute a violation of this TNR10-0000. Where a discharge is already authorized under the permit and the division determines the discharge to cause or contribute to the violation of applicable state water quality standards, the permitting authority will notify the operator of such violation(s). The permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and shall document these actions in the SWPPP.

The construction activity shall be carried out in such a manner as to prevent violations of water quality criteria as stated in the TDEC Rules, Chapter 1200-4-3-.03. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated for that water body by TDEC Rules, Chapter 1200-4-4. There shall be no distinctly visible floating scum, oil, or other matter contained in the storm water discharge. The storm water discharge must not cause an objectionable color contrast in the receiving stream. The storm water discharge must result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.

## 2.7 Non-Permitted Discharges

The following storm water discharges are <u>not</u> authorized:

Process Wastewater Discharges: Process wastewaters must be authorized by an individual permit or, as appropriate, another general permit.

Post-Construction Discharges: These are storm water discharges that originate from the construction site after construction activities have been completed, the site has undergone final stabilization, and the coverage under the permit has been terminated.

Discharges Mixed with Non-Storm Water: This includes discharges that are mixed with sources of non-storm water, other than discharges that are in compliance with the non-storm water discharges authorized by this permit. Any discharge authorized by a different NPDES permit may be commingled with discharges authorized by this permit.

Discharges Covered by Another Permit: Storm water discharges associated with construction activity that have been issued an individual permit are not covered under this permit.

Discharges Threatening Water Quality: These include storm water discharges from construction sites that the state determines will cause or have the reasonable potential to cause violations of water quality standards. (Where such determinations have been made, the discharger will be notified by the state in writing that an individual permit application is necessary. The individual permit application will be on forms as determined by TDEC-DWPC.) However, the division may authorize coverage under this permit after appropriate controls and implementation procedures have been included in the SWPPP that are designed to bring the discharge into compliance with water quality standards.

Discharges into Impaired Streams: These are discharges that would add loadings of a pollutant that is identified as causing or contributing to the impairment of a water body on the list of impaired waters. The term "impaired waters" means any segment of surface waters that has been identified by the division as failing to support its designated classified uses.

Discharges into Outstanding National Resource Waters — The director shall not grant coverage under this permit for discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters.

Discharges into Exceptional Quality Waters — The director shall not grant coverage under this permit for potential discharges of pollutants which would cause degradation to waters designated by TDEC as exceptional quality waters.

Discharges Not Protective of Federal or State-Listed Threatened and Endangered Species: These are storm water discharges and storm water discharge-related activities that are not protective of legally protected listed or proposed threatened or endangered aquatic fauna in the receiving stream(s); or discharges or activities that would result in a "take" of a federally listed endangered or threatened fish or wildlife species. If TDEC-DWPC finds that storm water discharges or storm water-related activities are likely to result in any of the above effects, TDEC-DWPC will deny the coverage under TNR10-0000 unless and until project plans are changed to protect the listed species.

Discharges Negatively Affecting a Property on the National Historic Register: These are storm water discharges that would negatively affect a property that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior.

Discharging into Receiving Waters with an Approved Total Maximum Daily Load Analysis: This pertains to discharges of pollutants of concern to waters for which there is a U.S. Environmental Protection Agency (USEPA)-approved total maximum daily load (TMDL). Such discharges are not covered under your permit unless measures or controls that are consistent with the assumptions and requirements of such TMDL are incorporated into the SWPPP. If a specific wasteload allocation has been established that would apply to the discharge, that allocation must be incorporated into the SWPPP and steps necessary to meet that allocation must be implemented. In a situation where a USEPA-approved or established TMDL has specified a general wasteload allocation applicable to construction storm water discharges, but no specific requirements for construction sites have been identified, the permittee should consult with the division to confirm that adherence to a SWPPP that meets the requirements of this permit will be consistent with the approved TMDL. Where a USEPAapproved or established TMDL has not specified a wasteload allocation applicable to construction storm water discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of TNR10-0000 and TNR15-0091 will generally be assumed to be consistent with the approved TMDL. If the USEPA-approved or established TMDL specifically precludes such discharges, the operator is not eligible for coverage under the construction general permit (CGP). There are TMDLs approved for receiving waters downstream of Charles W. Baker Airport.

#### 3.0 POLLUTION PREVENTION SITE PLAN DEVELOPMENT

The grading, drainage, and EPSCP for construction projects at Charles W. Baker are considered to be part of the overall site plan and must accompany the individual project's NOI submittal. Each construction project must calculate its post-construction runoff coefficient and, where appropriate, send a Geotechnical Report for the site with the site plans to the TDEC-DWPC office with the job-specific NOI via the MSCAA.

Storm water leaving construction sites at Charles W. Baker Airport enters the MSCAA's storm sewer system going to a Loosahatchie River canal, which then enters the Loosahatchie River, which then enters the Mississippi River.

The EPSCP must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. In addition, MSCAA recommends that contractors consult the city of Memphis Storm Water Management Manual (SWMM) for guidance with storm water requirements. The SWMM includes Volume 1: Regulations, Volume 2: Drainage Manual, and Volume 3: BMP Manual. Appendix C of this SWPPP summarizes the local BMP Manual and refers to individual BMP fact sheets that are available from the Memphis and Shelby County Storm Water Program's Web site at http://www.stormwatermatters.com. Because the receiving streams for Charles W. Baker Airport storm water discharges are impaired, the EPSCP must be prepared by a person who, at a minimum, has completed the department's Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites course or by a licensed professional engineer. A copy of the certification or training record for inspector certification should be included with the EPSCP.

#### The EPSCP must:

- Identify all potential sources of pollution that are likely to affect the quality of storm water discharges from the construction site.
- Describe practices to be used to reduce pollutants in storm water discharges from the construction site.
- Assure compliance with the terms and conditions of this permit.

Once a definable portion of a project has been finally stabilized, the co-permittee and MSCAA may identify the stabilized area on the EPSCP. At that time, no further SWPPP or inspection requirements apply to that portion of the site.

Plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 and the rules of the Tennessee Board of Architectural and Engineering Examiners. Engineering design of sediment basins and other sediment controls must be included in SWPPPs for construction sites involving drainage to an outfall totaling 5 or more acres due to the receiving water body's impaired status.

## 3.1 Site Description

The EPSCP must provide a description of pollutant sources and other information as indicated below:

- A description of all construction activities at the site (not just grading and street construction).
- The intended sequence of major activities that disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.)
- Estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, filling, or other construction activities.
- A description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on the site; such estimation should be on the basis of a drainage area serving each outfall, rather than an entire project.
- Any data describing the soil (data may be referenced or summarized) and how the soil type will dictate the needed control measures and the expected quality of any discharge from the site.

- An estimate of the runoff coefficient of the site after construction activities are completed and how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream.
- An erosion prevention and sediment control map of the site with the proposed construction area clearly outlined. The map should indicate the boundaries of the permitted area; drainage patterns and approximate slopes anticipated after major grading activities; areas of soil disturbance; an outline of areas that are not to be disturbed; the location of major structural and nonstructural controls identified in the SWPPP; the location of areas where stabilization practices are expected to occur; surface waters including wetlands; sinkholes; and careful identification of outfall points intended for coverage under the general permit for storm water discharges from the site.
- A description of any discharge associated with industrial activity other than construction storm water that originates onsite and the location of that activity and its permit number.
- Identification of any stream or wetland on or adjacent to the project, a description of any anticipated alteration of these waters, and the permit number or the tracking number of the Aquatic Resources Alteration Permit or Section 401 Certification issued for the alteration.
- The name of the receiving water(s), and approximate size and location of affected wetland acreage at the site.
- If applicable, identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project.
- For projects of more than 50 acres, the construction phases must be described. (No more than 50 acres may be disturbed at any one time.)
- If only a portion of the total acreage of the construction site is to be disturbed, then the protections employed to limit the disturbance must be discussed, i.e., caution fence, stream side buffer zones, etc.
- Limits of disturbance shall be clearly marked in the SWPPP and areas to be undisturbed clearly marked in the field before construction activities begin.

## 3.2 Description of Storm Water Runoff Controls

The EPSCP must include a description of appropriate erosion prevention and sediment controls and other BMPs that will be implemented at the construction site. The plan must clearly describe each major activity that disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.):

- Indicate appropriate control measures and the general timing for the measures to be implemented during construction activities.
- Indicate which permittee is responsible for implementation of which controls.

The EPSC plans must show the approximate location of each control measure along with a description of the timing during the construction process for implementing each measure (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished). The different stages of construction (initial/major grading, installation of infrastructure, final contours, etc.) and the erosion preventions and sediment control measures that will be utilized during each stage should be depicted on multiple plan sheets (see paragraphs below). Half sheets are acceptable. One sheet showing all EPSCs that will be used during the life of the multi-phase project implementing different EPSC controls at each stage will not be considered complete.

For site disturbances less than 5 acres, at least two separate EPSC plan sheets must be developed. At least two stages must be identified, with associated EPSC measures addressed. The plan stages must be addressed separately in plan sheets, with each stage reflecting the conditions and EPSC measures necessary to manage storm water runoff, erosion and sediment during the initial land disturbance (initial grading) and the conditions and EPSC measures necessary to manage storm water, erosion and sediment at final grading.

For site disturbances more than 5 acres, at least 3 separate EPSC plan sheets must be developed. Three stages must be identified. The first plan sheet should reflect the conditions and EPSC measures necessary to manage storm water runoff, during the initial land disturbance (initial grading). The second plan sheet shall reflect the conditions and the EPSC measures necessary to manage storm water runoff from interim land disturbance activities. The third plan sheet shall reflect the conditions and EPSC measures necessary to manage storm water runoff, erosion and sediment at final grading.

## 3.3 Construction Sequencing

In general, the construction sequence to be followed in order to reduce erosion and prevent sediment from leaving the construction site is:

- Install erosion control devices (i.e., ditch blocks, silt fencing)
- Remove existing topsoil (if re-grading site) to a minimum of six inches to a stockpile with erosion controls
- Remove existing pavement
- Grade and prepare subgrade for new building slab and/or paving
- Construct new building and/or paving
- Place earthen fill for side slopes from shoulder to existing grade
- Clean out any ditch blocks/ponds
- Sod areas of soil disturbance

#### 3.4 Erosion Prevention and Sediment Controls

The following are the general criteria that will be required for the development of the EPSCP:

- The construction-phase erosion prevention controls shall be designed to eliminate (or minimize if complete elimination is not possible) the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site to the maximum extent practicable.
- The design, inspection and maintenance of BMPs described in SWPPP must be prepared in accordance with good engineering practices and, at a minimum, shall be consistent with the requirements and recommendations contained in the current edition of the Tennessee Erosion and Sediment Control Handbook. In addition, all control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications (where applicable). All control measures selected must be able to slow runoff so that rill and gully formation is prevented. When steep slopes and/or fine particle soils are

present at the site, additional physical or chemical treatment of storm water runoff may be required. Proposed physical and/or chemical treatment must be researched and applied according to the manufacturer's guidelines and fully described in the SWPPP. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for relevant site situations.

- If permanent or temporary vegetation is to be used as a control measure, then the timing of the planting of the vegetation cover must be discussed in the SWPPP. Planning for planting cover vegetation during winter months or dry months should be avoided.
- If sediment escapes the permitted area, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation/restoration of a stream without consulting the division first. TNR100000 does not authorize access to private property. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining landowner.
- Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as recommended in the Tennessee Erosion and Sediment Control Handbook, and must be removed when design capacity has been reduced by 50%.
- Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events or before being carried off of the site by wind (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, materials used for erosion prevention and sediment control (such as silt fence) should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.
- Erodible material storage areas (including but not limited to overburden and stockpiles of soil etc.) and borrow pits used primarily for the permitted project and which are contiguous

to the site are considered a part of the site and shall be identified on the NOI, addressed in the SWPPP and included in the fee calculation.

- Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site should be preserved to the maximum extent practicable.
- Construction must be sequenced to minimize the exposure time of graded or denuded areas.
- Construction phasing is required on all projects regardless of size as a major practice for minimizing erosion and limiting sedimentation. Construction should be phased to keep the total disturbed area less than 50 acres at any one time. Areas of the completed phase must be stabilized within 14 days. No more than 50 acres of active soil disturbance should be planned at any time during the construction project. This includes off-site borrow or disposal areas that meet the conditions above.
- Erosion prevention and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday, but must be replaced at the end of the workday.
- The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records. MSCAA maintains daily log books with this information; information is collected by the MSCAA contracted inspectors.
- Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A
  stabilized construction access (a point of entrance/exit to a construction site) shall be
  described and implemented, as needed, to reduce the tracking of mud and dirt onto
  public roads by construction vehicles.

• Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.

#### 3.4.1 General Permit Requirements for Stabilization Practices

The EPSCP shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization, erosion control, or sediment treatment measures are to be installed in a stream without obtaining a Section 404 permit and an Aquatic Resource Alteration Permit, if such permits are required and appropriate.

Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed no later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- Where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions. In this situation, stabilization measures shall be initiated as soon as practicable.
- Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days.

Steep slopes (natural or created slope of 35% grade or greater) shall be temporarily stabilized not later than 7 days after construction activity on the slope has temporarily or permanently ceased.

Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, noneroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a noneroding surface.

## 3.4.2 General Permit Requirements for Structural Practices

The EPSCP shall include a description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil-retaining systems, gabions, and temporary or permanent sediment basins. Structural controls shall not be placed in streams or wetlands except as authorized by a section 404 permit and/or Aquatic Resource Alteration Permit.

Erosion prevention and sediment control measures must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. In addition, erosion prevention and sediment controls shall be designed to minimize erosion and maximize sediment removal resulting from a 5-year, 24-hour storm due to the impaired receiving stream (the design storm — see definition in text box to right: "2-year and 5-year design storm depths and intensities"), as a minimum, either from total rainfall in the designated period or the equivalent intensity. When clay and other fine particle soils are present at the construction site, chemical treatment may be used to minimize amount of sediment being discharged.

For an on-site outfall which receives drainage from 10 or more acres, a minimum sediment basin volume that will provide treatment for a calculated volume of runoff from a 5 year, 24 hour storm and runoff from each acre drained, or equivalent control measures as specified in the Tennessee Erosion and Sediment Control Handbook, shall be provided until final stabilization of the site. A drainage area of 10 or more acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment retention

"2-year and 5-year design storm depths and intensities" means the estimated design rainfall amounts, for any return period interval (i.e., 2-yr, 5-yr, 25-yr, etc.,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee: http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn pfds.html.

Other data sources may be acceptable with prior written approval by TDEC Water Pollution Control.

basin, the equivalency must be justified to the division. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin. Diverted runoff can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included.

All calculations of drainage areas, runoff coefficients and basin volumes must be provided as a part of the EPSCP submittal. The discharge structure from a sediment basin must be designed to retain sediment during the lower flows. Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, well-grassed or lined channel, or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharged water must not cause an objectionable color contrast with the receiving stream.

### 3.5 Storm Water Management

The EPSCP must be developed to ensure that measures have been completed that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The plan should also consider measures that will be installed during the construction process to control pollutants and any increase in the volume of storm water discharges that will occur after construction operations have been completed. For steep slope sites, the plan will also consider measures that will be installed to dissipate the volume and energy of the storm water runoff to predevelopment levels. This permit only addresses the installation of storm water management measures and not the ultimate operation and maintenance of such structures after the construction activities have been completed, the site has undergone final stabilization, and the permit coverage has been terminated. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site.

Construction storm water runoff management practices may include: storm water detention structures (including ponds with a permanent pool); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (that combine several practices). Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (no significant changes in the hydrological regime of the receiving water). The EPSCP must include an explanation of the technical basis used to select the practices to control pollution where flows exceed predevelopment levels. The Tennessee Erosion and Sediment Control Handbook provides measures that can be incorporated into the design or implemented on site to decrease erosive velocities. An Aquatic Resources Alteration Permit may be required if such velocity dissipation devices installed would alter the receiving stream and/or its banks.

## 3.6 Other Items Needing Control

The EPCSP must also include consider and describe the following other items potentially needing controls at the site:

- No solid materials, including building materials, shall be placed in waters of the state, except as authorized by a section 404 permit and/or Aquatic Resource Alteration Permit.
- Offsite vehicle tracking of sediments and the generation of dust shall be minimized. A
  stabilized construction access (a point of entrance/exit to a construction site) shall be
  described and implemented, as needed, to reduce the tracking of mud and dirt onto
  public roads by construction vehicles.
- Describe any waste disposal systems, sanitary sewer, or septic system onsite, and provide for the necessary sediment controls. Tenants and contractors must also comply with applicable state and/or local waste disposal sanitary sewer or septic system regulations for such systems to the extent that these are located within the permitted area.
- Describe construction and waste materials expected to be stored onsite with updates as appropriate. In addition, the EPSCP must consider the controls to be used to reduce pollutants from materials stored onsite, including storage practices to minimize exposure of the materials to storm water, and spill prevention and response.
- Describe storm water sources from areas other than construction and a description of controls and measures that will be implemented at those sites.
- Describe measures necessary to prevent "taking" of legally protected federal or state-listed threatened or endangered aquatic fauna and/or critical habitat (if applicable).

#### 3.7 Maintenance

Erosion prevention and sediment control measures must be maintained in good and effective operating condition. Maintenance needs identified by inspections or other means shall be addressed before the next storm event, but in no case more than 7 days after the need is identified. The EPSCP must provide maintenance requirements for BMPs. As a reference, the maintenance of typical measures is included below.

#### **Mulches**

Inspection of the application should be performed along with other regularly scheduled erosion and sediment control inspections.

- Any areas that have washed out due to high storm water flows should be reconsidered for different BMP use, or at least retreated.
- Areas that have been disturbed by blowing wind should be retreated.
- Maintenance needs identified in inspections or by other means shall be accomplished before
  the next storm event if possible, but in no case more than seven days after the need is
  identified.

#### Silt Fence

Silt fence stake pockets should be placed on the uphill side of the sediment fence, so if the stitching of the pocket pulls out, the fabric will still drape against the stakes. The bottom of the fabric of the fence should be trenched into the ground, or else water and sediment can flow under the sediment fence. The silt fence should be placed on the contour, or else a "flume" will be created where flow and sediment can concentrate. A failure is likely to occur at such a concentration point, and the flume will release concentrated flow and sediment down the face of the slope. Silt fence is designed for sheet flow only, and should never be placed over concentrated flows, such as channels or streams. Silt fence is designed for relatively small drainage areas, and should not be placed at the bottom of a large drainage area that will overwhelm the sediment fence in the first storm event.

- Sediment fences should be cleaned of accumulated sediment after each major storm, or when deposition is 1/2 of the barrier height.
- Breaks or overtopped areas should be replaced or repaired immediately. Fences should be repaired and the accumulated sediment dispersed to a stable area.
- Sediment fence should be removed when the area being protected is fully stabilized and prior to termination of permit coverage.

#### Storm Drain Inlet Protection

Using inlet protection measures that divert flow, rather than filter flow, can result in flooding of adjacent areas, or overwhelming adjacent inlets. Common problems are: bypassing of inlet protection due to insufficient packing of the ends of Biofilter bags and bypassing of the inlet protection due to overflow slots on drain inlet insert devices.

- Inlet filters for storm drains should be inspected and cleaned after each significant storm event and repaired promptly. Sediment shall be removed after each significant storm event and deposited in a stable area where it will not be subject to erosion.
- If the inlet protection device becomes clogged with sediment it must be carefully removed from the inlet and either cleaned or replaced.

## Temporary Sediment Basin

Constructing a basin that is too wide and not long enough can result in short-circuiting of the basin and discharge of sediment out of the basin.

- Temporary and permanent sediment basins should be cleaned of accumulated sediment after every significant storm event, or when sediment reaches the basin capacity as designed in the EPSCP.
- Removed sediment shall be properly disposed of in a stable area that is not susceptible to erosion.

## **Entrance/ Exit Tracking Controls**

While gravel for temporary construction entrances should be coarse enough to shake loose soil that adheres to the vehicles' wheels and undercarriage, it should not be so coarse and angular that it causes damage to tires.

 Stabilized gravel construction entrances shall be inspected for the transport of sediment onto public rights-of-way, and any tracked sediment shall be removed immediately by vacuum sweeping and not washed off by water trucks. If tracking is an ongoing problem, a wheel wash facility should be added to the site.

## Entrance/ Exit Tire Wash

Installation of tire wash without other entrance/exit tracking controls, resulting in excessive sediment loading on tire wash.

Failure to remove accumulated sediment from tire wash.

#### **Diversion of Runon**

Diversion channels must be properly sized to convey design flows around disturbed soil areas or other areas of concern.

• Diversion measures must be maintained to remove debris and sediment, repair linings, and replace lost rip rap as needed.

#### Check Dams

Placing a check dam or barrier so that the abutments are not at a higher elevation than the center of the barrier can result in flow around the ends of the barrier. Not trenching the bottom of the check dam or barrier can result in undermining of the barrier.

- Check dams should be checked for undermining and/or short-circuiting and repaired or replaced if necessary.
- Check dams should be cleaned after each significant storm event or when accumulated sediment reaches half the height of the check dam.
- Check dams should be keyed into the channel banks a minimum of 18 inches to prevent flow around the dam or as designed in the EPSCP.

#### 3.8 Best Management Practices

Each construction project will select BMPs through the process laid out in Appendix C, Best Management Practices. MSCAA encourages implementation of a series of best management practices and recommends that storm water controls be designed to limit the discharge of storm water pollutants offsite to predevelopment levels to the maximum extent practicable (MEP). Due to colloidal clay soils in the Millington area, sediment removal BMPs may not yield clear storm water.

#### 4.0 INSPECTIONS

Inspections of erosion controls must be performed to ensure proper maintenance and effectiveness of the devices.

#### 4.1 Inspector Training and Certification

Inspectors performing the required twice weekly inspections must have an active certification by completing the "Fundamentals of Erosion Prevention and Sediment Control Level I" course. A copy of the certification or training record for inspector certification is maintained at the MSCAA's Project Center.

An integral part of improving water quality at the airport is the training of those requesting coverage under TNR10-0000. To meet this need, MSCAA recommends the "Fundamentals of Erosion Prevention and Sediment Control Level I" course for its contractors. Workshop participants will receive resource notebooks and materials used by the instructors in presenting the courses. Handout materials include the Tennessee Erosion & Sediment Control Handbook of recommended Best Management Practices, TDEC Construction General Permit requirements, and SWPPP example; manual of Design Principles for Erosion Prevention & Sediment Control for Construction Sites; all workshop presentation slides; and a CD-ROM containing several other public domain design and analysis software and reference materials.

The Level I Fundamentals workshop is a one-day foundation-building course for individuals involved in land-disturbing activities and is intended for contractors, developers, plan preparers, reviewers, designers, engineers, and inspection and enforcement personnel from all levels of government. The fundamentals course aims to build a solid working knowledge of erosion and sedimentation processes and practices. Topics include: Construction General Permit and related SWPPP requirements; function, installation, limitations, inspection, and maintenance of BMPs; roles of local officials and state government agencies involved in the permitting process; and basic hydrologic and erosion processes. The Level I Fundamentals workshop provides a Certificate of Completion with seven (7) hours of Professional Development Hours (PDH) credit upon successful completion of the short Course Certification Exam.

#### 4.2 Schedule of Inspections

Inspections must be performed at least twice every calendar week. Inspections must be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized or where runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), or due to extreme drought, such inspection only has to be conducted once per month until thawing

or participation results in runoff or construction activity resumes. Inspections requirements do not apply to definable areas that have been finally stabilized. Written notification of the intent to change the inspection frequency and the justification for such request must be submitted to the local Environmental Field Office

#### 4.3 Inspection Items

Qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, locations where vehicles enter or exit the site, and each outfall.

Disturbed areas and areas used for storage of materials that are exposed to precipitation must be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion prevention and sediment control measures identified in the site plan must be observed to ensure that they are operating correctly.

Outfall points (where discharges leave the site or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

#### 4.4 Schedule for Corrections

Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than seven days after the need is identified. In addition, the site plan will be revised as appropriate no case later than seven days following the inspection.

## 4.5 Inspection Documentation

All inspections shall be documented on the Construction Storm Water Inspection Certification form provided in Appendix E of this SWPPP for all construction sites. Inspection documentation will be maintained on site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request. If the division requests the Construction Storm Water Inspection Certification form to be submitted, the submitted form must contain the printed name and signature of the trained certified inspector and the person who meets the signatory requirements of the permit.

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

Subsequent operator(s) (primary permittees) who have obtained coverage under this permit must conduct twice weekly inspections, unless their portion(s) of the site has been temporarily stabilized, or runoff is unlikely due to winter conditions or due to extreme drought. The primary permittee is no longer required to conduct inspections of portions of the site that are covered by a subsequent primary permittee.

#### 4.6 Site Assessment

A site assessment must be conducted at each outfall involving drainage totaling 5 or more acres. The site assessment will be conducted within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The site assessment can take the place of one of the twice weekly inspections.

The site assessment must be performed by individuals with following qualifications:

- A licensed professional engineer or landscape architect;
- A Certified Professional in Erosion and Sediment Control; or
- A person that successfully completed the Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites course.

The site assessment will be performed to verify the installation, functionality and performance of the erosion protection and sediment control measures described in this Plan. Following the site assessment, a thorough review and update (if applicable) of the SWPPP will be conducted; modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls shall be prepared by a licensed professional engineer or landscape architect.

The site assessment findings will be documented and kept with this SWPPP at the site. Documentation will include, at a minimum, the information provided in the twice-weekly inspection form and the printed name and signature of the individual performing the site assessment with the following certification:

"I certify under penalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

The site assessment can take the place of one of the twice-weekly inspections. Additional site assessment(s) may be required if TDEC observes site conditions that have potential of causing pollution to the waters of the state.

#### 5.0 POLLUTION PREVENTION

## **5.1** Non-Storm water Discharges

Construction projects at Charles W. Baker Airport may have some occasional non-storm water discharges that are authorized by the permit. The following non-storm water discharges from active construction sites are authorized by TNR00000 provided the non-storm water component of the discharge is combined with storm water discharges associated with construction activity, identified in the EPSCP with an appropriate pollution prevention measures and discharged through stable discharge structures. The estimated volume of the non-storm water component(s) of the discharge must be included in the design of all impacted control measures.

- a) dewatering of work areas of collected storm water and ground water (filtering or chemical treatment may be necessary prior to discharge)
- b) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site
- c) water used to control dust in accordance with section 3.5.5 above
- d) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable
- e) routine external building washdown that does not use detergents or other chemicals;
- f) uncontaminated groundwater or spring water
- g) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.)

All non-storm water discharges authorized by this permit must be free of sediment or other solids and must not cause erosion of soil or the stream bank, or result in sediment impacts to the receiving stream.

There will be no pumping of any water standing on the outside of the erosion control structures. The water will be allowed to drain down naturally. One or more of the following will used for dust control at the site:

- Exposing the minimum area possible of erodible earth
- Using water sprinkler trucks
- Using covered haul trucks
- Using dust palliatives or penetration asphalt on haul roads
- Storing construction materials and waste materials at an offsite location

### **5.2** Description of the Support Areas

All support areas for construction projects at Charles W. Baker Airport will be included in the site plan. The support areas may be used to stockpile soils and construction debris, park construction equipment, stage construction materials, and house the construction offices of the contractors. In addition, the support areas may also be used to conduct routine maintenance of construction equipment during the project.

## 5.2.1 Soil Stockpiles

Designated stockpile areas and other construction and waste materials to be stored onsite or in support areas will have erosion controls in place to prevent pollution. BMPs will be selected for each area.

#### **5.2.2 Construction Debris**

Designated stockpile areas and other construction and waste materials to be stored onsite or in support areas will have erosion controls in place to prevent pollution. No solid materials will be discharged directly into storm water conveyance systems from support areas. BMPs will be selected for each area.

#### 5.2.3 Hauling

Offsite vehicle tracking of sediments will be minimized. Dust control is mandated by MSCAA and frequent sprinkling of traffic areas is required. BMPs will be selected for each area and activity.

#### **5.2.4 Construction Equipment Storage and Maintenance**

Construction equipment and contractor vehicles may be stored at the support areas. Inspections for leaking vehicles will be made periodically (weekly) and repairs will be made promptly. Routine maintenance, such as oil changes, filter changes, greasing, and minor repairs may be conducted at support areas. Equipment is to be taken offsite for major repairs. No oil containers or other liquids are stored at the support area. Any spills of oils or other liquids at the support area will be promptly cleaned up and disposed of properly. Fuel stored onsite will be contained in

certified fuel tanks equipped with self-contained secondary containment. BMPs will be selected for each area and activity.

## 5.2.5 Onsite Waste Disposal Systems, Sanitary Sewer, or Septic Systems

Portable bathrooms will be used at the support areas for the construction sites. No onsite waste disposal systems, sanitary sewer or septic systems, or other systems requiring sediment controls or any permits are to be installed.

#### **6.0 SENSITIVE ENVIRONMENTAL FEATURES**

#### 6.1 Wetlands

There are wetlands on the south-end of the Charles W. Baker property and no construction projects planned in any wetland areas surrounding the airport. Should construction activities be undertaken in the future, wetland issues will be addressed in the site plans for those activities.

## **6.2** Threatened and Endangered Species

State and Federal rare, threatened, and endangered species that are found throughout Shelby County include the Indiana bat — *Myotis sodalis* (Endangered), bald eagle — *Haliaeetus leucocephalus* (Threatened), wood stork — *Mycteria americana* (Endangered-single bird observed feeding 1988), turgid-blossom pearly mussel — *Epioblasma turgidula* (Endangered), and the Least tern — *Sterna antillarum* (Endangered). However, the airport property does not support any of these state- or federally-listed threatened or endangered species or their critical habitat. Should habitat for any of these species be encountered, MSCAA will follow all TDEC requirements and the site plan will be modified to include protective measures acceptable to TDEC, MSCAA, and the contractor(s).

## 6.3 Total Maximum Daily Loads

The SWPPP must include documentation supporting a determination of permit eligibility with regard to waters that have an approved total maximum daily load (TMDL) for a pollutant of concern, including:

- identification of whether the discharge is identified, either specifically or generally, in an approved TMDL and any associated allocations, requirements, and assumptions identified for the discharge
- summaries of consultation with TDEC on consistency of SWPPP conditions with the approved TMDL
- measures taken to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the approved TMDL, including any specific wasteload allocation that has been established that would apply to the construction storm water discharge.

The approved 2010 303(d) list includes TMDLs for chlordane, dioxins, Escherichia coli, and PCBs in Loosahatchie River. No TMDLs for siltation have been developed for this receiving water body, although Loosahatchie River is listed as impaired for loss of biological integrity due to siltation, as well as for mercury, phosphorus, and other habitat alterations. Because there is no current TMDL for any of the receiving streams that would apply to construction storm water discharges from Charles W. Baker, there are no additional requirements at this time.

#### 6.4 Discharges to Impaired or Exceptional Tennessee Waters

Discharges that would add loadings of a pollutant that is identified on the list of impaired waters as causing or contributing to an impairment of a water body or that would cause degradation to waters designated by TDEC as impaired waters are not authorized by this permit. Because the discharges from Charles W. Baker Airport flow to a receiving stream which is impaired for loss of biological integrity due to siltation, total phosphorus, and other anthropogenic substrate alterations, additional SWPPP and BMP requirements shall apply as indicated throughout this SWPPP. To be eligible to obtain and maintain coverage under this permit, the operator must satisfy additional requirements. The additional requirements are incorporated into Section 3 of this SWPPP.

In the event TDEC finds that a discharger is complying with the SWPPP but contributing to the impairment of a receiving stream, then the discharger will be notified by the director in writing that the discharge is no longer eligible for coverage under the general permit. The permittee may update the SWPPP and implement the changes designed to eliminate further impairment of the receiving stream. If the permittee does not implement the SWPPP changes within seven days of receipt of notification, the permittee will be notified in writing that continued discharges must be covered by an individual permit. To obtain the individual permit, the operator must file an individual permit application. The project must be stabilized until such time as the SWPPP is redeveloped and the individual permit is issued. No earth-disturbing activities, except those necessary for stabilization, are authorized to continue until the individual permit is issued.

#### 6.5 Buffer Zone Requirements for Discharges into Impaired or Exceptional Waters

A 60-foot natural riparian buffer zone adjacent to the receiving stream designated as impaired waters shall be preserved, to the maximum extent practicable, during construction activities at the site. The receiving stream is listed as impaired for one or more reasons; however, the buffer zone requirement only applies to new construction sites. Therefore, no buffer zones are required at Charles W. Baker Airport.

For projects that could come up in the future that would be considered new construction, the water quality buffer zone would be required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a for Qualified certification program Hydrologic Professionals , TN Rules Chapter 0400-40-17). Buffer zones are not sediment control measures and should not be relied upon as primary sediment control measures. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state.

The natural buffer zone should be established between the top of stream bank and the disturbed construction area. The 60-foot criterion for the width of the buffer

Buffer zones are **not** required to portions of the buffer where certain land uses exist, or where pre-approved construction planned prior to June 16, 2005, and are to remain in place according to the following: A use is considered existing if it was present within the buffer zone as of the date of the Notice of Intent for coverage under the CGP. Existing uses shall include, but not be limited to, buildings, parking lots, roadways, utility lines and on-site sanitary sewage systems. Only the portion of the buffer zone that contains the footprint of the existing land use is exempt from buffer zones. Activities necessary to maintain uses are allowed provided that no additional vegetation is removed from the buffer zone. If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the buffer area are being removed buffer zone requirements shall apply.

zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30 feet at any measured location.

Every attempt should be made for construction activities not to take place within the buffer zone. BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Such equivalent BMPs shall be designed to be as effective in reduction of sediment in storm water runoff as a natural buffer zone. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction, roadway construction, utility line, or equipment installation, greenway construction, construction of a permanent outfall, or a velocity dissipating structure, etc.

This requirement does not apply to any valid Aquatic Resource Alteration Permits or equivalent permits issued by federal authorities. Memphis and Shelby County have established a 25-foot buffer zone from the top of bank for impoundments, pools, lakes, and wetlands.

#### 7.0 SPILLS AND LEAKS

The discharge of hazardous substances or oil in the storm water discharge(s) from the site will be prevented or minimized. Appendix D includes spill response notification and response resources. TNR10-0000 do not relieve the contractor of the reporting requirements of Title 40 of the Code of Federal Regulations Part 117 (40 CFR 117) and 40 CFR 302. Where a release containing a hazardous substance, fuel, or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

- 1. The contractor is required to notify the National Response Center (NRC) ([800] 424-8802) and the Tennessee Emergency Management Agency (emergencies: [800] 262-3300; non-emergencies: [800] 262-3400) in accordance with the requirements of 40 CFR 117 and 40 CFR 302 as soon as he or she has knowledge of the discharge.
- 2. The contractor shall submit to the TDEC Memphis Field Office, 8383 Wolf Lake Drive, Bartlett, Tennessee 38133 within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released); the date that such release occurred; the circumstances leading to the release; what actions were taken to mitigate effects of the release; and steps to be taken to minimize the chance of future occurrences.
- 3. This SWPPP must be modified within 14 calendar days of knowledge of the release to incorporate a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

Any spills or leaks of oils or other liquids will be promptly cleaned up and disposed of properly regardless of their potential to be carried offsite by a storm event.

It should be noted that a reportable quantity of a fuel or other petroleum product is the quantity that will form a visible sheen (e.g., a very small quantity).

MSCAA's Manager of Environmental Services must be kept fully informed in a timely manner of all spills or leaks and the actions taken in response to them.

Comprehensive Storm Water Pollution Prevention Plan Memphis-Shelby County Airport Authority Charles W. Baker Airport — Millington, Tennessee August 2023

#### **Airport Spill Response Procedures**

The general procedure for cleaning up spills or releases of potential pollutants at the Charles W. Baker Airport is as follows:

All spills and releases of potential pollutants that might contaminate storm water are to be completely contained upon discovery and the source of the spill is to be identified and halted immediately. The spilled material is to be cleaned up immediately. Personnel involved in the cleanup shall take precautions to protect personal health and safety, as outlined in the Material Safety Data Sheets (MSDS) for the spilled substance. The spilled material and all disposable, contaminated cleanup equipment shall be disposed of in the appropriate containers. Non-disposable cleanup equipment shall be thoroughly cleaned, with precautions taken to not spread contamination.

The MSCAA Project Manager must be informed of any spills or releases that occur at the facility. It is their responsibility to see that the release reporting requirements, detailed in Appendix D of this SWPPP, are followed, as applicable. Following a spill or release, the responsible personnel also have the responsibility for evaluating whether changes are needed in pollution prevention plans for the construction site, and for implementing necessary modifications.

#### 8.0 RISK IDENTIFICATION AND SUMMARY OF POTENTIAL POLLUTANT SOURCES

#### 8.1 Construction Activity

All outfalls will be protected with erosion control devices to prevent sediment from leaving the construction site. Additionally, there will be upstream structural controls, such as ditch blocks, and nonstructural controls, such as sodding, in place.

#### 8.2 Spills and Leaks

Any spills or leaks of oils or other liquids on the construction site will be promptly cleaned up and disposed of properly.

Construction site plans will denote the locations of all known underground fuel lines, storage tanks, and other utilities at the site. Previous ruptures of fuel lines have occurred during construction due to unknown, unmarked fuel line and vent pipe locations. Work has been conducted to mark all fuel line locations; however, if construction encounters a suspect stand pipe, possibly denoting the location of a vent pipe for an unmarked underground fuel line, work will stop in the immediate area until the pipe can be investigated and measures taken to ensure that any potential for a spill or leak has been mitigated.

#### 8.3 Soil Stockpiles

Designated stockpile areas and other construction and waste materials to be stored onsite or in support areas will have erosion controls in place to prevent pollution. BMPs will be implemented for each site.

#### 8.4 Construction Debris

Designated stockpile areas and other construction and waste materials to be stored onsite or in support areas will have erosion controls in place to prevent pollution. BMPs will be implemented for each site.

#### 8.5 Hauling

Offsite vehicle tracking of sediments will be minimized. Dust control is mandated by the MSCAA and frequent sprinkling of traffic areas is required. Airport roads, taxiways, ramps, and runways that become tracked with soil or sediment are promptly cleaned with mechanical sweepers. BMPs will be implemented for each site.

#### 8.6 Construction Equipment Storage and Maintenance

Construction equipment and contractor vehicles may be stored at the support areas. Inspections for leaking vehicles will be made periodically (weekly) and repairs will be made promptly. Routine maintenance, such as oil changes, filter changes, greasing, and minor repair may be conducted at support areas. Equipment is to be taken offsite for major repairs. No oil containers or other liquids are to be stored at the support area. Any spills of oils or other liquids at the support area will be promptly cleaned up and disposed of properly. Fuel stored onsite will be contained in certified fuel tanks equipped with self-contained secondary containment. BMPs will be implemented for each site.

#### 8.7 Onsite Waste Disposal

No wastes will be disposed of at the construction site or the support area. All wastes will be transported offsite for proper disposal.

#### 9.0 MANAGEMENT OF POST-CONSTRUCTION RUNOFF

Due to the adequacy of the existing storm water management (collection and transport) systems, additional storm water management practices are not necessary due to the new construction at this site.

The MSCAA and its construction project engineers will review the construction plans for each construction project to assess the necessity for additional storm water management practices related to increased impervious area.

#### 10.0 RECORD KEEPING AND INTERNAL REPORTING PROCEDURES

The contractor responsible for each construction site will keep records of incidents such as spills or other discharges, along with other information describing the quality and quantity of storm water discharges. Records of spills, inspections, and maintenance activities will be maintained with the SWPPP.

MSCAA shall retain copies of the SWPPP and all reports required by this permit, and records of all data used to complete the NOI for each construction site to be covered by TNR10-0000 for a period of at least one year from the date the NOT is filed. This period may be extended by written request of TDEC-DWPC.

Each contractor must retain a copy of the SWPPP (which includes TNR10-000 as Appendix B) at the construction site or other local location accessible to TDEC from the date construction commences to the date of final stabilization and submission of the NOT. The contractors with day-to-day operational control over pollution prevention plan implementation shall have a copy of the site plan available at a central location onsite for the use of all contractors and those identified as having responsibilities under the site plan whenever they are on the construction site. Once coverage is terminated, the permittee must maintain a copy of all records for a period of three years.

The contractor shall post a notice at the site with the following information:

- a) a copy of the NOC with the NPDES permit tracking number for the construction project
- b) name, company name, E-mail address (if available), telephone number and address of the project site owner/operator or a local contact person
- c) a brief description of the project
- d) the location of the SWPPP

The notice must be maintained in a legible condition. If posting this information near a main entrance is infeasible due to safety concerns, or not accessible to the public, the notice shall be posted in a local public building.

The contractor shall also retain following items/information in an appropriate location on-site:

- a) a rain gauge
- b) a copy of twice weekly inspection reports
- c) a documentation of quality assurance site assessments
- d) a copy of the site inspector's Fundamentals of Erosion Prevention and Sediment Control Level 1 certification

#### 11.0 STORM WATER POLLUTION PREVENTION PLAN ADMINISTRATION

#### 11.1 Signature Requirements

All NOIs shall be signed as follows:

Storm water pollution prevention plans, reports, certifications or other information submittals shall be signed by MSCAA Vice President of Operations or by a duly authorized representative of that person.

A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to TDEC.
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, contractor, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
- c. If an authorization under this section is no longer accurate because a different contractor has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of this section must be submitted to the state prior to, or together with, any reports, information, or applications to be signed by an authorized representative.

#### 11.2 Availability, State Review, and Modification of the SWPPP

This SWPPP will be maintained by the contractor onsite. A copy of the SWPPP has been submitted to the state for review and approval, as required by TNR10-0000 and TNR15-0091. This SWPPP shall be modified, if required by TDEC-DWPC.

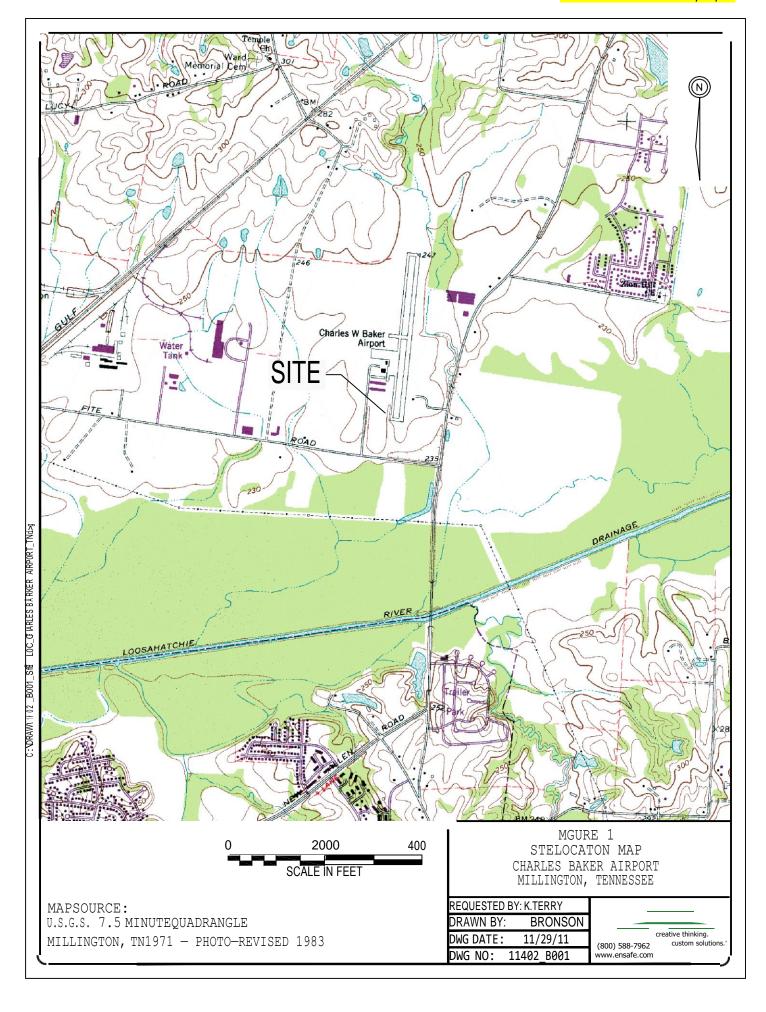
#### 11.3 Storm Water Pollution Prevention Plan Update

This SWPPP applies to specific construction projects at Charles W. Baker Airport and will be modified whenever:

- There is a change in the scope of the project that would be expected to have a significant effect on the discharge of pollutants to the waters of the state and that has not otherwise been addressed in the SWPPP.
- Inspections or investigations by site operators, local, state, or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity.
- Any new operator (typically contractor and/or subcontractor) has been identified as needed to reflect operational or design control that will implement a measure of the SWPPP.
- Measures need to be included to prevent a negative impact to legally protected federal or state-listed fauna or flora (or species proposed for such protection).

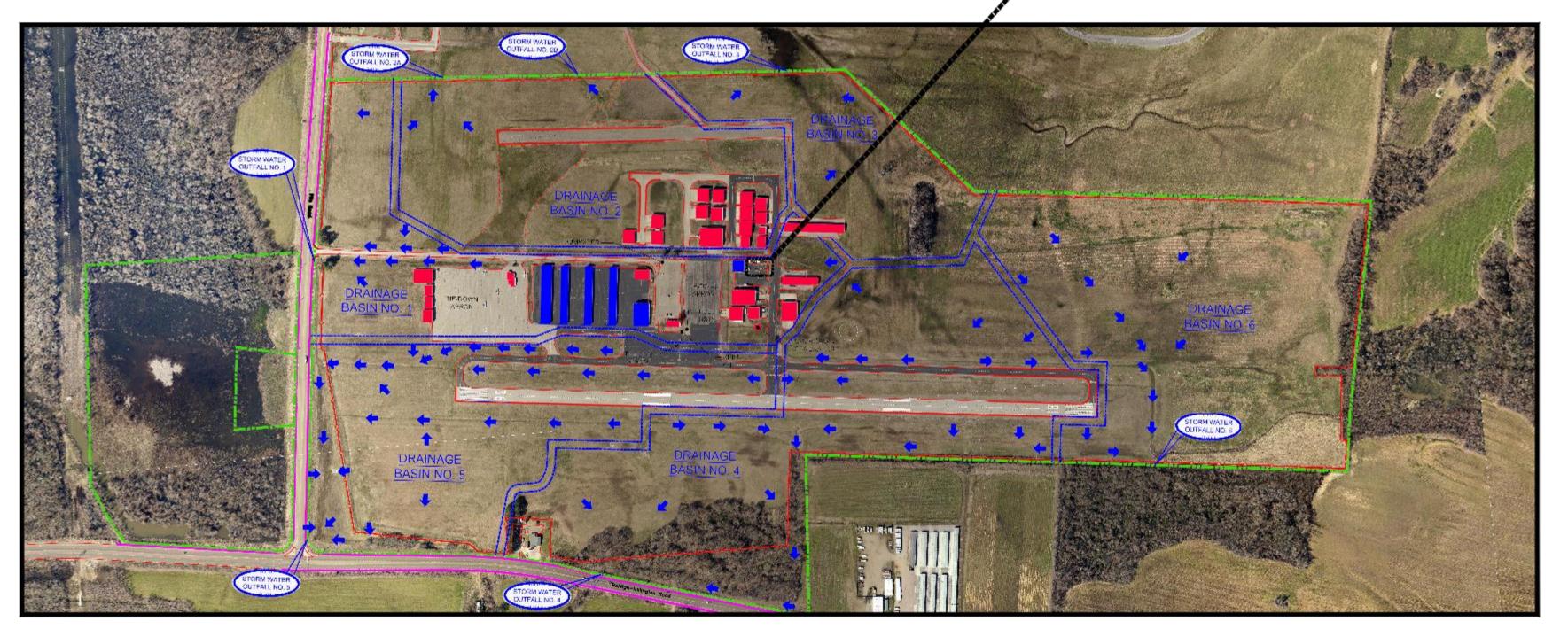
Amendments to the SWPPP may be reviewed by the division, the city of Memphis, the USEPA, or an authorized regulatory agency. In the event that a release of a reportable quantity of hazardous substances or oil occurs, this SWPPP will be reviewed. The review will identify measures to prevent the recurrence of such releases, and the SWPPP will be modified where appropriate to include these measures. In accordance with state regulations, all revisions and/or modifications to the SWPPP will be reviewed and certified by an official of MSCAA who meets the signatory requirements as described above.

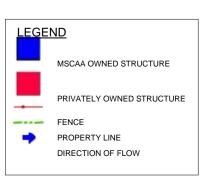
**Appendix A: Figure** 



FLAMMABLE MATERIAL STORAGE BLDG. USED OIL ABOVE GROUND STORAGE TANK \_\_ GASOLINE ABOVE GROUND STORAGE TANK MAINTENANCE EQUIPMENT STORAGE AREA

ENLARGED PLAN OF GROUND EQUIPMENT FUELING/STORAGE AREA N.T.S.







MEMPHIS INTERNATIONAL AIRPORT 2491 WINCHESTER RD. SUITE 113 MEMPHIS, TENNESSEE 38116-3856

PROGRAM MANAGER

REVIEWED BY:

**CHARLES BAKER AIRPORT** 

SHEET TITLE:

FIGURE 2 **WSPPP SITE LAYOUT MAP** 

**CHARLES BAKER** AIRPORT



## Memphis-Shelby County Airport Authority COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN

For Contractors Performing
Construction Activities at the
Charles W. Baker Airport
Under Permits TNR10-0000 and TNR\_\_\_\_-

### **Comprehensive Storm Water Pollution Prevention Plan Appendix A: Figure**

**Appendix B: Permit and Forms** 

**Appendix C: Best Management Practices Appendix D: Spill Response Notification** 

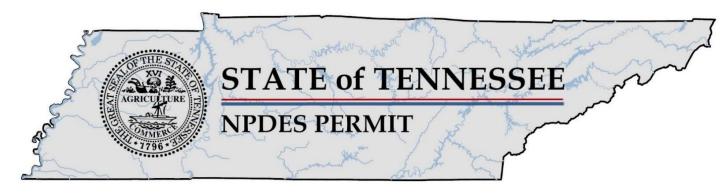
**Appendix E: Inspection Form** 

**Prepared By:** 

**MSCAA Manager of Environmental Services** 

August 2023

**Appendix B: Permit and Forms** 



### National Pollutant Discharge Elimination System (NPDES)

### General Permit for Discharges of Stormwater Associated with Construction Activities

#### Permit Number TNR100000

Issued by

Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass - Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243-1102

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the authorization by the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.) and the Water Quality Act of 1987, P.L. 100-4, including special requirements as provided in Subpart 6.4 of this general permit, operators of point source discharges of stormwater associated with construction activities into waters of the State of Tennessee, are authorized to discharge stormwater associated with construction activities in accordance with the following permit monitoring and reporting requirements, effluent limitations, and other provisions as set forth in parts 1 through 10 herein, from the subject outfalls to waters of the State of Tennessee.

This permit is issued on: **September 27, 2021** 

This permit is effective on: October 1, 2021

This permit expires on: September 30, 2026

for Jennifer Dodd

Director

CN-0759 RDA 2366

# Tennessee General Permit No. TNR100000 Stormwater Discharges Associated with Construction Activities

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VMJ TNR100000



#### PART 1

#### 1. COVERAGE UNDER THIS GENERAL PERMIT

#### 1.1. PERMIT AREA

The construction general permit (CGP) covers all areas of the State of Tennessee.

#### 1.2. DISCHARGES COVERED BY THIS PERMIT

#### 1.2.1. Stormwater Discharges Associated with Construction Activities

Discharge of stormwater associated with construction activity, as used in this permit, refers to stormwater point source discharges from areas where soil disturbing activities, or associated construction support activities (see Section 1.2.2) are located. Soil disturbing activities include but are not limited to clearing, grading, grubbing, filling and excavation.

This permit authorizes stormwater point source discharges from construction activities that result in soil disturbances of one or more acres. Soil disturbances of less than one acre are required to obtain authorization under this permit if construction activities are part of a larger common plan of development or sale that comprises at least one acre of cumulative land disturbance. One or more site operators must maintain coverage under this permit for all portions of a site that have not been permanently stabilized.

Projects of less than one acre of total land disturbance require authorization under this permit if:

- a) the <u>director</u> has determined that the <u>stormwater discharge</u> from a site is causing, contributing to, or is likely to contribute to a violation of a state water quality standard;
- b) the <u>director</u> has determined that the <u>stormwater discharge</u> is, or is likely to be a significant contributor of pollutants to waters of the state<sup>1</sup>; or
- c) changes in state or federal rules require sites of less than one acre that are not part of a larger common plan of development or sale to obtain a stormwater discharge permit.

<sup>&</sup>lt;sup>1</sup> "Significant contributor of pollutants to waters of the state" means any discharge containing pollutants that are reasonably expected to cause or contribute to a violation of a water quality criteria or receiving stream designated uses.



#### 1.2.2. Stormwater Discharges Associated with Construction Support Activities

This permit also authorizes <u>stormwater</u> <u>discharges</u> from support activities associated with a permitted construction activity. Support activities may include concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas and borrow areas. Support activities are authorized provided all of the following conditions are met:

- a) The support activity is related to a construction activity that is covered under this general permit.
- b) The <u>operator</u> of the support activity is the same as the <u>operator</u> of the construction activity.
- c) The support activity is not a commercial operation serving multiple unrelated construction projects by different operators.
- d) The support activity does not operate beyond the completion of the construction activity of the last construction project it supports.
- e) Support activities are identified in the Notice of Intent (NOI) and the Stormwater Pollution Prevention Plan (SWPPP). The appropriate erosion prevention and sediment controls and measures applicable to the support activity shall be described in a site-wide SWPPP covering all discharges from the support activity areas.

This permit does not authorize any process (dry weather) wastewater <u>discharges</u> from support activities. Process (dry weather) wastewater <u>discharges</u> from support activities must be authorized by an individual permit or other appropriate general permit.

TDOT projects shall be addressed in the *Waste and Borrow Policy*. Stormwater discharges associated with support activities that have been issued a separate individual permit or an alternative general permit are not authorized by this general permit.

#### 1.2.3. Non-Stormwater Discharges Authorized by this Permit

The following non-<u>stormwater</u> <u>discharges</u> from site-wide SWPPP areas of permitted construction activities are authorized by this permit provided the non-<u>stormwater</u> component of the discharge is in compliance with Subsection 5.5.3.12:

a) Dewatering of collected <u>stormwater</u> and groundwater, discharged in accordance with section 4.1.3.

- b) <u>Waters</u> used to wash dust and <u>soils</u> from vehicles where detergents are not used and detention and/or filtering is provided before the water leaves site. Wash removal of process materials such as oil, asphalt or concrete is not authorized.
- c) Water used to control dust in accordance with Section 5.5.3.7.
- d) Potable water sources, including waterline flushings, from which chlorine has been removed to the maximum extent practicable.
- e) Routine external building washdown that does not use detergents or other chemicals.
- f) Uncontaminated, non-turbid groundwater or spring water.
- g) Foundation or footing drains where flows are not contaminated with pollutants (e.g., lubricants and fluids from mechanized equipment, process materials such as solvents, heavy metals, etc.).
- h) Discharges from emergency fire-fighting activities.
- i) Fire hydrant flushings.
- i) Landscape irrigation.
- k) Pavement wash waters, provided spills or leaks of toxic or hazardous substances have not occurred (unless all spill material has been removed) and where soaps, solvents, and detergents are not used.
- I) Uncontaminated air conditioning or compressor condensate.

All non-<u>stormwater discharges</u> authorized by this permit must be free of <u>sediment</u> and other solids, must not cause erosion of <u>soils</u>, and must not result in <u>sediment</u> or erosion impacts to receiving streams.

#### 1.2.4. Other NPDES-Permitted Discharges

<u>Discharges</u> of <u>stormwater</u> or wastewater authorized by and in compliance with a different NPDES permit may be mixed with discharges authorized by this permit.

#### 1.3. LIMITATIONS ON COVERAGE

Except for <u>discharges</u> from support activities, as described in Section 1.2.2 and non-<u>stormwater discharges</u> listed in Section 1.2.3, all <u>discharges</u> covered by this permit shall be composed entirely of <u>stormwater</u>. This permit does not authorize the following <u>discharges</u>:

a) <u>Post-construction discharges</u> - <u>Stormwater discharges</u> associated with permanent <u>stormwater</u> management structures after construction

- activities have been completed, the site has undergone <u>permanent</u> stabilization and the coverage under this permit has been terminated.
- b) <u>Discharges mixed with non-stormwater</u> <u>Discharges</u> that are mixed with sources of non-<u>stormwater</u>, other than <u>discharges</u> which are identified in Section 1.2.4 and in compliance with Subsection 5.5.3.12 of this permit.
- c) <u>Discharges covered by another permit</u> <u>Discharges</u> associated with construction activities that have been issued an individual permit in accordance with Subpart 8.11.
- d) <u>Discharges threatening water quality</u> <u>Discharges</u> from construction sites that the <u>director</u> determines will cause or has the reasonable potential to cause or contribute to violations of water quality standards. Where such a determination has been made, <u>the division</u> will notify the discharger in writing that an individual permit application is necessary as described in Subpart 8.11. The division may authorize coverage under this permit after appropriate controls and implementation procedures have been included in the SWPPP that are designed to bring the discharge into compliance with water quality standards.
- e) Discharges into waters with unavailable parameters Discharges to waters with unavailable parameters that would cause measurable degradation of water quality for the parameter that is unavailable; or that would cause additional loadings of unavailable parameters that are bioaccumulative or that have criteria below method detection levels. Waters with unavailable parameters means any segment of surface waters that has been identified by the division as failing to support its designated classified uses. A discharge that complies with the additional requirements set forth in Subpart 6.4 is not considered to cause measurable degradation of waters with unavailable parameters, unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in Subpart 1.3(d) and the SWPPP cannot be modified to bring the site into compliance.
- f) <u>Discharges into Outstanding National Resource Waters</u> <u>Discharges</u> into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW) pursuant to Tennessee Rules, Chapter 0400-40-03-.06(5), except activities conducted by, or on behalf of, the National Park Service on its own lands.
- g) <u>Discharges into Exceptional Tennessee Waters</u> <u>Discharges</u> that would cause more than <u>de minimisDE\_MINIMIS</u> <u>degradation</u> of water quality for any available parameter in waters designated by TDEC as <u>Exceptional Tennessee Waters</u>. A discharge that complies with the additional requirements set forth in Subpart 6.4 is not considered to cause more than <u>de minimis</u> <u>degradation</u> of available parameters unless <u>the division</u> determines upon review of the SWPPP that there is a reason to limit

- coverage as set forth in Subpart 1.3(d)) and the SWPPP cannot be modified to bring the site into compliance.
- h) Discharges not protective of aquatic or semi-aquatic threatened and endangered species, species deemed in need of management or special concern species Discharges or discharge-related activities that are likely to jeopardize the continued existence of listed or proposed threatened or endangered aquatic species, or their critical habitat, under the Endangered Species Act (ESA), or other applicable state law or rule.

<u>Discharges</u> or conducting <u>discharge-related activities</u> that will cause a prohibited "<u>take</u>" of federally listed aquatic species (as defined under Section 3 of the ESA and 50 CFR §17.3) unless such <u>take</u> is authorized under Sections 7 or 10 of the ESA.

<u>Discharges</u> or conducting <u>discharge-related activities</u> that will cause a prohibited "<u>take</u>" of state listed aquatic species<sup>2</sup>, unless such <u>take</u> is authorized under the provisions of T.C.A. § 70-8-106(e).

- i) <u>Discharges from a new or proposed mining operation</u> <u>Discharges</u> from new or proposed mining operations are not authorized.
- j) <u>Discharges into waters with an approved Total Maximum Daily Load Discharges</u> of a pollutant to waters for which there is an <u>EPA</u>-approved or established total maximum daily load (<u>TMDL</u>) for that pollutant, unless the SWPPP incorporates measures or controls consistent with the assumptions and requirements of the TMDL.

Any discharge of <u>stormwater</u> or other fluids to groundwater via an <u>improved sinkhole</u> or injection well requires a Class V Underground Injection Control authorization by rule, or an individual permit under the provisions of Tennessee Rules, Chapter 0400-45-06.

#### 1.4. OBTAINING PERMIT COVERAGE

A complete <u>NOI</u>, Stormwater Pollution Prevention Plan (SWPPP) and application fee<sup>3</sup> are required to obtain coverage under this general permit. **Submitting for coverage under this permit means that an applicant has examined a copy of** 

<sup>&</sup>lt;sup>2</sup> As defined in the Tennessee Wildlife Resources Commission Proclamation, Endangered or Threatened Aquatic Species, and in the Tennessee Wildlife Resources Commission Proclamation, Wildlife in Need of Management.

<sup>&</sup>lt;sup>3</sup> Any reference to an "application" in this permit should be considered equivalent to the phrase "complete NOI, SWPPP and application fee"



this permit and thereby acknowledged the applicant's claim of ability to comply with permit terms and conditions.

#### 1.4.1. Notice of Intent (NOI)

Operators wishing to obtain coverage under this permit must submit a complete NOI in accordance with Part 3, using the NOI form provided in Appendix A of this permit. Electronic submittal is encouraged (see NPDES Electronic Reporting for more information). The division may review NOIs and SWPPPs for completeness and accuracy and, when deemed necessary, investigate the proposed project for potential impacts to the waters of the state. Absent extraordinary circumstances, NOCs should be issued within 30 days of NOI submittal, unless the division has responded to the operator within that time requesting additional information. Permittees must obtain all required local authorizations related to stormwater management (see Section 1.4.4).

#### 1.4.2. Stormwater Pollution Prevention Plan (SWPPP)

Operators wishing to obtain coverage under this permit must submit a site-specific SWPPP with the NOI, or sign and certify an existing site-specific SWPPP. The SWPPP shall address all of the operators' construction-related activities from the date construction commences to the date of termination of permit coverage, to the maximum extent practicable. The SWPPP must address the total acreage planned to be disturbed, including any associated construction support activities (see Section 1.2.2). The SWPPP must be developed, implemented and updated according to the requirements in Part 5 and Section 6.4.1. The SWPPP must be implemented prior to commencement of construction activities.

Preparation and implementation of the SWPPP may be a cooperative effort with all operators at a site. New operators with design and operational control of their portion of the construction site are expected to adopt, modify, update and implement their portion of the SWPPP. Alternatively, permittees at the site may develop and submit a SWPPP addressing only their portion of the project, as long as the proposed Best Management Practices (BMPs) are compatible with the previously submitted SWPPPs, as updated, and complying with conditions of this general permit.

SWPPPs must be updated or addended if site activities diverge significantly from those indicated in the initial SWPPP. A copy of the most recent version of the SWPPP must be available at the site.

Site operators who are building single family residences on at-grade lots (see Section 2.1.2) and who are submitting an application for coverage under this permit, may complete and submit Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This SWPPP template is available on our website at:

Form CN-1249 is not appropriate if significant grading of the lot or lots is necessary.

http://tdec.tn.gov/etdec/DownloadFile.aspx?row\_id=CN-1249.

#### 1.4.3. Permit Application Fee

The permit application fee should accompany the applicant's <u>NOI</u> form. The fee is based on the <u>total</u> acreage planned to be disturbed by an entire construction project for which the applicant is requesting coverage, including any associated construction support activities (see Section 1.2.2). The applicant may present documentation of areas in the project that will not be subject to disturbance at any time during the life of the project and have these areas excluded from the fee calculation.

The application fees shall be as specified in Tennessee Rules, Chapter 0400-40-11. The application will be deemed incomplete until the appropriate application fee is paid in full. Checks for the appropriate fee should be made payable to "Treasurer, State of Tennessee." Electronic payment methods, if made available by the State of Tennessee, are acceptable and are encouraged. The following conditions apply:

- a) If <u>stormwater discharges</u> from the site or acreage to be disturbed was previously authorized by a CGP, but coverage has been since terminated, a primary <u>operator</u> must submit a new application for coverage under the CGP.
- b) A new primary <u>operator</u> seeking subsequent coverage under an actively permitted activity must submit the subsequent coverage fee to obtain coverage under an active NOC.
- c) Acreage additions up to 10% of the original plan area, but not to exceed a total of 5 acres, and other minor modifications of the original plan do not require separate NOI submittal. These minor additions require submittal of a plan indicating the additional area(s) of disturbance, the total acreage to be disturbed, and the updated <a href="SWPPP">SWPPP</a>. The permittee is responsible for thoroughly and accurately identifying all waterbodies (including wetlands and streams) located on the added acreage and to provide a determination of the water's status if not previously provided. An additional fee and

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updated NOI are required only if the total acreage of disturbance would require a higher fee than originally paid, and then only the difference is due. New acreage disturbances cannot be added as previously disturbed acreage is stabilized, to create a 'rolling' total of disturbance. Iterative changes that would create cumulative impact exceeding 10% of the original plan area, or a total of 5 acres require submittal of updated NOI and SWPPP to the division.

d) In addition to the application fee, an annual maintenance fee applies per Tennessee Rules, Chapter 0400-40-11-.02(12)(i).

#### 1.4.4. Submittal of Documents to Local Municipalities

Some permittees may discharge <u>stormwater</u> through an NPDES-permitted municipal separate storm sewer system (<u>MS4</u>) who are not exempted in Section 1.4.5. These permittees are encouraged to coordinate with the local MS4 authority prior to submitting an NOI to <u>the division</u>. Permitting status of all permittees covered, or previously covered, under this general permit as well as the most current list of all <u>MS4</u> permits is available at:

<a href="http://tn.gov/environment/article/tdec-dataviewers">http://tn.gov/environment/article/tdec-dataviewers</a>.

Permittees must obtain all necessary authorizations pursuant to provisions of any local ordinances that apply to construction activities, and permittees are expected to comply with any additional erosion prevention, sediment control, and construction stormwater management measures required by a local municipality, county or permitted MS4 program.

#### 1.4.5. Permit Coverage Through a Qualifying Local Program (QLP)

Coverage equivalent to coverage under this general permit may be obtained from a qualifying local erosion prevention and <u>sediment</u> control <u>MS4</u> program. A Qualifying Local Program (QLP) is a municipal <u>stormwater</u> program implemented for <u>stormwater</u> <u>discharges</u> associated with construction activity that has been formally approved by <u>the division</u>. More information about Tennessee's <u>QLP</u> program and MS4 participants can be found at:

https://www.tn.gov/environment/permit-permits/water-permits1/npdes-permits1/npdes-stormwater-permitting-program/tennessee-qualifying-local-program.html.

If a construction site is within the jurisdiction of, and has obtained a notice of coverage from, a <u>QLP</u>, the <u>operator</u> is authorized to discharge <u>stormwater</u> associated with construction <u>activity</u> under this general permit without the submittal of an application to the division. Permitting of stormwater runoff from

construction sites from federal or state agencies (e.g., Tennessee Department of Transportation and Tennessee Valley Authority) and the local MS4 program itself will remain solely under the authority of TDEC.

<u>The division</u> may require any <u>operator</u> located within the jurisdiction of a <u>QLP</u> to obtain permit coverage directly from <u>the division</u>. The <u>operator</u> shall be notified in writing by <u>the division</u> that coverage by the <u>QLP</u> is no longer applicable and how to obtain coverage under this permit.

#### 1.5. NOTICE OF COVERAGE

#### 1.5.1. Permit Tracking Numbers

Construction activities covered under this permit will be assigned permit tracking numbers in the sequence TNR100001, TNR100002, etc. Permit tracking numbers assigned under a previous construction general permit will be retained. An operator applying for new permit coverage will be assigned a new permit tracking number. Assigning a permit tracking number by the division to a proposed discharge from a construction activity does not confirm or imply an authorization to discharge under this permit. Operators receiving new permit coverage will be listed as active on the TDEC Dataviewer.

#### 1.5.2. Notice of Coverage (NOC)

The NOC is a notice from the division to the primary permittee informing them that the NOI, the SWPPP, and the application fee were received and accepted. The primary permittee is authorized to discharge stormwater associated with construction activity as of the effective date listed on the NOC.

For new <u>operators</u> seeking subsequent coverage under an existing tracking number, <u>the division</u> will not issue a NOC. New <u>operators</u> that notify the division to be added to an existing coverage are covered upon receipt of notification of permit coverage by the division. The permit record reflecting the additional operator will be published on TDEC's DataViewer in the next update.

The division reserves the right to deny coverage to artificial entities (e.g., corporations or partnerships, excluding entities not required to register with the Tennessee Secretary of State) that are not properly registered and in good standing (i.e., listed with an entity status of "active") with the Tennessee Secretary of State, Division of Business Services. The division also reserves the right to issue permit coverage in the correct legal name of the individual or entity seeking

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coverage, including each general partner of a general partnership in addition to the general partnership.

Alterations to channels or waterbodies (see definition of <u>streams</u>) that are contained on, traverse through or are adjacent to the construction site are not authorized by this permit. Such alterations may require an Aquatic Resources Alteration Permit (ARAP): <a href="https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html">https://www.tn.gov/environment/permit-permits/water-permits1/aquatic-resource-alteration-permit--arap-.html</a>.

It is the responsibility of the applicant to thoroughly and accurately identify all waterbodies (see definition of <u>streams</u>) located on the site and to provide a determination of the water's status.

For channels, this determination must be conducted in accordance with Tennessee's standard operating procedures for hydrologic determinations set forth at Tennessee Rules, Chapter 0400-40-03.05(9). Wetlands determinations must include the submission of a wetland delineation completed utilizing the USACOE 1987 *Wetlands Delineation Manual* and applicable *Regional Supplement*. For the purposes of permitting, the permittee may choose to provide all aquatic features located on the site the protections afforded to <u>streams</u> and wetlands in lieu of conducting hydrologic determinations. <u>ARAPs</u> are independent requirements from CGP coverage and complete applications for <u>ARAPs</u> shall precede <u>NOI submittal</u>. The division reserves the right to delay or withhold issuance of coverage under the CGP in some cases until the appropriate <u>ARAP</u> coverage has been obtained.

The treatment and disposal of wastewater (e.g., sanitary, commercial or industrial wastewater) generated during and after the construction must be also addressed prior to issuance of the NOC. The NOC may be delayed until adequate wastewater treatment is identified and accompanying disposal permits are issued.



#### PART 2

#### 2. CONSTRUCTION SITE OPERATORS

#### 2.1. TYPES OF OPERATORS

#### 2.1.1. Owner/Developer

An owner or developer of a project is a primary permittee. This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person may include, but is not limited to, a developer, landowner, realtor, commercial builder, homebuilder, utility company, etc. This person may be an individual, a corporate entity, or a governmental entity. An owner's or developer's responsibility to comply with requirements of this permit extends until permit coverage is terminated in accordance with requirements of Part 9.

The site-wide permittee is the first primary permittee to apply for coverage for a construction activity. There may be other primary permittees for a project, but there is only one site-wide permittee. Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. Once covered by a permit, each operator is responsible for complying with the permit. Permittees are jointly and severally liable for a violation related to construction activities that affect the same project site, unless a permittee affirmatively demonstrates to the satisfaction of the Department that its own action, or failure to act, was not a cause of the violation.

#### 2.1.2. Commercial Builders

A commercial builder can be a primary or secondary permittee at a construction site.

A commercial builder who purchases one or more lots from a primary permittee for the purpose of constructing and selling a structure<sup>4</sup> and has design or operational control over construction plans and specifications for that portion of

 $<sup>^{4}</sup>$  e.g., residential house, non-residential structure, commercial building, industrial facility, etc.



the site, or is hired by an end user, such as a lot owner who may not be a permittee, must obtain coverage in one of the following ways:

- a) The site-wide permittee may transfer coverage to the commercial builder, for the entire site or just the acreage/lots the builder has purchased;
- b) The commercial builder may submit a new <u>NO</u>I for the acreage purchased, following requirements in Section 3.1.4; or
- c) The commercial builder may be hired by the primary permittee or a lot owner to build a structure, and by mutual agreement build on the site under the existing coverage of the site-wide permittee. In this case, the commercial builder signs the primary permittee's <u>NOI</u> and <u>SWPPP</u> as a contractor (see Section 2.1.3) and is considered a secondary permittee.

#### 2.1.3. Contractors

A contractor is considered a secondary permittee. This person has day-to-day operational control of the activities necessary to ensure compliance with the <a href="Mailto:SWPPP">SWPPP</a> or other permit conditions (e.g., the contractor is authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions). A contractor may be:

- ageneral contractor
- a grading contractor
- an erosion control contractor
- a sub-contractor responsible for land disturbing activities or erosion prevention and sediment control (EPSC) implementation and maintenance
- a commercial builder hired by the primary permittee.

The contractor may need to include in their contract with the party that hired them specific details for the contractor's responsibilities concerning EPSC measures. This includes the ability of the contractor to make EPSC modifications. The contractor shall sign the primary permitee's NOI and SWPPP associated with the construction project at which they will be an operator (insofar as possible), or submit a separate NOI to the division indicating their intent to be added to the existing activity coverage as an operator.

#### 2.2. RESPONSIBILITIES OF OPERATORS

A permittee may meet one or more of the operational control components in the definition of "operator" found in Subpart 2.1. Either Section 2.2.1 or 2.2.2, or both, will apply depending on the type of operational control exerted by an individual permittee.



#### **2.2.1.** Permittees with Design Control

Permittees with operational control over construction plans and specifications at the construction site, including the ability to make modifications to those plans and specifications, must ensure that:

- a) the project specifications meet the minimum requirements of Part 5 (SWPPP) and all other applicable conditions;
- b) the <u>SWPPP</u> indicates the areas of the project where they have operational control;
- c) all other permittees implementing and maintaining portions of the SWPPP impacted by any changes made to the plan are notified of such modifications in a timely manner;
- d) all common BMPs (i.e., sediment treatment basin and drainage structures) necessary for the prevention of erosion or control of sediment are maintained and effective until all construction is complete and all disturbed areas in the entire project are stabilized, unless permit coverage has been obtained and responsibility has been taken over by a new primary permittee; and
- e) all operators on the site have permit coverage, if required.

If parties with day-to-day operational control of the construction site have not been identified at the time the site-wide SWPPP is initially developed, the permittee with operational control shall be considered to be the responsible person until an NOI is submitted identifying the new operators (see Section 3.1.4). These new operators (e.g., general contractor, utilities contractors, subcontractors, erosion control contractors, hired commercial builders) are considered secondary permittees. The SWPPP must be updated to reflect the addition of new operators.

#### 2.2.2. Permittees with Day-to-Day Operational Control

Permittees with day-to-day operational control of the activities necessary to ensure compliance with the SWPPP or other permit conditions must ensure that:

- a) the SWPPP for portions of the project where they are <u>operators</u> meets the requirements of Part 5 and identifies the parties responsible for implementing the <u>control</u> measures identified in the plan;
- b) the SWPPP indicates areas of the project where they have operational control over day-to-day activities; and

c) measures in the SWPPP are adequate to prevent <u>soil</u> erosion and control any sediment that may result from their earth disturbing activity.

Permittees with operational control over only a portion of a larger construction project are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on their portion of the construction site. This includes, but is not limited to, implementation of Best Management Practices (BMPs) and other controls required by the SWPPP. Permittees shall ensure either directly or through coordination with other permittees, that their activities do not render another person's pollution control ineffective. All permittees must implement their portions of the SWPPP.



# PART 3

# 3. NOTICE OF INTENT (NOI) REQUIREMENTS

#### 3.1. NOI SUBMITTAL

#### 3.1.1. Who Must Submit an NOI?

All <u>operators</u> must submit an <u>NOI</u> form. For the purpose of this permit and in the context of <u>stormwater</u> associated with construction activity, an "<u>operator</u>" means any person associated with a construction project who meets either or both of the following two criteria:

- a) The person has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is considered the primary permittee and is typically:
  - the owner or developer of the project,
  - the owner or developer of a portion of the project (e.g., subsequent builder), or
  - the person who is the current owner of the construction site.
- b) The person has day-to-day operational control of the activities necessary to ensure compliance with the SWPPP or other permit conditions. This person is typically a contractor, or a commercial builder hired by the primary permittee, and is considered a secondary permittee.

### 3.1.2. Existing Sites

An <u>operator</u> presently permitted under the 2016 construction general permit shall be granted coverage under this new general permit. Coverage will be extended automatically without notification to <u>the division</u> or an additional fee being assessed. The existing SWPPP shall be modified according to the Section 5.3.1 of this permit.

If an <u>operator</u> does not wish to be continued under the new general permit, they may terminate coverage (Section 9.1). If a site with terminated coverage is unstable or if construction continues, a new <u>NOI</u>, SWPPP and application fee must be submitted.

# 3.1.3. New Sites or New Phases of Existing Sites

Except as provided in Section 3.1.4, <u>operators</u> must submit a complete <u>NO</u>I,SWPPP and an application fee in accordance with the requirements described

in Subpart 1.4. The complete application should be submitted at least 30 days prior to <u>commencement of construction</u> activities. The permittee is authorized to <u>discharge stormwater associated with construction activity</u> as of the effective date listed on the NOC or the TDEC DataViewer. The land disturbing activities shall not start until the NOC is received by the applicant according to Subpart 1.5.

## 3.1.4. New Operators

New <u>operators</u> proposing to conduct construction activities at a site with existing coverage must submit an <u>NOI</u>. The <u>NOI</u> should be submitted prior to the new <u>operator</u> commencing work at the site. The <u>NOI</u> must reference the project name and tracking number assigned to the primary permittee's <u>NOI</u>. The <u>NOI</u> may not need to be submitted immediately upon assuming operational control if the portion of the site controlled by the new <u>operator</u> is inactive and all the previously disturbed areas are permanently stabilized.

A new <u>operator</u> working as a residential home builder may submit Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This form may be found at: <a href="http://tdec.tn.gov/etdec/DownloadFile.aspx?row\_id=CN-1249">http://tdec.tn.gov/etdec/DownloadFile.aspx?row\_id=CN-1249</a>.

If the primary permittee's company name has changed (but not the site ownership or authorized signators), an updated NOI should be submitted to the division within 30 days of the name change, along with documentation that the name change has been properly registered with the Tennessee Secretary of State, Division of Business Services. If the new operator agrees to comply with an existing site-wide SWPPP already implemented at the site, a copy of the SWPPP does not have to be submitted with the NOI.

If the transfer of ownership is due to foreclosure or a permittee filing for bankruptcy proceedings, the new owner (e.g., a lending institution) must obtain permit coverage if the construction activity is inactive but soil is not stabilized sufficiently. If the property is sufficiently stabilized permit coverage may not be necessary, unless and until construction activity at the site resumes.

#### 3.1.5. Late NOIs

Dischargers are not prohibited from submitting NOIs after construction at their site has already begun. When a late NOI is submitted, and if the division authorizes coverage under this permit, such authorization is only for future discharges. Any prior, unpermitted, discharges or permit noncompliances are subject to penalties as described in Section 8.1.2.



### 3.1.6. Who Must Sign the NOI?

All construction site <u>operators</u> as defined in Subpart 2.1 must sign the <u>NOI</u> form. Signatory requirements for a <u>NOI</u> are described in Section 8.7.1. Signatures on electronically submitted NOIs are deemed to be equivalent to a hardcopy signature. An NOI that does not bear a valid signature will be deemed incomplete.

#### 3.2. FORMAT AND CONTENT OF THE NOI FORM

#### **3.2.1.** NOI Form

The NOI form is provided in Appendix A of this permit. This form and its instructions set forth the required content of the NOI. The NOI form must be filled in completely. If the division notifies applicants by mail, E-mail, public notice or by making information available on the world wide web of electronic NOI forms (see NPDES Electronic Reporting), the operators may be required to use those electronic options to submit the NOI (Section 3.3.2)

Owners, developers and contractors that meet the definition of the <u>operator</u>in Subpart 2.1 shall apply for permit coverage on the same <u>NO</u>I, if possible. The division may accept separate <u>NO</u>I forms from different <u>operators</u> for construction activities on the same construction site when warranted.

After permit coverage has been granted to the primary permittee, any subsequent  $\underline{NO}I$  submittals must include the site's previously assigned permit tracking number and the project name. The SWPPP shall be prepared in accordance with Part 5, and must be submitted with the  $\underline{NO}I$  unless the  $\underline{NO}I$  is only being submitted to add a secondary permittee to an existing coverage.

### 3.2.2. Construction Site Map

An excerpt (8 ½" by 11" or 11" by 17") from the appropriate 7.5 minute <u>United States Geological Survey</u> (USGS) topographic map (or other map showing contours) with the proposed construction site centered, must be included with the <u>NOI</u>. The entire proposed construction area must be clearly outlined on the map, with all acreage to be disturbed clearly identified. All <u>outfalls</u><sup>5</sup> discharging runoff from the property, <u>streams</u> receiving the <u>discharge</u>, and storm sewer systems conveying the <u>discharge</u> from <u>outfalls</u> shall be clearly identified and marked on the map. NOIs for linear projects must specify the location of each end

<sup>&</sup>lt;sup>5</sup> Phrase "<u>point source</u>" and term "<u>outfall</u>" are used interchangeably. For the purpose of this general permit, they can be considered synonyms.

of the construction area and all areas to be disturbed. Commercial builders that develop separate SWPPPs that cover only their portion of the project shall also submit a site or plat map that clearly indicates the lots for which they are applying for permit coverage, and the location of EPSCs that will be used at each lot (Section 5.5).

#### 3.3. WHERE AND HOW TO SUBMIT AN APPLICATION

#### 3.3.1. Traditional Submittal

The applicant shall submit the NOI,SWPPP and application fee to the appropriate Environmental Field Office (EFO) for the county where the construction activity is located and where <u>stormwater discharges</u> enters waters of the state. If a site straddles a county line of counties that are in different EFO service areas, the <u>operators</u> shall send the <u>NOI</u> and the application fee to the <u>EFO</u> that provides coverage for the majority of the proposed construction activity.

A list of counties and the corresponding <u>EFO</u>s is provided in Subpart 3.4. The division's Nashville Central Office will serve as a processing office for <u>NO</u>Is submitted by federal or state agencies (e.g., TDOT, TVA and the local <u>MS4</u> programs).

## 3.3.2. Submittal Using Electronic Forms

The division is in the process of launching the new NPDES Electronic Reporting online customer portal for submission of permit applications and other reports. If the division notifies applicants by mail, E-mail, public notice or by making information available on the world wide web of electronic application submittal, the operators may be required to use those electronic options to submit the NOI,SWPPP and an application fee. For more information, visit <a href="https://www.tn.gov/environment/program-areas/wr-water-resources/netdmr-and-electronic-reporting.html">https://www.tn.gov/environment/program-areas/wr-water-resources/netdmr-and-electronic-reporting.html</a>.



# 3.4. TDEC ENVIRONMENTAL FIELD OFFICES (EFOS) AND CORRESPONDING COUNTIES

EFO Name	List of Counties
Chattanooga	Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie
Columbia	Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury, Moore, Perry, Wayne
Cookeville	Cannon, Clay, Cumberland, DeKalb, Fentress, Jackson, Macon, Overton, Pickett, Putnam, Smith, Trousdale, Van Buren, Warren, White
Jackson	Benton, Carroll, Chester, Crockett, Decatur, Dyer, Gibson, Hardin, Haywood, Henderson, Henry, Lake, Lauderdale, Madison, McNairy, Obion, Weakley
Johnson City	Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, Washington
Knoxville	Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, Union
Memphis	Fayette, Hardeman, Shelby, Tipton
Nashville	Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery, Robertson, Rutherford, Stewart, Sumner, Williamson, Wilson

TDEC may be reached by telephone at the toll-free number 1-888-891-8332 (TDEC). Local <u>EFO</u>s may be reached directly when calling this number from the construction site, using a land line.



# PART 4

### 4. CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES

#### 4.1. NON-NUMERIC EFFLUENT LIMITATIONS

Any <u>point source</u> authorized by this general permit must achieve, at a minimum, the effluent limitations representing the degree of effluent reduction attainable by application of best practicable control technology (BPT) currently available.

### 4.1.1. Erosion prevention and sediment controls

Design, install and maintain effective erosion and <u>sediment</u> controls to minimize the <u>discharge of pollutants</u>. At a minimum, such controls must be designed, installed and maintained to:

- 1.) Control <u>stormwater</u> volume and velocity to minimize <u>soil</u> erosion in order to minimize pollutant discharges;
- 2.) Control <u>stormwater discharges</u>, including both peak flowrates and total <u>stormwater</u> volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
- 3.) Minimize the amount of soil exposed during construction activity;
- 4.) Minimize the disturbance of steep slopes;
- 5.) Minimize <u>sediment</u> <u>discharges</u> from the site. The design, installation and maintenance of erosion and <u>sediment</u> controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting <u>stormwater</u> runoff, and <u>soil</u> characteristics, including the range of soil particle sizes expected to be present on the site;
- 6.) Provide and maintain natural <u>buffers</u> as described in Section 4.1.2, direct <u>stormwater</u> to vegetated areas and maximize <u>stormwater</u> infiltration to reduce pollutant discharges, unless infeasible;
- Minimize <u>soil</u> compaction. Minimizing <u>soil</u> compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
- 8.) Unless infeasible, preserve <u>topsoil</u>. Preserving <u>topsoil</u> is not required where the intended function of a specific area of the site dictates that the <u>topsoil</u> be disturbed orremoved.

# 4.1.2. Water Quality Riparian Buffer Zone Requirements

The <u>water quality riparian buffer zone</u> requirements in this section apply to all streams with available parameters adjacent to construction sites (for waters with

unavailable parameters or Exceptional Tennessee Waters, see Section 6.4.2). A 30-foot natural water quality riparian <u>buffer</u> shall be preserved between such waterbodies and the <u>disturbed areas</u>, to the maximum extent practicable, during construction activities. The water quality riparian <u>buffer</u> is required to protect waters of the state that are not <u>wet weather conveyances</u> as identified using Tennessee's standard operating procedures for hydrologic determinations set forth in Tennessee Rules, Chapter 0400-40-03-.05(9). Because of the potential heavy <u>sediment</u> loading associated with construction site runoff, water quality riparian <u>buffers</u> are not primary <u>sediment</u> control measures and shall not be relied on as such; the primary purpose of water quality riparian <u>buffers</u> is additional pollutant removal. <u>Stormwater discharges</u> must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, to improve its effectiveness in protecting waters of the state.

The water quality riparian buffer zone should be preserved between the top of <a href="stream">stream</a> bank and the disturbed construction area. The 30-foot criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 15 feet at any measured location. If the construction site encompasses both sides of a <a href="stream">stream</a>, buffer averaging can be applied to both sides, but each side must average the 30-foot criterion independently.

Construction activities within the water quality riparian buffer zone shall be avoided and existing forested buffer areas shall be preserved whenever possible. Where it is not practicable to maintain a full water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects may include sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure.

<sup>&</sup>lt;sup>6</sup> If obtaining permit coverage for the first time following the effective date of this permit, 15-foot <u>buffers</u> are also required for any <u>wet weather conveyance</u> identified as waters of the United States by the U.S. Army Corps of Engineers or the Environmental Protection Agency.

This requirement does not apply to any valid Aquatic Resources Alteration Permit (ARAP), or equivalent permits issued by federal authorities. Additional <u>buffer</u> zone requirements may be established by the local MS4 program.

### 4.1.2.1. Water quality riparian buffer zone exemption based on existing uses

Water quality riparian <u>buffer</u> zones as described in Section 4.1.2 shall not be required in portions of the <u>buffer</u> where certain land uses exist and are to remain in place according to the following:

- a) A use shall be considered existing if it was present within the <u>buffer</u> zone as of the date of the Notice of Intent for coverage under the construction general permit. Existing uses may include buildings, parking lots, roadways, utility lines and on-site sanitary sewage systems. Only the portion of the <u>buffer</u> zone that contains the footprint of the existing land use is exempt from <u>buffer</u> zones. Activities necessary to maintain uses are allowed provided that no additional vegetation is removed from the <u>buffer</u> zone.
- b) If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the <u>buffer</u> area are being removed, buffer zone requirements shall apply.

### 4.1.2.2. Pre-approved sites

Construction activity at sites that were pre-approved prior to February 1, 2010, is exempt from the <u>buffer</u> requirements of Section 4.1.2. Evidence of pre-approval for highway projects shall be a final right-of-way plan; and, for other construction projects, the final design drawings with attached written and dated approval by the local, state or federal agency with authority to approve such design drawings for construction.

### 4.1.3. Dewatering

<u>Discharges</u> from dewatering activities, including <u>discharges</u> from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Appropriate controls may include weir tanks, dewatering tanks, gravity bag filters, sand media particulate filters, pressurized bag filters, cartridge filters or other control units providing the level of treatment necessary to comply with permit requirements.



#### 4.1.4. Pollution Prevention Measures

The permittee must design, install, implement and maintain effective pollution prevention measures to minimize the discharge of sediment and other pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

- a) Minimize the <u>discharge of pollutants</u> from equipment and vehicle washing, wheel wash water and other wash waters not containing soaps or solvents.
   Wash waters must be treated in a <u>sediment basin</u> or alternative control that provides equivalent or better treatment prior to discharge;
- b) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- c) Minimize the <u>discharge of pollutants</u> from spills and leaks, and implement chemical spill and leak prevention and response procedures.

## 4.1.5. Prohibited Discharges

The following discharges are prohibited:

- a) Wastewater from washout of concrete, unless managed by an appropriate control.
- b) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.
- c) Fuels, oils or other potential pollutants used in vehicle and equipment operation and maintenance.
- d) Soaps or solvents used in vehicle and equipment washing.



# PART 5

# 5. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

#### 5.1. THE GENERAL PURPOSE OF THE SWPPP

A SWPPP must be prepared and submitted along with the NOI as required in Section 1.4.2. The primary permittee must implement the SWPPP and maintain effective Best Management Practices (BMPs) from commencement of construction activity until permanent stabilization is complete, or until the permittee does not have design or operational control of any portion of the construction site. If a SWPPP submittal contains contradictory or ambiguous information, the division will hold the permittee to the most stringent interpretation of the information submitted. Requirements for termination of site coverage are provided in Part 9.

A site-specific SWPPP must be developed for each construction project or activity covered by this permit. The design, inspection and maintenance of <u>BMPs</u> described in the SWPPP must be prepared in accordance with good engineering practices. At a minimum, <u>BMPs</u> shall be consistent with the recommendations contained in the current edition of the <u>Tennessee Erosion and Sediment Control Handbook</u> (the handbook).

Once a definable area has been <u>permanently stabilized</u> as described in Subsection 5.5.3.4, the permittee may identify this area on the SWPPP. No further SWPPP or inspection requirements apply to that portion of the site (e.g., earth-disturbing activities around one of three buildings in a complex are done and the area is <u>permanently stabilized</u>, one mile of a roadway or pipeline project is done and permanently stabilized, etc.).

For more effective implementation of BMPs, a cooperative effort by the different operators at a site to prepare and participate in a site-wide SWPPP is expected. Primary permittees at a site may develop separate SWPPPs that cover only their portion of the project. In instances where there is more than one SWPPP for a site, the permittees must ensure the <u>stormwater</u> discharge controls and other measures are compatible with one another and do not prevent another operator from complying with permit conditions. The site-wide SWPPP developed and submitted by the primary permittee must assign responsibilities to secondary permittees and coordinate all <u>BMPs</u> at the construction site. Assignment and coordination can be done by name or by job title.



### 5.2. QUALIFICATION REQUIREMENTS

For sites greater than five acres of disturbance, the narrative portion of the SWPPP shall be prepared by an individual who has a working knowledge of erosion prevention and sediment controls, such as (but not limited to):

- a registered engineer or landscape architect,
- a Certified Professional in Erosion and Sediment Control (CPESC) or
- a person that successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

For sites less than or equal to five acres of disturbance, these qualification requirements do not apply, and the division provides the following optional templates:

- Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This SWPPP template is available at:
  - http://tdec.tn.gov/etdec/DownloadFile.aspx?row\_id=CN-1249. Form CN-1249 is not appropriate if significant grading of the lot or lots is necessary.
- SWPPP Template for Sites Not Requiring Engineer Design from the DWR NR G 02 Construction Stormwater 05172019 Guidance regarding construction stormwater general permit coverage involving sites with Non-Engineer Design SWPPPs:
   https://www.tn.gov/content/dam/tn/environment/water/policy-and-guidance/dwr-nr-g-02-cgp-non-engineering-swppp-final-051719.pdf
   Attachment A (template):
   https://www.tn.gov/content/dam/tn/environment/water/policy-and

https://www.tn.gov/content/dam/tn/environment/water/policy-and-guidance/dwr-nr-g-02-cgp-non-engineering-swppp-final-051719-template.docx.

Plans and specifications for any building or structure, changes in topography and drainage, including the design or modification of <u>sediment basins</u> or other <u>sediment controls</u> involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a <u>professional engineer or landscape architect</u> registered in Tennessee and signed and sealed in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 and the rules of the Tennessee Board of Architectural and Engineering Examiners. Engineering design of <u>sediment basins</u> or equivalent sediment controls must be provided for construction sites involving



drainage to an <u>outfall</u> totaling 10 or more acres (Subsection 5.5.3.5) or 5 or more acres if draining to <u>waters with unavailable parameters</u> or <u>Exceptional Tennessee</u> Waters (Section 6.4.1).

#### 5.3. SWPPPPREPARATION AND COMPLIANCE

# **5.3.1.** Existing Sites

Operators of an existing site, presently permitted under the division's 2016 construction general permit, shall maintain full compliance with the existing SWPPP. The existing SWPPP shall be modified, if necessary, to meet requirements of this new general permit, and the SWPPP changes implemented as soon as practicable but no later than 12 months following the new permit effective date. The permittee shall make the updated SWPPP available for the division's review upon request.

### **5.3.2.** New Sites or New Phases of Existing Sites

For <u>construction stormwater discharges</u> not authorized under an NPDES permit as of the effective date of this permit, a SWPPP that meets the requirements of Part 5 of this permit shall be prepared and submitted along with the <u>NOI</u> and an appropriate fee for coverage under this permit.

### **5.3.3.** Signature Requirements

The SWPPP shall be signed by the <u>operators</u> in accordance with Subpart 8.7, and if applicable, certified according to requirements in Section 5.2. Signatures on electronically submitted documents are deemed equivalent to original signatures. A SWPPP that does not bear a valid signature will be deemed incomplete.

# 5.3.4. SWPPP Availability

A copy of the existing version of the SWPPP shall be retained on-site at the location which generates the <u>stormwater</u> discharge in accordance with Part 7 of this permit. If the site is inactive or does not have an onsite location adequate to store the SWPPP, the location of the SWPPP, along with a contact phone number, shall be posted on-site. If the SWPPP is located off-site, reasonable local access to the plan during normal working hours must be provided.

The permittee shall make the existing SWPPP and inspection reports available upon request to the <u>director</u>; the local agency approving erosion prevention and <u>sediment</u> control plans, grading plans, land disturbance plans or <u>stormwater</u> management plans; or the operator of an MS4.



#### 5.4. KEEPING SWPPP CURRENT

#### 5.4.1. SWPPP Modifications

The permittee must modify, update and recertify the SWPPP if any of the following conditions apply:

- a) Whenever there is a change in the scope of the project that would be expected to have a significant effect on the <u>discharge</u> of <u>pollutants</u> to the waters of the state and which has not otherwise been addressed in the SWPPP.
- b) Whenever there is a change in <u>chemical treatment</u> methods, including the use of different <u>treatment chemical</u>, different dosage or application rate or different area of application.
- c) Whenever inspections or investigations by site operators or local, state or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under Section 5.5.2, or is otherwise not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity. Where local, state or federal officials determine that the SWPPP is ineffective in eliminating or significantly minimizing pollutant sources, a copy of any correspondence to that effect must be retained in the SWPPP.
- d) Whenever any new <u>operator</u> (typically a secondary permittee) who will implement a measure of the SWPPP must be identified (see Subpart 3.1.1 for further description of which operators must be identified).
- e) Whenever it is necessary to include water quality protection measures as required by the applicable wildlife management agency intended to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection Subpart 1.3). Amendments to the SWPPP may be reviewed by the division, a local MS4, the EPA, or an authorized regulatory agency.
- f) Whenever a Total Maximum Daily Load (TMDL) is developed for the receiving waters for a pollutant of concern (e.g., siltation). A list of Tennessee's TMDLs can be found at:

  <a href="https://www.tn.gov/environment/program-areas/wr-water-resources/watershed-stewardship/tennessee-s-total-maximum-daily-load--tmdl--program.html">https://www.tn.gov/environment/program-areas/wr-water-resources/watershed-stewardship/tennessee-s-total-maximum-daily-load--tmdl--program.html</a>.



#### 5.5. COMPONENTS OF THESWPPP

The SWPPP must:

- a) identify all potential sources of pollutants likely to affect the quality of stormwater discharges from the construction site;
- b) describe practices to be used to reduce pollutants in stormwater discharges from the construction site; and
- c) assure compliance with the terms and conditions of this permit.

The SWPPP shall include the items described in Sections 5.5.1, 5.5.2 and 5.5.3.

#### **5.5.1.** SWPPP Narrative

Each SWPPP shall provide a description of pollutant sources and other information as indicated below:

- a) A description of all construction activities at the site, including the intended sequence of activities which disturb <u>soils</u> for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation).
- b) Estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, filling or other construction activities.
- c) A description of the topography of the site, including an estimation of percent slope and delineation of drainage area (acres) serving each <u>outfall</u>. Drainage area estimates shall include off-site drainage, if applicable.
- d) Hydric soils must be clearly identified.
- e) A description of how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream.
- f) An erosion prevention and <u>sediment</u> control (EPSC) plan with the proposed construction area clearly outlined. The plan shall indicate the boundaries of the permitted area, drainage patterns, approximate slopes anticipated after major grading activities, areas of <u>soil</u> disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, the location of areas where stabilization practices are expected to occur, <u>streams</u> and sinkholes, and identification on the erosion control plan of <u>outfall</u> points intended for coverage. The erosion control plan must meet requirements stated in Section 5.5.3.
- g) A description of any discharge associated with industrial activity other than construction stormwater that originates on site and the location of that activity and its permit number.



- h) Identification of any streams on or adjacent to the project, a description of any anticipated alteration of these waters and the permit number or the tracking number of the Aquatic Resources Alteration Permit (ARAP) or Section 401 Certification issued for the alteration.
- i) The name of the receiving waters (this does not include wet weather conveyances connecting the site discharge to the receiving stream).
- Identification if those receiving waters have unavailable parameters for siltation.7
- k) Identification if those receiving waters are Exceptional Tennessee Waters.8
- I) If applicable, clearly identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project.
- m) A description of the construction phasing for projects of more than 50 acres (Subsection 5.5.3.2).
- n) The timing of the planting of the vegetation cover must be discussed in the SWPPP if permanent or temporary vegetation is to be used as a control measure. Planting cover vegetation during winter months or dry months should be avoided.

#### 5.5.2. **SWPPP** and **EPSC** plans

The SWPPP must include EPSC plans (Section 5.5.3) showing the approximate location of each control measure and a description of when the measure will be implemented during the construction process (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished). The different stages of construction and the EPSC measures that will be utilized during each stage shall be depicted on multiple plan sheets as described below.

Three separate EPSC plan sheets should be developed for most sites, with the exception of single-lot homes, commercial lots, or linear infrastructure projects of less than or equal to 5 acres, for which a single plan sheet may be sufficient:

a. The first plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during the initial land disturbance (grading) stage.

<sup>&</sup>lt;sup>7</sup> DWR Construction Stormwater Permitting Map Viewer can be found at: https://tdeconline.tn.gov/dwrcgp/

<sup>&</sup>lt;sup>8</sup> List of Exceptional Waters and ORNWs in Tennessee can be found at: https://tdec.tn.gov:8090/pls/enf\_reports/f?p=9034:34304; corresponding map viewer is under development

- b. A second plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during any interim grading and construction stages.
- c. The third plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during the final grading stage while permanent site stabilization is being achieved.

The description and implementation of controls shall address the following minimum components, as described in Sections 5.5.3, 5.5.3.6 and 5.5.3.7. Additional controls may be necessary to comply with Section 6.3.2.

#### 5.5.3. Erosion Prevention and Sediment Controls (EPSC)

### 5.5.3.1. General criteria and requirements

- a) The erosion prevention controls shall be designed to eliminate to the maximum extent practicable the dislodging and suspension of <u>soil</u> in water. <u>Sediment</u> controls shall be designed to retain mobilized <u>sediment</u> on site to the maximum extent practicable.
- b) All <u>control measures</u> must be properly selected, installed and maintained in accordance with the manufacturer's specifications and/or good engineering practices. If periodic inspections or other information indicate a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control.
- c) If <u>sediment</u> escapes the permitted area, off-site accumulations that have not reached a <u>stream</u> must be removed at a frequency sufficient to minimize off-site impacts (e.g., <u>sediment</u> that has escaped a construction site and collected in a street must be removed so that it does not subsequently wash into storm sewers and <u>streams</u> during the next rain or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation or restoration of a <u>stream</u> without receiving prior authorization from <u>the division</u>. This permit does not authorize access to private property. Arrangements concerning the removal of <u>sediment</u> on adjoining property must be settled by the permittee and the adjoining landowner.
- d) <u>Sediment</u> must be removed from <u>sediment</u> traps, silt fences, <u>sediment basins</u> and other sediment controls when design capacity has been reduced by 50%.
- e) Erodible material storage areas (e.g., overburden and stockpiles of <u>soil</u>) and <u>borrow pits</u> that are used primarily for the permitted project are considered a part of the site and shall be identified on the <u>NO</u>I, addressed in the SWPPP and included in the fee calculation. TDOT projects shall be addressed in the Waste and Borrow Manual per the Statewide Stormwater Management Plan (SSWMP).



- f) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 14 days prior to commencement of grading or earth moving activities unless the area is subsequently temporarily or permanently stabilized.
- g) Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site shall be preserved to the maximum extent practicable. The limits of <u>soil</u> disturbance shall be clearly outlined in the SWPPP and the areas to remain undisturbed clearly indicated on the site, with the methods to be used to mark these areas described in the SWPPP.
- h) Construction must be sequenced to minimize the exposure time of graded or denuded areas.
- i) EPSC measures must be in place and functional before earth moving operations begin and must be constructed and maintained throughout the construction period stages as appropriate. Temporary measures may be removed at the beginning of the workday but must be replaced at the end of the workday.
- j) Off-site vehicle tracking of <u>sediment</u> and the generation of dust shall be minimized. A stabilized construction access shall be described and implemented to reduce the tracking of mud and dirt onto public roads by construction vehicles.

### 5.5.3.2. Construction phasing

Construction phasing is recommended on all projects regardless of size as an effective practice for minimizing erosion and limiting <u>sedimentation</u>. It is recommended that construction be phased to keep the total disturbed area less than 50 acres at any one time. This includes off-site borrow or disposal areas that meet the conditions of Section 1.2.2. Areas where construction is completed must be stabilized within 14 days (Subsection 5.5.3.4).

#### 5.5.3.3. Projects Exceeding 50 acres of Disturbance

On projects where the permittee chooses to disturb more than 50 acres at one time, the following additional requirements shall apply:

- a) The permittee shall notify the division immediately if more than 50 acres of disturbance at one time is planned.
- b) Site assessments, as described in Subsection 5.5.3.8, shall be conducted on a quarterly basis.
- c) Operator inspections as described in Subsection 5.5.3.9 shall be conducted twice per week and following any rainfall event of more than 0.5 inches in



- 24 hours. Inspections following rainfall events can be counted as one of the twice-weekly inspections.
- d) Data describing the erodibility of soils on site, how the soil type erodibility will dictate the needed control measures and how the soil may affect the expected quality of runoff from the site shall be provided. The data may be referenced or summarized. Hydric soils must be clearly identified.
- e) A geospatial file shall be submitted to the division which identifies the project area boundaries as a polygon feature. This polygon feature can be submitted in any common data format (e.g., .kml file, shapefile, feature layer, etc.) that is compatible with common geographic systems software (e.g., Google Earth, ESRI, QGIS, etc.). The file name should reflect the same site name provided on the permit application, or a permit tracking number, if available.
- Stormwater runoff monitoring shall be conducted at each outfall draining 10 or more acres (Section 5.5.3.5) or 5 or more acres if draining to waters with unavailable parameters or Exceptional Tennessee Waters (Section 6.4.1).

Code	Parameter	Qualifier	Unit	Sample Type	Monitoring Frequency	Statistical Base
00070	Turbidity	Report	NTU	Grab	Monthly	Daily Maximum
00070	Turbidity	Report	NTU	Grab	Monthly	Monthly Average
00530	Total Suspended Solids (TSS)	Report	mg/L	Grab	Monthly	Daily Maximum
00530	Total Suspended Solids (TSS)	Report	mg/L	Grab	Monthly	Monthly Average
45613	Floating solids or visible foam-visual	Report	Y=1;N=0	Visual	Monthly	Value
50050	Flow	Report	MGD	Estimate	Monthly	Daily Maximum
50050	Flow	Report	MGD	Estimate	Monthly	Monthly Average

The permittee shall maintain a log of rainfall events including date, estimated duration (in hours), and total estimated rainfall per calendar day. For sampling events, the permittee shall provide an estimate of the total volume of the discharge per sampled outfall and the interval between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

The permittee shall report the estimated total drainage area and estimated acreage of land disturbance in the drainage area for each outfall for each sampling event. Record of the estimated drainage area and amount of land disturbance for a given sample event shall be reported in the notes section of the Discharge Monitoring Report.

### 5.5.3.4. Stabilization practices

The SWPPP shall include a description of temporary and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved when possible. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees and the preservation of mature vegetation. When seasonal or climate conditions would prevent timely establishment of vegetation other stabilization practices must be utilized. Use of impervious surfaces for permanent stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization control measures or EPSC measures are to be installed in a stream without obtaining a Section 404 permit and an Aquatic Resources Alteration Permit (ARAP).

Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site must be completed within 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- a) Where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable.
- b) Where construction activity on a portion of the site is temporarily ceased, but soil disturbing activities is planned to resume within 2weeks.
- c) In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as properly anchored mulch, <u>soil</u> binders or matting must be employed.

<u>Steep slopes</u> shall be stabilized within one week after construction activity on the slope has temporarily or permanently ceased.

Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a non-eroding surface. On sites where disturbed acreage will be returned to its prior agricultural use (i/e. row crops, pasture) normal agricultural practices can be substituted.

### 5.5.3.5. Structural practices

The SWPPP shall include a description of structural practices utilized to divert flows from exposed <u>soils</u>, store flows or otherwise limit runoff and <u>discharge of pollutants</u> from exposed areas of the site. Such practices may include, but are not limited to silt fences, earth dikes, drainage swales, <u>sediment</u> traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced <u>soil</u> retaining systems, gabions and temporary or permanent <u>sediment basins</u>. Structural controls shall not be placed in <u>streams</u> except as authorized by a section 404 permit and/or Aquatic Resources Alteration Permit (ARAP).

EPSC measures shall be designed to minimize erosion and maximize <u>sediment</u> removal resulting from a <u>2-year, 24-hour</u> storm (the design storm). The design of erosion prevention and <u>sediment</u> controls must adhere to good engineering practices. The drainage area recommendations and treatment design specifications are provided in the <u>Tennessee Erosion and Sediment Control Handbook</u>. <u>Chemical treatment</u> of the <u>stormwater</u> runoff may be necessary to minimize the amount of <u>sediment</u> being discharged when clay and other fine particle <u>soils</u> or highly erodible <u>soils</u> are present at the construction site. However, the use of cationic polymers for treatment is prohibited.

For an outfall that receives drainage from 10 or more acres, a minimum sediment basin volume that will provide treatment for a calculated volume of runoff from a 2-year, 24-hour storm and runoff from each acre drained, or equivalent control measures as specified in the Tennessee Erosion and Sediment Control Handbook, shall be provided until permanent stabilization of the site. A drainage area of 10 or more acres includes disturbed and undisturbed portions of the site and areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment basin, the equivalency (with respect to sediment removal) must be justified to the division. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin. Diverted runoff can be omitted from the volume calculation.

<u>Sediment</u> storage expected from the <u>disturbed areas</u> must be included. <u>Discharges</u> from basins and impoundments shall utilize outlet structures that only withdraw water from near the surface of the basin or impoundment, unless infeasible.

All calculations related to drainage areas, runoff coefficients, basin volumes and equivalent control measures must be provided in the SWPPP. The discharge structure from a sediment basin must be designed to retain sediment during the lower flows in accordance with the most current version of the Tennessee Erosion and Sediment Control Handbook. Muddy water to be pumped from excavation and work areas must be held in settling basins, filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharged water must not cause an objectionable color contrast with the receiving stream.

<u>Sediment</u> structures treating drainage areas in excess of 25 acres require a site-specific design that accurately defines the site hydrology, site-specific <u>sediment</u> loading, hydraulics of the site, and adheres to all <u>Tennessee Erosion and Sediment</u> Control Handbook design recommendations for sediment basins.

Velocity dissipation structures shall be installed if needed to provide for non-erosive discharge velocities to wet weather conveyances or streams.

#### 5.5.3.6. Stormwater management

The following factors must be accounted for in the design of all <u>stormwater</u> controls:

- a) The nature of <u>stormwater</u> runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. <u>Stormwater</u> controls must be designed to control <u>stormwater</u> volume, velocity, and peak flow rates to minimize <u>discharges</u> of pollutants in <u>stormwater</u>, as well as minimizing channel and streambank erosion at discharge points.
- b) The <u>soil</u> type and range of <u>soil</u> particle sizes expected to be present on the site.
- c) Description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed, including a brief



description of applicable State or local erosion and sediment control requirements.

#### 5.5.3.7. Other items needing control

- a) No solid materials, including building materials, shall be placed in waters of the state, except as authorized by a section 404 permit and/or Aquatic Resources Alteration Permit (ARAP). Litter, construction debris and construction chemicals exposed to stormwater shall be picked up prior to storm events or before being carried off the site by wind so that they do not become a pollutant source for stormwater discharges. EPSC materials shall be prevented from becoming a pollutant source for stormwater discharges.
- b) The SWPPP shall identify and provide the necessary EPSC measures for the installation of any waste disposal system, sanitary sewer or septic system. Permittees must also comply with applicable state and local waste disposal, sanitary sewer or septic system regulations as necessary.
- c) The SWPPP shall include a description of construction and waste materials expected to be stored on-site. The SWPPP shall also include a description of controls used to reduce pollution from materials stored on site. Controls may include storage practices to minimize exposure of the materials to stormwater or spill prevention and response.

#### 5.5.3.8. Site Assessments

Site assessment shall be conducted at each outfall draining 10 or more acres (Section 5.5.3.5) or 5 or more acres if draining to waters with unavailable parameters or Exceptional Tennessee Waters (Section 6.4.1). The site assessment is a documented site inspection conducted by a qualified individual to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. Site assessments shall cover the entire disturbed area and occur within 30 days of construction commencing at each portion of the site that drains the qualifying acreage. The site assessment shall be performed by individuals with one or more of the following qualifications:

- 1. A licensed professional engineer or landscape architect;
- 2. A Certified Professional in Erosion and Sediment Control (CPESC); or
- 3. A person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites"

At a minimum, site assessments should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. If structural BMPs (or equivalent EPSC measures) are not constructed or construction is in progress at the time of the site assessment, a follow-up monthly assessment(s) are required until the BMPs are constructed per the SWPPP. The site assessment should be performed with the inspector and should include a review and update (if applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 and the rules of the Tennessee Board of Architectural and Engineering Examiners.

### 5.5.3.9. Inspections

Operators shall ensure proper installation, maintenance, and overall effectiveness of erosion prevention and <u>sediment</u> controls (EPSCs) by performing twice <u>weekly</u> site inspections. Inspections must verify and document the functionality and performance of the EPSC measures described in the SWPPP. Initial inspections shall also indicate if all EPSCs have been installed as designed in the submitted SWPPP and EPSC plans; and, if not, measures that need to be taken so those EPSCs meet the design specifications in the field SWPPP and EPSC plans.

#### 5.5.3.10. Inspector qualifications

Twice weekly inspections can be performed by:

- a) a person with a valid certification from the "Level I Fundamentals of Erosion Prevention and Sediment Control" course,
- b) a licensed professional engineer or landscape architect,
- c) a Certified Professional in Erosion and Sediment Control (CPESC), or
- d) a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements, such as stabilization and maintenance activities.



### 5.5.3.11. Schedule of inspections

- a) Inspections described in paragraphs b, c and d below, shall be performed at least twice weekly. Inspections shall be performed at least 72 hours apart. Where sites or portions of construction sites have been temporarily stabilized, inspections only have to be conducted once per month until construction activity resumes. Inspection requirements do not apply to definable areas that have been permanently stabilized. Changes to the inspection frequency and the justification for such request must be included in the records kept on site. For projects by the Tennessee Department of Transportation (TDOT) and the Tennessee Valley Authority (TVA), such request must be submitted to the division's Nashville Central Office. The division reserves the right to require more frequent inspections if deemed necessary to ensure compliance at a site.
- b) Qualified personnel, as defined in Subsection 5.5.3.10 (provided by the permittee or cooperatively by multiple permittees), shall inspect <u>disturbed areas</u> of the construction site that have not been <u>permanently stabilized</u>, areas used for storage of materials that are exposed to precipitation, structural <u>control measures</u>, locations where vehicles enter or exit the site and each outfall.
- c) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the site's drainage system. EPSC measures shall be observed to ensure that they are operating correctly.
- d) Outfall points shall be inspected to determine whether EPSC measures are effectively preventing sediment discharges off-site or impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- e) Based on the results of the inspection, any inadequate <u>control measures</u> or <u>control measures</u> in disrepair shall be replaced, modified or repaired as necessary, before the next rain event; but in no case more than seven days after the need is identified.
- f) Based on the results of the inspection, the site description identified in the SWPPP in accordance with Section 5.5.1 and pollution prevention measures identified in the SWPPP in accordance with Section 5.5.3 shall be revised as appropriate. Such revisions shall be made no later than seven days following the inspection. In addition, any modifications to pollution prevention measures shall be implemented as soon as practicable but no later than 14 days following the inspection.

- g) All inspections shall be documented on the *Construction Stormwater Inspection Certification Form* provided in <u>Appendix C</u> of this permit. An alternative inspection form may be used as long as the form contents and the inspection certification language are equivalent to the division's form and the permittee has obtained a written approval from the division to use the alternative form. The form must contain the printed name and signature of the inspector and the certification must be executed by a person who meets the signatory requirements of Section 8.7.2. Inspection reports must be submitted to the division within 10 days of the request.
- h) Inspectors shall accurately document site conditions in their inspection reports. Falsifying inspection records, or other documentation; or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.
- i) The initial primary permittee (such as a developer) is no longer required to inspect portions of the site that are covered by a subsequent primary permittee (such as a home builder). Subsequent primary permittees who have obtained coverage under this permit shall conduct twice weekly inspections as per the requirements in Subsection 5.5.3.9.

#### 5.5.3.12. Pollution prevention measures for non-stormwater discharges

The SWPPP must identify source(s) of all non-<u>stormwater discharge(s)</u> listed in Section 1.2.3 if it is to be combined with <u>stormwater discharges</u> associated with construction activity. The SWPPP shall identify and ensure the implementation of appropriate pollution prevention measures for the non-<u>stormwater</u> components of the discharge. Any non-<u>stormwater</u> must be discharged through stable discharge structures. Estimated volume of the non-<u>stormwater</u> components of the discharge must be included in the design of all impacted control measures.



# PART 6

# 6. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

#### 6.1. RELEASES IN EXCESS OF REPORTABLE QUANTITIES

The discharge of hazardous substances or oil in the <u>stormwater discharges</u> from a facility shall be prevented or minimized in accordance with the applicable SWPPP for the facility. This permit does not relieve the permittee of the reporting requirements of 40 CFR 117 and 40 CFR 302.

#### 6.2. SPILLS

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

### 6.3. DISCHARGE COMPLIANCE WITH STATE WATER QUALITY STANDARDS

#### 6.3.1. Violation of water quality standards

This permit does not authorize <u>stormwater</u> or other <u>discharges</u> that would cause or contribute to a violation of a state water quality standard (Tennessee State Rules, Chapters 0400-40-03, 0400-40-04). Such <u>discharges</u> constitute a violation of this permit.

Where a discharge is already authorized under this permit and the division determines the discharge to cause or contribute to the violation of applicable state water quality standards, the division will notify the operator of such violations. The permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and shall document these actions in the SWPPP.

### 6.3.2. Discharge quality

a) The construction activity shall be carried out in such a manner that will prevent violations of water quality criteria as stated in the Tennessee Rules, Chapter 0400-40-03-.03. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits or <u>turbidity</u> impair the usefulness of waters of the state for any of the uses designated for that water body by Tennessee Rules, Chapter 0400-40-04. Construction activity carried out in the manner required by



- this permit shall be considered in compliance with the Tennessee Rules, Chapter 0400-40-03-.03.
- b) There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits, or sludge banks of such size or character as may be detrimental to fish and aquatic life.
- c) The <u>stormwater discharge</u> must not contain total suspended solids, <u>turbidity</u>, or color in such amounts or character that will result in any objectionable appearance compared to the turbidity or color of the receiving water, considering the nature and location of the water.
- d) The <u>stormwater discharge</u> shall not contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving <u>stream</u>. This provision includes species covered under Subpart 1.3.
- e) Solids or other materials removed by any <u>sediment</u> control treatment devices must be disposed of in a manner that prevents its entrance into or pollution of any surface or subsurface waters.

# 6.4. DISCHARGES INTO WATERS WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS

### 6.4.1. SWPPP/BMP Requirements

- a) Discharges that would cause measurable degradation of waters with unavailable parameters or that would cause more than de minimis degradation of Exceptional Tennessee Waters are not authorized by this permit (Subpart 1.3). To be eligible to obtain and maintain coverage under this permit, the operator must satisfy, at a minimum, the following additional requirements for discharges into waters with unavailable parameters for siltation and for discharges to Exceptional Tennessee Waters. All other provisions of this general permit that apply to receiving waters with available parameters shall also apply.
- b) The SWPPP must certify that EPSC measures used at the site are designed to control stormwater runoff generated by a 5-year, 24-hour storm event (the design storm), at a minimum, either from total rainfall in the designated period or the equivalent intensity as specified on the following website https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\_map\_cont.html.

<sup>&</sup>lt;sup>9</sup> or discharges upstream of such waters and because of the proximity to the segment and the nature of the discharge is likely to cause more than <u>de minimis</u> <u>degradation</u> in the unavailable or exceptional segment.

- c) The permittee shall perform inspections described in Section 5.5.3.9 at least twice every calendar week. Inspections shall be performed at least 72 hours apart.
- d) If the division finds that an operator is contributing to the impairment of a receiving stream despite complying with the SWPPP, the operator will be notified by the division in writing that the discharge is no longer eligible for coverage under the general permit. The operator may update the SWPPP and implement the necessary changes designed to eliminate further impairment of the receiving stream. If the permittee does not implement the SWPPP changes within seven days of receipt of notification, the permittee will be notified in writing that continued discharges must be covered by an individual permit (Subpart 8.11). To obtain the individual permit, the operator must file an individual permit application and submit an updated SWPPP. The project must be stabilized immediately and remain stable until the SWPPP is updated and the individual permit is issued. Only discharges from earth disturbing activities necessary for stabilization are authorized to continue until the individual permit is issued.
- e) For an on-site <u>outfall</u> in a drainage area totaling five or more acres, a minimum <u>sediment basin</u> volume that will provide treatment for a calculated volume of runoff from a <u>5-year, 24-hour</u> storm and runoff from each acre drained; or equivalent <u>control measures</u> as specified in the <u>Tennessee Erosion and Sediment Control Handbook</u>, shall be provided until permanent stabilization of the site.
- f) For an on-site <u>outfall</u> in a drainage area totaling 3.5 4.9 acres, a minimum <u>sediment</u> trap volume or engineering equivalent that will provide treatment for a calculated volume of runoff from a <u>5-year</u>, <u>24-hour</u> storm and runoff from each acre drained, is required until <u>permanent stabilization</u> of the site. A drainage area of 3.5 4.9 acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall.

## 6.4.2. Water Quality Riparian Buffer Zone Requirements

Sites that contain, or are adjacent to, receiving <u>waters</u> with <u>unavailable</u> <u>parameters</u> for siltation or designated as <u>Exceptional Tennessee Waters</u> shall preserve a 60-foot natural water quality riparian <u>buffer</u> zone adjacent to the receiving <u>stream</u>. All other <u>buffer</u> zone requirements as stated in Section 4.1.2 will apply.

The natural water quality riparian <u>buffer</u> zone shall be preserved between the top of <u>stream</u> bank and the disturbed construction area. The 60-foot criterion for the width of the <u>buffer</u> can be established on an average width basis at a project, as long as the minimum width of the <u>buffer</u> is more than 30 feet at any measured location. If the construction site encompasses both sides of a <u>stream</u>, <u>buffer</u> averaging can be applied to both sides, but each side must average the 60-foot criterion independently.

This requirement does not apply to an area that is being altered under the authorization of a valid Aquatic Resources Alteration Permit (ARAP), or equivalent permits issued by federal authorities. Additional natural <u>buffer</u> zone requirements may be established by the local MS4 program.



# PART 7

### 7. RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS

#### 7.1. DOCUMENTS

The primary permittee shall retain copies of SWPPPs, reports required by this permit, records of all data used to complete the <u>NOI</u> and the <u>NOT</u> for a period of at least three years from the date the <u>NOT</u> is submitted. This period may be extended by written request of the director.

#### 7.2. ACCESSIBILITY AND RETENTION OF RECORDS

The permittee shall retain a copy of the SWPPP and a copy of the permit at the construction site (or other location accessible to the division) from the date construction commences to the date of termination of permit coverage. Permittees with day-to-day operational control over SWPPP implementation shall have a copy of the SWPPP available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site.

### 7.2.1. Posting Information at the Construction Site

A notice shall be posted near the main entrance of the construction site visible to the public with the following information:

- a) a copy of the NOC with the NPDES permit tracking number for the construction project;
- a name or company name; E-mail address (if available); telephone number and address of the project site owner/operator or a local contact person; and
- c) the location of the SWPPP (Subpart 7.2).

The notice must be maintained in a legible condition. The notice shall be posted in a local public building if posting this information near a main entrance is infeasible due to safety concerns or if the site is not accessible to the public. If the construction project is a <u>linear construction project</u> (e.g., pipeline or highway), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary. This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site. This permit does not require permittees to allow members of the public access to a construction site.

The permittee shall also retain the following items in an appropriate location onsite (or other location accessible to the division):

- a) A rain gauge (or use a reference site for a record of daily precipitation) and accurate rainfall records;
- b) A copy of all required inspection reports; and
- c) Records of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated.

#### 7.3. ELECTRONIC SUBMISSION OF DOCUMENTS

This permit requires the submission of forms developed by the <u>director</u> in order for a person to comply with certain requirements, including, but not limited to, making reports, submitting inspection findings, applying for permit coverage and requesting for termination of permit coverage. The <u>director</u> may make these forms available electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter <u>0400-01-40</u>. Electronic submission may be required when available, unless waived by the Commissioner in accordance with 40 C.F.R. § 127.15.

If <u>the division</u> notifies applicants by mail, E-mail, public notice or by making information available on the world wide web of electronic forms (see <u>NPDES</u> <u>Electronic Reporting</u>), the <u>operators</u> may be required to use those electronic options to submit the NOI (Section 3.3.2)

In the event of large-scale emergencies and/or prolonged electronic reporting system outages, an episodic electronic reporting waiver may be granted by the Commissioner in accordance with 40 CFR § 127.15. A request for a deadline extension or episodic electronic reporting waiver should be submitted to <a href="mailto:DWRWater.Compliance@tn.gov">DWRWater.Compliance@tn.gov</a>, in compliance with the Federal NPDES Electronic Reporting Rule.

In the event that <u>NPDES Electronic Reporting</u> is not functioning, the permittee shall comply with reporting conditions by mailing reports with wet-ink original signatures shall to the following address:

STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF WATER RESOURCES

COMPLIANCE & ENFORCEMENT UNIT

William R. Snodgrass - Tennessee Tower

312 Rosa L. Parks Avenue, 11th Floor

Nashville, Tennessee 37243-1102

For purposes of determining compliance with this permit, data provided to the division electronically is legally equivalent to data submitted on signed and certified forms. A copy must be retained for the permittee's files.

# 7.3.1. Monitoring Results

Monitoring results (if applicable, for projects exceeding 50 acres of disturbance at one time, see Subsection 5.5.3.3) shall be recorded monthly and submitted monthly using NetDMR. Submittals shall be no later than 15 days after the completion of the reporting period. If NetDMR is not functioning, a completed DMR with an original signature shall be submitted to the address for Compliance and Enforcement Unit as listed in the Subpart 7.3 above. The first DMR is due on the 15th of the month following permit effectiveness.

DMRs must be signed and certified by a responsible corporate officer as defined in Tennessee Rule 0400-40-05-.05(6), a general partner or proprietor, or a principal municipal executive officer or ranking elected official, or his duly authorized representative. Such authorization must be submitted in writing and must explain the duties and responsibilities of the authorized representative.



# PART 8

#### 8. STANDARD PERMIT CONDITIONS

#### 8.1. DUTY TO COMPLY

### 8.1.1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Tennessee Water Quality Control Act (TWQCA) and is grounds for an enforcement action, permit termination, revocation and reissuance, modification; or for denial of a permit renewal application.

#### 8.1.2. Penalties

Pursuant to T.C.A. § 69-3-115 of The Tennessee Water Quality Control Act of 1977, as amended:

- a) Any person who violates an effluent standard or limitation or a water quality standard established under this part (T.C.A. § 69-3-101, et. seq.); violates the terms or conditions of this permit; fails to complete a filing requirement; fails to allow or perform an entry, inspection, monitoring or reporting requirement; violates a final determination or order of the board, panel or commissioner; or violates any other provision of this part or any rule or regulation promulgated by the board, is subject to a civil penalty of up to ten thousand dollars (\$10,000) per day for each day during which the act or omission continues or occurs.
- b) Any person unlawfully polluting the waters of the state or violating or failing, neglecting, or refusing to comply with any of the provisions of this part (T.C.A. § 69-3-101, et. seq.) commits a Class C misdemeanor. Each day upon which such violation occurs constitutes a separate offense.
- c) Any person who willfully and knowingly falsifies any records, information, plans, specifications, or other data required by the board or the commissioner, or who willfully and knowingly pollutes the <u>waters of the state</u>, or willfully fails, neglects or refuses to comply with any of the provisions of this part (T.C.A.§69-3-101, et. seq.) commits a Class E felony and shall be punished by a fine of not more than twenty-five thousand dollars (\$25,000) or incarceration, or both.



### 8.1.3. Civil and criminal liability

Nothing in this permit shall be construed to relieve the discharger from civil or criminal penalties for noncompliance. Notwithstanding this permit, the discharger shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the discharger to conduct stormwater discharge activities in a manner such that public or private nuisances or health hazards will not be created. Furthermore, nothing in this permit shall be construed to preclude the State of Tennessee from any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or the Federal Water Pollution Control Act.

### 8.1.4. Liability Under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable local, state or federal law.

#### 8.2. CONTINUATION OF THE EXPIRED GENERAL PERMIT

Permittees shall maintain coverage under this general permit until a new general permit is issued.

Operator(s) of an existing site permitted under the division's 2016 construction general permit shall maintain full compliance with the existing SWPPP. The existing SWPPP shall be modified according to the Section 5.3.1 of this permit.

#### 8.3. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### 8.4. DUTY TO MITIGATE

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.



#### 8.5. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the division or an authorized representative of the division, within a time specified by the division, any information that the division may request to determine compliance with this permit or other information relevant to the protection of the waters of the state. The permittee shall also furnish to the division, upon request, copies of records required to be kept by this permit.

### 8.6. OTHER INFORMATION

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the director, he or she shall promptly submit such facts or information.

### 8.7. SIGNATORY REQUIREMENTS

All <u>NO</u>Is, SWPPPs, <u>NOT</u>s, Construction Stormwater Inspection Certifications, Construction Stormwater Monitoring Report forms, reports, certifications or information either submitted to the <u>director</u> or the <u>operator</u> of a large or medium Municipal Separate Storm Sewer System (<u>MS4</u>) shall be signed as described in Sections 8.7.1 and 8.7.2 and dated.

# 8.7.1. Signatory Requirements for an NOI<sup>10</sup>

The NOI shall be signed as follows:

- a) For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
  - a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
  - ii. the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated site including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive

<sup>&</sup>lt;sup>10</sup> As specified in 40 CFR 122.22(a)(1)-(3) [48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39619, Sept. 1, 1983; 49 FR 38047, Sept. 29, 1984; 50 FR 6941, Feb. 19, 1985; 55 FR 48063, Nov. 16, 1990; 65 FR 30907, May 15, 2000]



measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- b) For a general partnership, by each general partner in the general partnership,
- c) For a sole proprietorship, by the proprietor,
- d) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
  - i. the chief executive officer of the agency, or
  - ii. a senior executive officer having responsibility for the overall operations of a principle geographic unit of the agency (e.g., Regional Administrators of EPA).

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate or municipal, state, federal, or other public agency officers. The division will presume that these officers have the requisite authority to sign permit applications unless the entity has notified the <u>director</u> to the contrary. Procedures governing authority to sign permit applications may provide for assignment or delegation to applicable positions rather than to specific individuals.

## 8.7.2. Signatory Requirements for SWPPPs, Reports and Other Items

SWPPPs, Construction Stormwater Inspection Certification forms, reports, certifications or other information submittals required by the permit and other information requested by the division, including but not limited to Notice of Violation responses, shall be signed by a person described in Section 8.7.1, or by a duly authorized representative of that person.

# 8.7.3. Duly Authorized Representative

For a purpose of satisfying signatory requirements for reports (Section 8.7.2), a person is a duly authorized representative only if:

- a) the authorization is made in writing by a person described in Section 8.7.1;
- b) the authorization specifies an individual having responsibility for the overall operation of the regulated site or activity such as the position of



- plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; a duly authorized representative may thus be either a named individual or any individual occupying a named position; and
- c) the written authorization is submitted to the <u>director</u> or an appropriate <u>EFO</u>. The written authorization shall be a written document including the name of the newly authorized person or any individual occupying a named position as described in paragraph b) above, and the corresponding contact information (title, mailing address, phone number and E-mail address) for the authorized person or position. The written authorization shall be signed by the newly authorized person accepting responsibility and by the person described in Section 8.7.1 delegating the authority.

## 8.7.4. Changes to Authorization

If an authorization under Sections 8.7.1 or 8.7.3 is no longer accurate because a different individual or position has responsibility as the primary or secondary permittee, but the company name (permittee name) remains the same, a new  $\underline{NOI}$  and SWPPP certification shall be submitted and signed by the new party who meets signatory authority satisfying the requirements of Sections 8.7.1 or 8.7.3. The  $\underline{NOI}$  shall include the new individual's information (title, mailing address, phone number and E-mail address), the existing tracking number and the project name.

## 8.7.5. Signatory Requirements for Primary Permittees

Primary permittees required to sign an NOI and SWPPP because they meet the definition of an operator (Subpart 2.1) shall sign the following certification statement on the NOI and on the SWPPP:

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."



## 8.7.6. Signatory Requirements for Secondary Permittees

Secondary permittees required to sign an <u>NO</u>I and SWPPP because they meet the definition of an <u>operator</u> but who are not primarily responsible for preparing an <u>NO</u>I and SWPPP, shall sign the following certification statement on the <u>NO</u>I and on the SWPPP:

"I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities onsite are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

#### 8.8. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to Section 311 of the Clean Water Act or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

### 8.9. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges; nor does it authorize any injury to private property, any invasion of personal rights or any infringement of federal, state or local laws or regulations. The issuance of this permit does not authorize trespassing or discharges of stormwater or non-stormwater across private property.

### 8.10. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.



#### 8.11. INDIVIDUAL PERMITS

## 8.11.1. Required Individual Permit Coverage

The director may require any person covered by this permit to apply for and obtain an individual NPDES permit to ensure adequate protection of designated uses of a receiving stream. Any interested person may petition the director in writing to take action under this paragraph but must include in their petition the justification for such an action. Where the director requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the director shall notify the discharger in writing that an individual permit application is required. This notification will include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application and a statement that coverage under this general permit shall terminate upon the effective date of an individual NPDES permit; or denial of coverage under an individual permit. An individual NPDES permit is required only when additional permit terms or conditions beyond those set forth herein are necessary to protect water quality. Criteria for the division to require an individual NPDES permit may include, but are not limited to:

- a) Due to unique site conditions the discharge may result in greater than <u>deminimis</u> <u>degradation</u>, or a threat to threatened or endangered aquatic or semi-aquatic species.
- b) The total acreage to be disturbed and/or total drainage area to an <u>outfall</u> may exceed the capability of standard EPSCs and other <u>BMP</u>s to prevent pollution to waters.
- c) <u>Steep grades</u> or erosive <u>soil</u> conditions warrant site-specific controls that exceed the conditions of the CGP.
- d) Other site-specific conditions, such as contaminated soils or public lands.

The notification may require stabilization of the site and suspend coverage under this general permit until the individual permit is issued. Individual permit applications and updated SWPPP shall be submitted to the appropriate Environmental Field Office of the division as indicated in Subpart 3.4. The director may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the director under this paragraph, then the applicability of this permit to the discharger will be terminated at the end of the day specified by the director for application submittal.



If the decision to require an individual NPDES permit precedes the issuance of coverage under this general permit, earth disturbing activities cannot begin until the individual permit is issued.

## 8.11.2. Permittee-Requested Individual Permit Coverage

Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. Any discharger that knowingly cannot abide by the terms and conditions of this permit must apply for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, and a SWPPP to the appropriate division's Environmental Field Office. The request may be granted by issuance of an individual permit, or alternative general permit, if the reasons cited by the permittee are adequate to support the request.

### 8.11.3. General Permit Termination

When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the discharger is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is terminated on the date of such denial, unless otherwise specified by the director. Coverage under the Tennessee Multi-Sector General Permit for the Discharge of Stormwater from an Industrial Activity (TMSP) will not be considered as an alternative general permit under this section without being specified by the director.

## 8.12. OTHER, NON-STORMWATER, PROGRAMREQUIREMENTS

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

### 8.13. PROPER OPERATION AND MAINTENANCE

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related equipment) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of SWPPPs.

## Tennessee General NPDES Permit No. TNR 100000 Stormwater Discharges from Construction Activities

Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee, when determined by the permittee or the division to be necessary to achieve compliance with the conditions of the permit.

#### 8.14. INSPECTION AND ENTRY

The permittee shall allow authorized representatives of the Environmental Protection Agency, the <u>director</u> or an authorized representative of the commissioner of TDEC, or, in the case of a construction site which <u>discharges</u> through a municipal separate storm sewer, an authorized representative of the <u>MS4</u> receiving the discharge, upon the presentation of credentials and other documents as may be required by law:

- a) to enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- b) to have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
- c) to inspect any facilities or equipment, including monitoring and control equipment.

#### 8.15. PERMIT ACTIONS

This permit may be issued, modified, revoked, reissued or terminated for cause in accordance with this permit and the applicable requirements of T.C.A. § 69-3-108. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.



## PART 9

## 9. REQUIREMENTS FOR TERMINATION OF COVERAGE

### 9.1. TERMINATION OF DEVELOPER AND BUILDER COVERAGE

## 9.1.1. Termination Process for Primary Permittees

Primary permittees wishing to terminate coverage under this permit must submit a completed Notice of Termination (NOT) form provided in Appendix B of this permit (representative photo or video documentation of site stabilization is recommended). Electronic submittal is encouraged (see NPDES Electronic Reporting for more information). Primary permittees who abandon a site and fail to submit the NOT will be in violation of this permit. If the NOT was not submitted five years following the "estimated end date" (as identified on the NOI), the division can terminate the CGP coverage, unless the permittee specifically requests to maintain coverage. Signs notifying the public of the construction activity shall be in place until the NOT form has been submitted. Primary permittees may terminate permit coverage only if the conditions described below occur at the site:

- a) For areas where the primary permittee has control, all earth-disturbing activities and, if applicable, construction support activities permitted under Section 1.2.2 at the site are complete and the following requirements are met:
  - For any areas that were disturbed during construction, are not covered by permanent structures and over which the permittee had control during the construction activities; the requirements for permanent vegetation or non-vegetative stabilization described in Subsection 5.5.3.4 are met;
  - ii. The permittee has removed and properly disposed of all construction materials, as well as waste and waste handling devices. The permittee has removed all equipment and vehicles that were used during construction, unless they are intended for long-term use following termination of permit coverage;
  - iii. The permittee has removed all <u>stormwater</u> controls that were installed and maintained during construction, except those that are intended for long-term use following termination of permit coverage;
  - iv. The permittee has identified in the SWPPP who is responsible for ongoing maintenance of any <u>stormwater</u> controls left on the site for long-term use following termination of permit coverage, and
  - v. The groundcover achieves permanent stabilization.



- b) The permittee has transferred control of all areas of the site for which he is responsible (including, but not limited to, infrastructure, common areas, stormwater drainage structures, sediment control basin) under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit.
- c) The permittee obtains coverage under an individual or alternative general NPDES permit.

### 9.1.2. NOT Review

The division may review <u>NOTs</u> for completeness and accuracy and, when necessary, investigate the proposed site for which the <u>NOT</u> was submitted. Coverage under the permit is terminated when the permit record is published on <u>TDEC's DataViewer</u> as "Inactive." <u>Operators</u> may be liable for discharges that occur from the site after termination.

The division retains the right to deny termination of coverage under this general permit upon receipt of the <u>NOT</u>. If the local Environmental Field Office has information indicating that the permit coverage is not eligible for termination, written notification will be provided within 30 days of receipt that permit coverage has not been terminated. The notification will include a summary of existing deficiencies. When the site meets the termination criteria, the <u>NOT</u> should be resubmitted.

If any permittee files for bankruptcy or the site is foreclosed on by the lender, the permittee shall notify the division of the situation so that the division may assess the site to determine if permit coverage should be obtained by any other person or whether other action is needed.

### 9.2. TERMINATION OF BUILDER AND CONTRACTOR COVERAGE

## 9.2.1. Termination Process for Secondary Permittees

Secondary permittees must request termination of coverage under this permit by submitting a <u>NOT</u> when they are no longer an <u>operator</u> at the construction site. Electronic submittal is encouraged (see <u>NPDES Electronic Reporting</u> for more information). Secondary permittees receive coverage under this permit but are not normally mailed a NOC. Consequently, <u>the division</u> may, but is not required to, notify secondary permittees that their notice of termination has been received. If <u>the division</u> has reason to believe that the secondary permittee's <u>NOT</u> should

## Tennessee General NPDES Permit No. TNR 100000 Stormwater Discharges from Construction Activities

not have been submitted, <u>the division</u> will deny the secondary permittee's <u>NOT</u> in writing, with specific reasons as to why the NOT should not have been submitted.

### 9.3. NOT CERTIFICATION

The <u>NOT</u> and the following certification must be signed in accordance with Subpart 8.7 of this permit:

"I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the state is unlawful under the Tennessee Water Quality Control Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Tennessee Water Quality Control Act. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

#### 9.4. WHERE TO SUBMIT A NOT?

Electronic submittal is encouraged (see <a href="NPDES Electronic Reporting">NPDES Electronic Reporting</a> for more information). Otherwise, the <a href="NOT">NOT</a> shall be submitted to the Environmental Field Office (EFO) which issued the NOC to the primary permittee. A list of counties and the corresponding <a href="EFOs">EFOs</a> is provided in Subpart 3.4. The appropriate permit tracking number must be clearly printed on the form.



## PART 10

## **10.** DEFINITIONS, ACRONYMS AND RESOURCES

## 10.1. **DEFINITIONS**

2-year 24-hour 5-year 24-hour	2-year and 5-year design storm depths and intensities The estimated design rainfall amounts, for any return period interval (i.e., 2-yr, 5-yr, 25-yr, etc.,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the data available at <a href="https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html">https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html</a> .  Other data sources may be acceptable with prior written approval by TDEC Division of Water Resources.
ARAP	Aquatic Resource Alteration Permit Persons who wish to make an alteration to a stream, river, lake or wetland must first obtain a water quality permit. Physical alterations to properties of waters of the state require an ARAP or a §401 Water Quality Certification (§401 certification). Examples of stream alterations that require a permit from the division include:  • Dredging, excavation, channel widening, or straightening • Bank sloping; stabilization • Channel relocation • Water diversions or withdrawals • Dams, weirs, dikes, levees or other similar structures • Flooding, excavating, draining and/or filling a wetland • Road and utility crossings • Structural fill General ARAPs are developed and maintained by the division to provide a streamlined, expedited means of authorizing projects that singularly or cumulatively propose minor impacts to water resources.
ВМР	Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants to waters of the state.  BMPs also include treatment requirements, operating procedures; and practices to control plant site runoff,



	spillage, leaks, sludge or waste disposal, or drainage from rawmaterial storage. BMPs include source control practices (non-structural BMPs) and engineered structures designed to treat runoff.  Structural BMPs are facilities that help prevent pollutants in stormwater runoff from leaving the site.  Non-structural BMPs are techniques, activities and processes that reduce pollutants at the source.
borrow pit	<b>Borrow Pit</b> is an excavation from which erodible material (typically <u>soil</u> ) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity for the purpose of this permit.
buffer zone	Buffer Zone or Water Quality Riparian Buffer is a permanent strip of natural perennial vegetation, adjacent to a stream, river, wetland, pond, or lake that contains dense vegetation made up of grass, shrubs, and/or trees. The purpose of a water quality riparian buffer is to maintain existing water quality by minimizing risk of any potential sediments, nutrients or other pollutants reaching adjacent surface waters and to further prevent negative water quality impacts by providing canopy over adjacent waters
clearing	Clearing refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities. Clearing, grading and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams or power lines for sight distance or other maintenance and/or safety concerns, or cold planning, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.).



commencement	Commencement of construction: the initial disturbance of
	<u>soils</u> associated with clearing, grading, excavating or other construction activities.
common plan	Common plan of development or sale is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design) or physical demarcation (including boundary signs, lot stakes, surveyor markings) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.
control measure	Control measure refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the state.
CWA	CWA means the Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.)
director	<b>Director</b> means the director, or authorized representative, of the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation.
degradation	<b>Degradation</b> means the alteration of the properties of waters by the addition of pollutants, withdrawal of water, or removal of habitat, except those alterations of a short duration.
de minimis	<ul> <li>De Minimis is degradation of a small magnitude, as provided in this paragraph: <ul> <li>(a) Discharges and withdrawals:</li> <li>1. Subject to the limitation in part 3 of this subparagraph, a single discharge other than those from new domestic wastewater sources will be considered de minimis if it uses less than five percent of the available assimilative capacity for the substance being discharged.</li> <li>2. Subject to the limitation in part 3 of this subparagraph, a single water withdrawal will be considered de minimis if it removes less than five percent of the 7Q10 flow of the stream.</li> </ul> </li> </ul>



	3. If more than one activity described in part 1 or 2 of this subparagraph has been authorized in a segment and the total of the authorized and proposed impacts uses no more than 10% of the assimilative capacity, or 7Q10 low flow, they are presumed to be de minimis. Where the total of the authorized and proposed impacts uses 10% of the assimilative capacity, or 7Q10 low flow, additional degradation may only be treated as de minimis if the Division finds on a scientific basis that the additional degradation has an insignificant effect on the resource. (b) Habitat alterations authorized by an Aquatic Resource Alteration Permit (ARAP) are de minimis if the Division finds that the impacts, individually and cumulatively, are offset by impact minimization and/or in-system mitigation, provided however, in Outstanding National Resource Waters (ONRWs) the mitigation must occur within the ONRW.
discharge of a pollutant	<b>Discharge</b> or <b>discharge</b> of a <b>pollutant</b> refers to the addition of pollutants to waters from a source.
disturbed area	Disturbed area means the total area presented as part of the development (and/or of a larger common plan of development) subject to being cleared, graded, grubbed, filled or excavated during the life of the development. The area cannot be limited to only the portion of the total area that the site-wide owner/developer initially disturbs through the process of various land clearing activities or in the construction of roadways, sewers, drainfields, and water utilities, stormwater drainage structures, etc., to make the property marketable.
division	<b>Division</b> means the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation
exceptional waters	Exceptional Tennessee Waters are surface waters designated by the division as having the characteristics set forth at Tennessee Rules, Chapter 0400-40-0306(4). Characteristics include waters within parks or refuges; scenic rivers; waters with threatened or endangered species; waters that provide specialized recreational opportunities; waters within areas designated as lands



	unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.
permanent stabilization	Permanent Stabilization means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:  (1) A perennial, preferably native, vegetative cover with a uniform (i.e., evenly distributed, without large bare areas) density of at least 70 percent has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion.  (2) Equivalent permanent stabilization measures such as the use of riprap; permanent geotextiles; hardened surface materials including concrete, asphalt, gabion baskets or Reno mattresses have been employed.  (3) For construction projects on land used for agricultural or silvicultural purposes, permanent stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.
improved sinkhole	Improved sinkhole is a natural surface depression that has been altered in order to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under the Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures and crevices, such as those commonly associated with weathering of limestone.
Level 1	Level 1 - Fundamentals of Erosion Prevention and Sediment Control training and certification program administered by University of Tennessee Water Resources Research Center (https://tnepsc.org/index.asp). The Fundamentals course is a foundation-building course intended for individuals involved in land-disturbing activities covered by the Construction General Permit. The course aims to build a working knowledge of erosion and sedimentation processes and practices and is intended for: site inspectors, inspection and enforcement personnel from all levels of government, plan preparers and reviewers, and designers and engineers. Topics include:

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	Construction General Permit and related SWPPP requirements; function, installation, limitations, inspection and maintenance of Best Management Practices; roles of local officials and state government agencies involved in the permitting process; and basic hydrologic and erosion processes. Upon successful completion of a Course Certification Exam, the participant receives a Level 1 TNEPSC certificate. The Level 1 certificate is valid for three full years following the year that the certificate was issued. To meet the requirement for Level 1 certified staff, TDOT may develop and administer an approved equivalent Level 1 training and certification program as provided in the TDOT individual MS4 Permit. The equivalent TDOT Level 1 certification is valid only for TDOT staff and for projects where TDOT is the primary site operator.
Level 2	Level 2 - Design Principles for Erosion Prevention and Sediment Control for Construction Sites training and certification program administered by University of Tennessee Water Resources Research Center (https://tnepsc.org/index.asp). It is an advanced 2-day workshop designed for engineers and other professionals who have completed the prerequisite Level 1 course. The Level 2 Design workshop provides the general tools needed for developing an acceptable, working SWPPP. Topics discussed in the course include: hydrologic methods for determining peak flows; principles of soil erosion, scouring and sediment transport processes, including practice examples for preventing erosion; and open channel principles and practices for designing a stable channel, including use and examples of riprap, blankets and matting, and vegetation; stormwater control requirements and design; sedimentation principles; and temporary sediment basin design requirements, and detailed examples. The Level 2 Design workshop provides a Certificate of Completion after attending both days and successfully completing the take-home exam.
linear project	Linear Project is a land disturbing activity as conducted by an underground/overhead utility or highway department, including, but not limited to, any cable line or wire for the transmission of electrical energy; any conveyance pipeline for transportation of gaseous or liquid substance; any

	cable line or wire for communications; or any other energy resource transmission ROW or utility infrastructure, e.g., roads and highways. Activities include the construction and installation of these utilities within a corridor. Linear project activities also include the construction of access roads, staging areas and borrow/spoil sites associated with the linear project. Land disturbance specific to the development of residential and commercial subdivisions or high-rise structures is not considered a linear project.
measurable degradation	Measurable Degradation, as used in the context of discharges or withdrawals, means changes in parameters of waters that are of sufficient magnitude to be detectable by the best available instrumentation or laboratory analyses.
month	Month or Monthly refers to calendar months.
MS4	"Municipal Separate Storm Sewer System" or "MS4" is defined in 40 CFR §122.26(b)(8) to mean a conveyance or system of conveyances (e.g., roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that are:  a) owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; b) designed or used for collecting or conveying stormwater; c) not a combined sewer; and d) not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR §122.2.
operator	<b>Operator</b> for the purpose of this permit and in the context of <u>stormwater</u> associated with construction activity, means any person (typically considered the primary permittee)



	associated with a construction project that meets either of the following two criteria:  a) This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project (e.g., subsequent builder) or the person who is the current owner of the construction site.  b) This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee and is considered a secondary permittee. It is anticipated that at different phases of a construction project, different types of parties may satisfy the definition of "operator" (see Part 2 of this permit).
point source(or outfall)	Point source means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include introduction of pollutants from non-point source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, forest lands or return flows from irrigated agriculture or agricultural stormwater runoff. In short, outfall is a point where runoff leaves the site as a concentrated flow in a discrete conveyance. Phrase "point source" and term "outfall" are used interchangeably in this general permit, and can be considered synonyms.
pollutant	Pollutant means sewage, industrial wastes, or other wastes.
QLP	Qualifying State, Tribal, or local erosion and sediment control program is one that includes, as defined in 40 CFR 122.44(s):



	<ul> <li>a) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.</li> <li>b) 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 that may cause adverse impacts to water quality.</li> <li>c) Requirements for construction site operators to develop and implement a stormwater pollution prevention plan. A stormwater pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures and identification of non-stormwater discharges.</li> <li>d) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.</li> </ul>
rainfall	A <b>rainfall event</b> is defined as any occurrence of rain preceded by 10 hours without precipitation that results in an accumulation of 0.01 inches or more. Instances of rainfall occurring within 10 hours of each other will be considered a single rainfall event.
registered engineer	Registered Engineer and Registered Landscape Architect An engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.
runoff coefficient	Runoff coefficient means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is not absorbed by the surface to the total amount of water that falls during a rainstorm.
sediment	<b>Sediment</b> means solid material, both inorganic (mineral) and organic, that is in suspension, is being transported; or has been moved from the site of origin by wind, water, gravity or ice as a product of erosion.
sediment basin	Sediment basin A temporary basin consisting of an embankment constructed across a wet weather

	conveyance, an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, dam, impoundment, permanent pool, primary spillway, secondary or emergency spillway and surface dewatering device. The size and shape of the basin depends on the location, size of drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., waters with unavailable parameters, Exceptional TN Waters, or waters with available parameters).
sedimentation	<b>Sedimentation</b> means the action or process of forming or depositing sediment.
soil	<b>Soil</b> or <b>Topsoil</b> means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.
steep slope	Steep Slope or Steep Grade means a natural or created slope of 35% grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the SWPPP to engineer runoff around or over a steep slope so as not to erode the slope. In addition, site managers should focus on erosion prevention on the slopes and stabilize the slopes as soon as practicable to prevent slope failure or sediment discharges from the project.
stormwater	<b>Stormwater</b> means rainfall runoff, snow melt runoff, and surface runoff and drainage.
stream	A <b>Stream</b> is a surface water that is not a wet weather conveyance. Therefore, as used in this permit, "stream" includes lakes, wetlands and other non-linear surface waters.
construction stormwater	Stormwater associated with industrial activity is defined in 40 CFR 122.26(b)(14) and incorporated here by reference. Most relevant to this permit is 40 CFR 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities, including borrow pits containing erodible material. Disturbance of soil for the purpose of crop production is exempt from permit requirements, but stormwater discharges from agriculture-related activities that involve construction of structures (e.g., barn construction, road construction, pond construction) are considered associated with industrial



	activity. Maintenance to the original line and grade,
	hydraulic capacity; or to the original purpose of the facility (e.g., re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair and repaving of an existing road) is not considered a construction activity for the purpose of this permit.
discharge- related activities	Stormwater discharge-related activities means activities that cause, contribute to or result in point source stormwater pollutant discharges. These activities may include excavation, site development, grading and other surface disturbance activities; and activities to control stormwater including the siting, construction and operation of best management practices (BMPs).
SWPPP	Stormwater Pollution Prevention Plan is a written site-specific plan required by this permit that includes a narrative pollution prevention plan and graphical erosion and sediment control plan. In its basic form, the plan contains a site map, a description of construction activities that could introduce pollutants to stormwater runoff, a description of measures or practices to control these pollutants, and erosion and sediment control plans and specifications. It must be prepared and submitted before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook.
take	<b>Take</b> of an endangered species means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.
the handbook	Tennessee Erosion and Sediment Control Handbook is a guidance issued by the Division of Water Resources for the purpose of developing Stormwater Pollution Prevention Plans and Erosion and Sediment Control Plans required by the TNCGP.  The handbook is designed to provide information to planners, developers, engineers and contractors on the proper selection, installation and maintenance of BMPs. The handbook is intended for use during the design and

	construction of projects that require erosion and sediment controls to protect waters of the state.
temporary stabilization	Temporary stabilization is achieved when vegetation or non-erodible surface has been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease. However, if future construction activity is planned, permit coverage continues.
TMDL	Total maximum daily load (TMDL) means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(I)). TMDL is a study that quantifies the amount of a pollutant in a stream, identifies the sources of the pollutant and recommends regulatory or other actions that may need to be taken in order for the stream to cease being polluted. TMDLs can also be described by the following equation:  TMDL = sum of nonpoint sources (LA)+ sum of point sources (WLA)+ margin of safety  Alist of completed TMDLs that have been approved by EPA can be found at our web site:  https://www.tn.gov/environment/program-areas/wr-water-
	resources/watershed-stewardship/tennessee-s-total-maximum-daily-loadtmdlprogram.html
treatment chemicals	Treatment chemicals are polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are chitosan and anionic PAM.
turbidity	<b>Turbidity</b> is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.
waste site	<b>Waste site</b> is an area where material from a construction site is disposed of. When the material is erodible, such as soil, the site must be treated as a construction site.



waters or waters of the state	Waters (or waters of the state) means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof, except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.
unavailable parameters	Waters with unavailable parameters means any segment of surface waters that has been identified by the division as failing to support one or more classified uses. For the purpose of this permit, pollutant of concern is siltation. Based on the most recent assessment information available to staff, the division will notify applicants and permittees if their discharge is into, or is affecting, waters with unavailable parameters. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages ( <a href="https://tdeconline.tn.gov/dwr/">https://tdeconline.tn.gov/dwr/</a> ), and the results of recent field surveys. GIS coverages of the <a href="https://streams.and.lakes.not">streams.and.lakes.not</a> meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at <a href="https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reportspublications.html">https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reportspublications.html</a> .
week	A <b>one-week period</b> is a synonym of a <b>calendar-week</b> ; typically, a period from Sunday through Saturday.
wet weather conveyance	<ul> <li>Wet weather conveyances are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following: <ul> <li>a) The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.</li> <li>b) The conveyance's channels are at all times above the ground water table.</li> <li>c) The flow carried by the conveyance is not suitable for drinking water supplies.</li> <li>d) Hydrological and biological analyses indicate that, due to naturally occurring ephemeral or low flow under normal weather conditions, there is not sufficient water</li> </ul> </li></ul>

## Tennessee General NPDES Permit No. TNR100000 Stormwater Discharges from Construction Activities

to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Tennessee Rules,
Chapter 0400-40-304(3)).

### 10.2. ACRONYMS AND ABBREVIATIONS

7Q10 7-day minimum, 10-year recurrence interval

ARAP Aquatic Resource Alteration Permit

BMP Best Management Practice

BPT Best Practicable Control Technology Currently Available

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

CFR Code of Federal Regulations

CGP Construction General Permit (this NPDES permit)

CWA Clean Water Act

EFO Environmental Field Office (see Subpart 3.4)
EPA (U.S.) Environmental Protection Agency
EPSC Erosion Prevention and Sediment Control
MS4 Municipal Separate Storm Sewer System
NOC Notice of Coverage (see Subpart 1.5)

NOI Notice of Intent (to be covered by this permit – see Section 1.4.1)

NOT Notice of Termination (see Part 9)

NPDES National Pollutant Discharge Elimination System

ONRW Outstanding National Resource Waters

QLP Qualifying Local Program (see Section 1.4.5)

SWPPP Stormwater Pollution Prevention Plan

TDEC Tennessee Department of Environment and Conservation

TDOT Tennessee Department of Transportation

TMDL Total Maximum Daily Load

TMSP Tennessee Multi-Sector General Permit for the Discharge of

Stormwater from an Industrial Activity

TVA Tennessee Valley Authority

TWQCA Tennessee Water Quality Control Act

UIC Underground Injection Control USGS United States Geological Survey

## Tennessee General NPDES Permit No. TNR 100000 Stormwater Discharges from Construction Activities

## 10.3. RESOURCES, HYPERLINKS, AND WEB PAGES

Electronic Code of Federal Regulations (eCFR), Title 40 (40 CFR § 1 through § 1099) <a href="https://www.ecfr.gov/cgi-bin/text-idx?SID=75202eb5d09974cab585afeea981220b&mc=true&tpl=/ecfrbrowse/Titl">https://www.ecfr.gov/cgi-bin/text-idx?SID=75202eb5d09974cab585afeea981220b&mc=true&tpl=/ecfrbrowse/Titl</a>

e40/40chapterl.tpl

Electronic Reporting (NetDMR) Waiver Request

https://www.tn.gov/content/dam/tn/environment/water/documents/wr\_ereporting\_waiver.pdf

Online Forms

NPDES Electronic Reporting

NPDES Compliance Inspection Manual (<u>EPA</u>) <a href="https://www.epa.gov/sites/production/files/2017-01/documents/npdesinspect.pdf">https://www.epa.gov/sites/production/files/2017-01/documents/npdesinspect.pdf</a>

## NPDES Electronic Reporting Rule

https://www.federalregister.gov/documents/2015/10/22/2015-24954/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule

Rules of the TN Department of Environment and Conservation, Chapter 0400-40 https://publications.tnsosfiles.com/rules/0400/0400-40/0400-40.htm

TDEC Water Quality Rules, Reports, and Publications <a href="https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html">https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html</a>

Technical Support Document for Water Quality-based Toxics Control (<u>EPA</u>) https://www3.epa.gov/npdes/pubs/owm0264.pdf

Tennessee Water Resources Data and Map Viewers <a href="https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-resources-data-map-viewers.html">https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-resources-data-map-viewers.html</a>

### **USGS StreamStats**

https://www.usgs.gov/mission-areas/water-resources/science/streamstatsstreamflow-statistics-and-spatial-analysis-tools?qtscience\_center\_objects=0#qt-science\_center\_objects

# Tennessee General NPDES Permit No. TNR 100000 Stormwater Discharges from Construction Activities

## USGS SWToolbox

https://www.usgs.gov/software/swtoolbox-software-information

(End of body of permit; appendices follow.)

## APPENDIX A - NOTICE OF INTENT FORM (NOI)

(See Next Page)



## TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor Nashville, TN 37243 Toll Free Number: 1-888-891-8332 (TDEC)

# NOTICE OF INTENT (NOI) FOR GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES (TNR100000)

Site or Project Name:		NPDES Trac Number: TN	_		
Street Address including city or zip		Construction		<b>e</b> :	
code or Location:			Estimated End Date:		
Site		=	Latitude (dd.		
Description:			Longitude (-dd.dddd):		
	MS4	Acres Disturbed:			
County(ies):	Jurisdiction (if applicable):		Total Acres:		
Are there any streams and/or wetlands free wetlands are located on-site and may be imported in Aquatic Resource Alteration Permit has to the permit number?		tlands delineation		nber:	
Receiving waters:					
Include the SWPPP with the NOI SWPPP Included		Include a site location map	on		
Name of Site Owner or Developer (Site-Wi operational or design control over construction	plans and specif	ications)	·		or entity triat rias
For corporate entities only, provide the Tennes	ssee Secretary of	State (SOS) Co	ontrol Numbe	r:	
Site Owner or Developer Contact Name: (individual responsible for site)		Title or Position: (the party who signs the certification below):			e certification
Mailing Address:		City:		State:	Zip:
Phone: ( )		E-mail:			
Optional Contact Name:		Title or Position	า:		
Mailing Address:		City:		State:	Zip:
Phone: ( )		E-mail:	ı		

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<b>Owner or Developer Certification:</b> (must be signed by preofficial) (Primary Permittee)	esident, vice-president or equivalent	, or ranking elected
I certify under penalty of law that this document and all attaches supervision. The submitted information is to the best of my knowa aware that there are significant penalties for submitting false imprisonment. As specified in Tennessee Code Annotated Secondary of perjury.	owledge and belief, true, accurate, a e information, including the possib	and complete. I am illity of fine and
Owner or Developer Name: (print or type)	Signature:	Date:
Contractor(s) Certification: (must be signed by president, v (Secondary Permittee)	vice-president or equivalent, or rank	ing elected official)
I certify under penalty of law that I have reviewed this documen Based on my inquiry of the construction site owner/developer responsible for assembling this NOI and SWPPP, I believe the NOI, if approved, makes the above-described construction actithat certain of my activities on-site are thereby regulated. I am possibility of fine and imprisonment for knowing violations, an As specified in Tennessee Code Annotated Section 39-16-702	identified above and/or my inquiry information submitted is accurate. ivity subject to NPDES permit numb aware that there are significant per id for failure to comply with these per identificant.	of the person directly I am aware that this er TNR100000, and nalties, including the ermit requirements.
Primary contractor name, address, and SOS control number (if applicable): (print or type)	Signature:	Date:
Primary contractor name, address, and SOS control number (if applicable): (print or type)	Signature:	Date:
Primary contractor name, address, and SOS control number (if applicable): (print or type)	Signature:	Date:

Addendum 1 - issued 4/11/24

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(Instructions on reverse)

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# NOTICE OF INTENT (NOI) FOR GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES (TNR100000)

Purpose of this form: A completed notice of intent (NOI) must be submitted to obtain coverage under the Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activity (permit). Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions. This permit is required for stormwater discharge(s) from construction activities including clearing, grading, filling and excavating (including borrow pits) of one or more acres of land. This form should be submitted at least 30 days prior to the commencement of land disturbing activities, or no later than 48 hours prior to when a new operator assumes operational control over site specifications or commences work at the site.

The appropriate permit application fee must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites):

(i) Projects equal to or greater than 150 acres	\$10,000
(ii) Projects equal to or greater than 50 acres and less than 150 acres	\$6,000
(iii) Projects equal to or greater than 20 acres and less than 50 acres	\$3,000
(iv) Projects equal to or greater than 5 acres and less than 20 acres	\$1,000
(v) Projects equal to or greater than 1 acre and less than 5 acres	\$250
(vi) Projects seeking subsequent coverage under an actively covered larger common	
plan of development or sale	\$100

There is no fee for sites less than 1 acre. A separate annual maintenance fee is also required for construction activities that exceed 1 year under general permit coverage. Tennessee Rules, Chapter 0400-40-11-.02(b)(12)).

Who must submit the NOI form? Per Section 2 of the permit, all site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of stormwater associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria: (1) The person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project (e.g. subsequent builder), or the person that is the current landowner of the construction site. This person is considered the primary permittee; or (2) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee and is considered a secondary permittee.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 of the permit shall apply for permit coverage on the same NOI, insofar as possible. After permit coverage has been granted to the primary permittee, any separate or subsequent NOI submittals must include the site's previously assigned permittracking number and the project name. The site-wide site-specific SWPPP shall be prepared in accordance with the requirements of part 5 of the permit and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (secondary permittee) to an existing coverage.

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Artificial entities (e.g., corporations or partnerships excluding entities not required to register) must submit the TN Secretary of State, Division of Business Services, control number. The Division reserves the right to deny coverage to artificial entities that are not properly registered and in good standing with the TN Secretary of State.

Notice of Coverage The division will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). Stormwater discharge from the construction site is authorized as of the effective date of the NOC.

<u>Complete the form</u> Type or print clearly, using ink and not markers or pencil. Answer each item or enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.** 

Describe and locate the project Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The maps can be obtained at the USGS World Wide Web site: <a href="http://www.usgs.gov/">http://www.usgs.gov/</a>; latitude and longitude information can be found at numerous other web sites. Attach a copy of a portion of a 7.5 minute topographic map, a city map, or a county map showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

Give name of the receiving waters and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the stormwater runoff drains. Note that the receiving water course may or may not be located on the construction site. If the first water body receiving construction site runoff is unnamed ("unnamed tributary"), determine the name of the water body that the unnamed tributary enters.

An ARAP may be required If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP). If you have a question about the ARAP program, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the appropriate EFO for the county(ies) where the construction activity is located, addressed to **Attention: Stormwater NOI Processing** or use MyTDEC Forms for electronic submittal.

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133-4119	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305-4316	Chattanooga	1301 Riverfront Parkway, Suite 206	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

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## APPENDIX B - NOTICE OF TERMINATION FORM (NOT)

(See Next Page)



#### TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources (DWR)
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243
1-888-891-TDEC (8332)

# Notice of Termination (NOT) for General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator at the construction site. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been permanently stabilized, the temporary erosion and sediment control measures have been removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form.

Submit this form to the local DWR Environmental Field Office (EFO) address (see table below) or using MyTDEC Forms electronic submittal process. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

Site or Project Name:		NPDES Tracking Number: TNR				
Stre	eet Address or Location:		County(ies):			
Nan	Name of Permittee Requesting Termination of Coverage:					
Permittee Contact Name:		Title or Position:				
Mail	ling Address:	City: State:		Zip:		
Pho (	ne: )	E-mail:				
Cl	neck the reason(s) for termination of permit cov	/erage: (check onl	y one)			
Primary permittee termination: all requirements for termination under Permit Part 9.1.1. a) through c) have been met. This includes, but is not limited to, for areas the primary permittee has control all earth-disturbing activities at the site are complete and permanent stabilization as defined in Part 10 of the CGP has been achieved. (attach photo documentation).					ll earth-	
	When applicable, and you are a primary permittee seeking termination, list who is responsible for ongoing maintenance of stormwater controls left on the site subject for long-term use following termination of coverage:				r	
	Secondary permittee termination: all requirements for termination under Permit Part 9.2.1. have bee met (no longer an operator at the construction site).				ave been	

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## Certification and Signature:

(must be signed by president, vice-president or equivalent ranking elected official)

I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the state is unlawful under the Tennessee Water Quality Control Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Tennessee Water Quality Control Act. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Permittee name (print or type):		Signature:		Date:	
EFO	Address	EFO	Street Address		
Memphis	8383 Wolf Lake Drive, Bartlett, TN 38133	Cookeville	1221 South Willow Ave., TN 3850		
Jackson	1625 Hollywood Drive, TN 38305	Chattanooga	1301 Riverfront Park TN 37402	way, Ste. 206,	
Nashville	711 R S Gass Boulevard, TN 37243	Knoxville	3711 Middlebrook F	Pike, TN 37921	
Columbia	1421 Hampshire Pike, TN 38401	Johnson City	2305 Silverdale Roa	d, TN 37601	

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## APPENDIX C - INSPECTION REPORT FORM

(See Next Page)



#### TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources (DWR)
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11<sup>th</sup> Floor,
Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

# General NPDES Permit for Stormwater Discharges from Construction Activities (CGP) Construction Stormwater Inspection Certification (Inspection Form)

Site	or Pro	ject Name:			NPDES Tracking Number:	TNR		
Primary Permittee Name:		Date of Inspection:						
	Current approximate  disturbed acreage:  Has rainfall been checked/documented daily?  Yes No							
		ather/ground	Rainfall total since last		Inspector's TNEPSC			
cond	itions:		inspection:		Certification Number:			
Site Assessment Assessor's TN PE registration Assessor's TNEPSC Level II/CPESC			number	r:				
Ye	es 💹 N	No	number:					
Chec	k the	box if the followin	g items are on-site:					
		Notice of Coverage	, ,					
			n Prevention Plan (SWP	PP)				
<u> </u>		Weekly inspection of						
<u>_</u>	_	Site contact inform	ation					
L		Rain Gage						
Off-s	ite Ret	ference Rain Gage L	ocation					
Dact N	Janaa	omant Practices (P	MDc).					
		ement Practices (B		(EDSCs) f	iunctioning correctly?			
		cribe below in Comm	nd Sediment Controls	(EPSCS) T	unctioning correctly?			
II INC	), ues	clibe below iii Colliii	lent Section					
1.	Are a	III applicable EPSCs	installed and maintained	per the S	WPPP per the current phase	?	Yes	No
2.	Are E 5.5.3	~	orrectly at all disturbed are	eas/mate	rial storage areas? (permit se	ection	Yes	No
Are EPSCs functioning correctly at outfall/discharge points such that there is no objectionable color contrast in the receiving stream, and no other water quality impacts? (permit section 5.5.3.5 and 6.3.2)			☐ Yes	□ No				
4.	Are EPSCs functioning correctly at ingress/egress points such that there is no evidence of track-out? (permit section 5.5.3.1)			of	☐ Yes	□ No		
5.	If applicable, have discharges from dewatering activities been managed by appropriate controls? (permit section 4.1.3) If "No," describe below the measure to be implemented to address deficiencies.				☐ Yes	□ No		
6.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days? (permit section 5.5.3.4) If "No," describe below each location and measures taken to stabilize the area(s).			☐ Yes	□ No			
7.	minir disch	nize the discharge o	of pollutants from wash valleaks persection 4.1.4?	waters, e	nented, and maintained to xposure of materials and escribe below the measure	□ N/A	Yes	□ No

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Site or Project Name:	NPDES Tracking Number	NPDES Tracking Number: TNR		
Primary Permittee Name:	Date of Inspection:			
8. If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No," describe below the measures to be implemented to address deficiencies. (permit section 1.2.2)				□ No
Have all previous deficiencies been addressed? If "No," describe the remaining deficiencies in the Comments section.  Check if deficiencies/corrective measures have been reported on a previous form.				□ No
Comment Section. If the answer is "No" for any of the aboractions to be taken. Otherwise, describe any pertinent observed in the section of the aboraction o		arize cor	rective	
Certification and Signature (must be signed by the ce and 8.7.2 of the CGP)	ertified inspector and the permittee pe	er Sectio	ons 5.5.3	3.11 (g)
I certify under penalty of law that this document and all are or supervision. The submitted information is to the best of am aware that there are significant penalties for submittic imprisonment. As specified in Tennessee Code Annotate penalty of perjury.	f my knowledge and belief, true, accung false information, including the po	ırate, ar əssibility	nd comp of fine	lete. I and
Inspector Name and Title :	Signature:	Date:		
Primary Permittee Name and Title:	Signature:	Date:		

CN-1173 (Rev. 12-21) (Instructions on next page) RDA 2366

### Construction Stormwater Inspection Certification Form (Inspection Form)

## Purpose of this form/ Instructions

An inspection, as described in subsection 5.5.3.9. of the General Permit for Stormwater Discharges from Construction Activities ("Permit"), shall be performed at the specified frequency and documented on this form. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), such inspection only has to be conducted once per month until thawing results in runoff or construction activity resumes.

Inspections can be performed by:

- a) a person with an valid certification from the "Fundamentals of Erosion Prevention and Sediment Control Level I" course.
- b) a licensed professional engineer or landscape architect,
- c) a Certified Professional in Erosion and Sediment Control (CPESC), or
- d) a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

Qualified personnel, as defined in subsection 5.5.3.10 of the Permit (provided by the permittee or cooperatively by multiple permittees) shall inspect <u>disturbed areas</u> of the construction site that have not been permanently stabilized, areas used for storage of materials that are exposed to precipitation, structural <u>control measures</u>, locations where vehicles enter or exit the site, and each outfall.

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the site's drainage system. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.

Outfall points (where discharges leave the site and/or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment <u>control measures</u> are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

Based on the results of the inspection, any inadequate <u>control measures</u> or <u>control measures</u> in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than 7 days after the need is identified.

Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 5.5.1 of the Permit and pollution prevention measures identified in the SWPPP in accordance with section 5.5.2 of the Permit, shall be revised as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.

All inspections shall be documented on this Construction Stormwater Inspection Certification form. Alternative inspection forms may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the Division's form and the permittee has obtained a written approval from the Division to use the alternative form. Inspection documentation will be maintained on site and made available to the Division upon request. Inspection reports must be submitted to the Division within 10 days of the request.

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

CN-1175 (Rev. 12-21)



# Memphis-Shelby County Airport Authority COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN

For Contractors Performing
Construction Activities at the
Charles W. Baker Airport
Under Permits TNR10-0000 and TNR15-0091

## **Comprehensive Storm Water Pollution Prevention Plan**

**Appendix A: Figure** 

**Appendix B: Permit and Forms** 

**Appendix C: Best Management Practices Appendix D: Spill Response Notification** 

**Appendix E: Inspection Form** 

**Prepared By:** 

**MSCAA Manager of Environmental Services** 

August 2023



# Memphis-Shelby County Airport Authority COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN

For Contractors Performing
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## **Comprehensive Storm Water Pollution Prevention Plan**

**Appendix A: Figure** 

**Appendix B: Permit and Forms** 

Appendix C: Best Management Practices

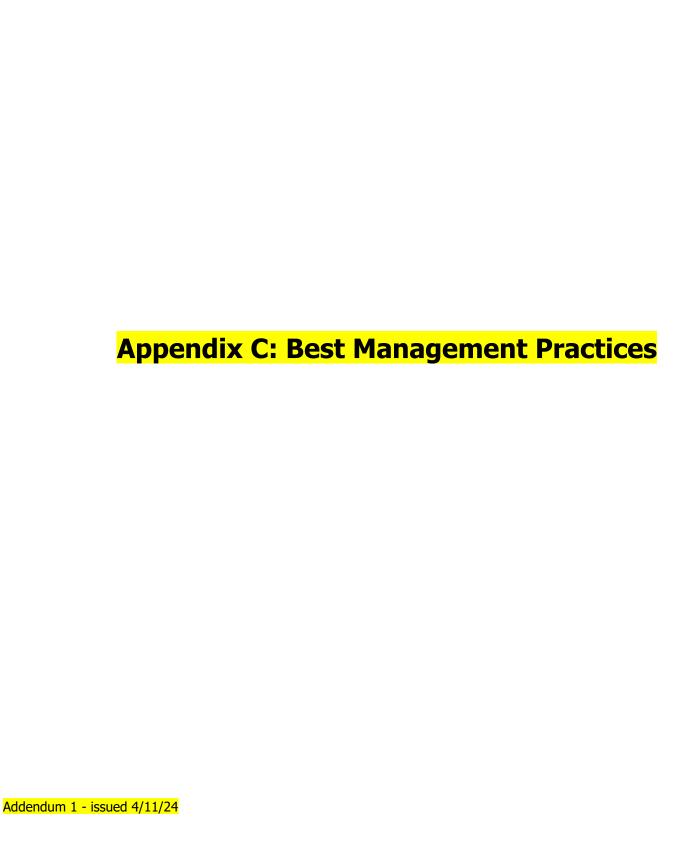
**Appendix D: Spill Response Notification** 

**Appendix E: Inspection Form** 

**Prepared By:** 

**MSCAA Manager of Environmental Services** 

August 2023



## **Memphis and Shelby County Best Management Practices Manual**

In August 2006, the city of Memphis and Shelby County published the Storm Water Management Manual (SWMM), which includes a Best Management Practices (BMP) Manual. The purpose of the BMP Manual is to establish minimum standards for the design and implementation of measures to prevent and control erosion, sediment, and other forms of storm water pollution.

All of the major streams in Memphis and unincorporated Shelby County are limited due to siltation, including Loosahatchie River downstream from the airport. Memphis and Shelby County encourage implementation of a series of best management practices that optimize the use of required green and open spaces, especially along buildings and within or along parking lots. The storm water controls must be designed to limit the discharge of storm water pollutants offsite to predevelopment levels to the maximum extent practicable (MEP). Due to colloidal clay soils in the Memphis area, sediment removal BMPs may not yield clear storm water. The MEP for sediment removal in the Memphis area is to design and implement BMPs as indicated in the BMP Manual.

### **Organization of BMP Manual**

The BMP Manual includes a brief introduction to storm water BMPs, the theory of erosion control, the steps in selecting which BMPs to use, and a series of focused and concise fact sheets for each type of BMP to be used in the city of Memphis and unincorporated Shelby County. The revision date (month and year) is included on each page to allow easy identification of the latest version of each BMP.

The fact sheets are categorized so that they may be used as quick references or for detailed design, inspection, and maintenance guidance. In this way, the fact sheets are designed to be stand-alone documents that may be distributed to facilitate focused discussion about each practice. BMP categories are:

AM	Activities and Methods
ES	<b>Erosion and Sediment</b>
IC	Industrial and Commercial
ST	Storm Water Treatment

To access the BMP Manual, go to www.stormwatermatters.com.

A listing of BMPs to select from is provided on pages 3 through 8 in this appendix.

#### **Erosion and Sediment Control**

Shelby County typically has heavy precipitation in winter and early spring brought about by low-pressure systems that cause widespread rains. A second period of heavy precipitation occurs in late spring and early in summer, when local showers and thunderstorms are more common. Precipitation is generally lightest in late summer and in early fall.

Soils in Shelby County are typically characterized as nearly level to gently sloping, well-drained, and silty; however, the city and county have many soils, which should be evaluated at each site by consulting the Shelby County soil survey and conducting a site evaluation. Silt deposits are usually from 5 to more than 20 feet thick. Often, a fragipan (caused by agricultural use) begins at a depth of 15 to 30 inches and needs to be broken to increase infiltration. Topsoils are underlain by a layer of aeolian loess consisting of silt, clay, and silty clay. The thickness of the loess varies from location to location.

In general, soils in Shelby County are susceptible to high rates of erosion and require careful management. The silt and silty clay soils in Shelby County are infamous for their colloidal properties, which do not filter or settle well.

One of the main tools available to help land users determine the potentials and limitations of soils is a soil survey. Soil surveys are available through the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). The surveys are made by NRCS in cooperation with other federal, state, and local agencies. The Shelby County soil survey is also available on the Internet at <a href="http://websoilsurvey.nrcs.usda.gov/app/">http://websoilsurvey.nrcs.usda.gov/app/</a>. Web Soil Survey allows you to produce a customized soil survey for your site. Detailed information about limitations for specific soils should be evaluated.

#### **SELECTING BEST MANAGEMENT PRACTICES**

Both erosion prevention practices and sediment control practices must be employed at all sites. Due to the fine loess soil particles in the Memphis area that make sediment control difficult, developers must adequately address erosion prevention practices, such as scheduling and ground cover. Sediment discharges must be in compliance with TDEC permits and must be controlled to the maximum extent practicable (MEP). MEP is a technology-based discharge standard established for Municipal Separate Storm Sewer Systems required by §402(b) of the Clean Water Act.

### **Temporary Versus Permanent BMPs**

The same level of care should be taken to select temporary BMPs as is used with permanent BMPs. The same level of care should also be taken to install and maintain temporary BMPs. The only difference is in the intended lifespan of the BMP. It is good to remember that, in the world of construction and industry, a temporary solution may be in place for years and years due to oversight, neglect, good performance, etc. In general, temporary BMPs are intended to address construction activities, while permanent BMPs address long-term storm water management objectives.

Temporary BMPs may include a variety of "good housekeeping" measures and short-term erosion and sediment control activities. An appropriate professional such as a Certified Professional in Erosion and Sediment Control (CPESC) and/or licensed professional civil engineer should plan temporary BMPs. A licensed professional engineer must design some of the more complicated or sensitive BMPs. The contractor is responsible for properly constructing/implementing and maintaining the temporary practices and/or seeking guidance when the measures do not appear to be meeting the storm water management objectives (namely that sediment and other pollutants do not leave the construction site).

Permanent BMPs, which are designed to control long-term storm water pollution, are the final improvements to and configuration of the project. Permanent BMPs are selected by licensed professional civil engineers, incorporated into the plans and specifications for the project, and have long-term maintenance responsibilities identified. The contractor is responsible for properly constructing the permanent controls. Permanent BMPs are normally selected in the planning phase in conjunction with the approval of the tentative map designed during the design phase of a project and completed to the satisfaction of the city of Memphis Public Works Division or Shelby County Engineering Department.

## **Identify Objectives**

The objectives in pollution prevention for each property can vary widely. Therefore, a specific understanding of pollution risks for each activity is essential for selecting and implementing BMPs. Defining these risks requires review of the characteristics of the site and the nature of the construction process or industrial activity. This information should be carefully assembled and reviewed early in the design process. Once these pollution risks are defined, then BMP objectives are developed and specific BMPs can be selected. The BMP objectives for a typical construction project are as follows:

- Practice Good Housekeeping: Perform activities in a manner that keeps potential pollutants
  from either draining or being transported offsite by managing pollutant sources and
  modifying construction activities. Dispose of waste materials in designated areas and in
  designated containers away from rainfall and storm water runoff.
- Minimize Disturbed Areas: Determine project scheduling and only clear land that will be
  actively under construction in the near term (within the next three months).
  Minimize new land disturbance, and do not clear or disturb sensitive areas (e.g.,
  steep slopes, buffers, and natural watercourses).
- Stabilize Disturbed Areas: Provide temporary stabilization of disturbed soils whenever active construction is not occurring on that portion of the site. Provide permanent stabilization during the final grading process and carefully landscape the site.
- Protect Slopes and Channels: Avoid disturbing steep or unstable slopes. Safely convey runoff from the top of the slope and stabilize disturbed slopes as quickly as possible. Avoid disturbing natural channels. Stabilize temporary and permanent channel crossings as quickly as possible and ensure that increases in runoff velocity caused by the project do not erode the channel.
- Control Site Perimeter: Upstream runoff should be diverted around or safely conveyed through the construction project and must not cause downstream property damage. Runoff from project site should be free of excessive sediment and other constituents.
- Control Internal Erosion and Drainage: Detain sediment-laden waters from actively disturbed areas within the site to minimize the risk of sediment leaving the site.

Site characteristics and proposed contractor activities will affect the potential for site erosion and contamination by other constituents used on the construction site. It is important to plan the project to fit the topography and drainage patterns of the site. Before defining BMP objectives, these factors should be carefully considered:

- 1. Site conditions that affect erosion and sedimentation, which include:
  - a. soil type, including underlying soil strata that are likely to be exposed
  - b. natural terrain and slope
  - c. final slopes and grades
  - d. location of concentrated flows, storm drains, and streams
  - e. existing vegetation and ground cover
- 2. Climatic factors, which include:
  - a. seasonal rainfall patterns
  - b. appropriate design storm (quantity, intensity, duration)
- 3. Type of construction activity.
- 4. Construction schedules, construction sequencing, and phasing of construction.
- 5. Size of construction project and area to be graded.
- 6. Location of the construction activity relative to adjacent uses and public improvements.
- 7. Cost-effectiveness considerations.
- 8. Types of construction materials and potential pollutants present or that will be brought onsite.
- 9. Floodplain, floodway, and buffer requirements.

#### **Select BMPs**

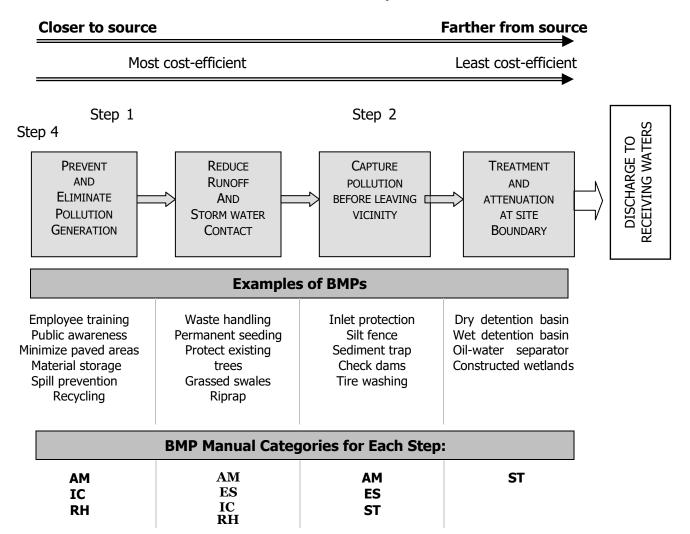
Once the BMP objectives are defined, it is necessary to identify the BMPs that are best suited to meet each objective. To determine where to place BMPs, a map of the project site can be prepared with sufficient topographic detail to show existing and proposed drainage patterns and

existing and proposed permanent storm water control structures. The project site map should identify the following:

- Locations where storm water enters and exits the site. Include both sheet and channel flow for the existing and final grading contours.
- Identify locations subject to high rates of erosion such as steep slopes and unlined channels. Long, steep slopes over 100 feet in length are considered as areas of moderate to high erosion potential.
- Categorize slopes as: low erosion potential (0 to 5 percent slope), moderate erosion potential (5 to 10 percent slope), or high erosion potential (slope greater than 10 percent).
- Use Volume 2, Chapter 2 of the SWMM (Drainage Manual- Hydrology Chapter) to properly size and design BMPs using soil loss equations and runoff calculations.
- Identify wetlands, springs, sinkholes, floodplains, floodways, sensitive areas, or buffers that must not be disturbed, as well as other areas where site improvements will not be constructed. Establish clearing limits around these areas to prevent disturbance by the construction activity.
- Identify the boundaries of tributary areas for each outfall location. Then calculate the approximate area of each tributary area. Define areas where various contractor activities have a likely risk of causing a runoff or pollutant discharge.

With this site map in hand, categories of BMPs can be selected and located. Detailed planning before construction begins and phasing construction activities achieve erosion and pollution prevention most cost-effectively. It is more cost-effective to prevent erosion and pollution than it is to remove sediment and pollutants. This is demonstrated in Figure C-1 by first attempting to eliminate erosion and pollution generation (step 1) prior to reviewing the other alternatives in steps 2 through 4.

Figure C-1
BMP Treatment Options



BMPs that can achieve multiple BMP objectives should be utilized to achieve cost-effective solutions. For instance, it is not always necessary to install extensive sediment trapping controls during initial grading. In fact, sediment trapping should be used only as a short-term measure for active construction areas and replaced by permanent stabilization measures as soon as possible. A permanent detention pond may be built first and used as temporary sediment control by placing a filter on the outlet. After construction is complete and the tributary area is stabilized, the permanent outlet configuration can be reestablished.

The use of source control BMPs to control erosion before it starts is the preferred method of long-term sediment control. However, the best protection on active construction sites is generally obtained through simultaneous application of both source control and sediment containment BMPs. This combination of controls is effective because it prevents most erosion before it starts and has the ability to capture sediments that become suspended before the transporting flows leave the construction site.

BMPs for erosion and sediment control are selected to meet the BMP objectives based on specific site conditions, construction activities, and cost-effectiveness. Since construction site conditions are constantly changing, different BMPs may be needed at different times during construction.

In most cases, permanent BMPs can be implemented most effectively when they can be integrated into other aspects of the project design. This requires that storm water control be considered early in the design process. Storm water detention is required for most types of development and some types of redevelopment within the city of Memphis and Shelby County. Some BMPs can be incorporated into storm water detention facilities with modest design refinements and limited increases in land area and cost. Some areas can be used for more than one purpose, usually in a cost-effective way. Landscaped open space, which is relatively flat, may be combined with storm water quality/quantity facilities. Vegetated swales and buffer areas may be used as roadside corridors or along parking lots.

Review TDEC's general permit for storm water discharges for construction activities to ensure state requirements are met.

#### **Minimize Disturbed Areas**

The first step for selecting BMPs is to compare the project layout and schedule with onsite management measures that, where appropriate, can limit the exposure of the project site to erosion and sedimentation. Scheduling and planning considerations are the least expensive way to

limit the need for erosion and sediment control measures. Consider the following procedures to minimize disturbed areas:

- 1. Do not disturb any portion of the site unless an improvement is to be constructed there. Retain existing vegetation and ground cover where feasible, especially along streams and watercourses and along the downstream perimeter of the site.
- 2. Minimize the size of disturbed areas and time of exposure by careful phasing of construction. Minimize the amount of denuded areas and any new grading activities during the wet months of December through May. Do not clear any portion of the site until active construction begins. Use temporary cover (such as seeding or straw) whenever construction is halted or delayed.
- 3. Phased grading operations should limit the amount of areas exposed to the process of erosion at any one time. Only the areas that are actively involved in cut and fill operations or are otherwise being graded should be exposed. Exposed areas should be stabilized as soon as grading is complete in that area.
- 4. Construct permanent storm water control facilities such as detention basins and perimeter channels early in the project and use these BMPs for sediment trapping, slope stabilization, and runoff velocity reduction throughout the construction period.
- 5. Quickly complete construction on each portion of the site. Install landscaping features and other improvements that permanently stabilize each part of the site immediately after the land has been graded to its final contour.

The purpose of site stabilization BMPs is to prevent erosion by covering disturbed soil. This covering may be vegetative, chemical, or physical. Any exposed soil is subject to erosion — either by rainfall striking the ground, runoff flowing over the soil, wind blowing across the soil, or vehicles driving on the soil. Thus all exposed soils should be stabilized except where active construction is in progress. Construction site locations that are particularly subject to erosion and should be stabilized as soon as possible include:

- Slopes
- Highly erosive soils
- Construction entrances
- Swales/wet-weather conveyances
- Soil stockpiles

#### **Site Perimeter Controls**

The purpose of site perimeter controls is to protect downstream areas from erosion, sediment, flooding problems, and excessive runoff. If construction phasing will allow, consider installing permanent storm water control facilities (detention basins and perimeter channels) early in the project and use these BMPs for sediment trapping, slope stabilization, and runoff velocity reduction throughout the construction period.

- Disturbed areas or slopes that drain toward adjacent properties, storm drain inlets or receiving waters should be protected with continuous berms, silt fences, sandbags, straw bales, etc. to prevent sediment discharge. The contractor should be prepared to stabilize those soils with additional protective measures prior to the onset of rain.
- When grading has been completed, the areas should be protected with vegetative measures such as mulching, seeding, planting, or emulsifiers, or a combination of these methods. The combination of erosion protection measures and sediment control devices should remain in place until the area is permanently stabilized.
- Significant offsite flows (especially concentrated flows) that drain onto disturbed areas or slopes should be controlled through use of continuous berms, earth dikes, drainage swales, check dams, and lined ditches that will allow for controlled passage or containment of flows.
- Concentrated flows that are discharged offsite should be controlled through outlet protection and velocity dissipation devices in order to prevent erosion of downstream areas. See ES-25, Outlet Protection, for various types of velocity dissipation devices.
- Perimeter controls should be placed everywhere runoff enters or leaves the site, before
  clearing and grubbing begin. Both runoff and sediment typically overload perimeter controls,
  so that constant monitoring and maintenance is required. Additional controls within the
  interior of the construction site (such as check dams and sediment traps, etc.), should
  supplement perimeter controls once rough grading is complete.

## **Internal Erosion and Drainage Design**

When perimeter controls and outfall devices have been installed, internal erosion and drainage design can be addressed. Internal design elements are generally more time-intensive. The middle of a project site is where construction phasing and sequencing becomes important. Until the permanent facilities are constructed, temporary storm water facilities will be subjected to erosion from concentrated flows.

- These facilities should be stabilized through temporary check dams, geotextile mats, and under extreme erosive conditions by lining with concrete.
- Long or steep slopes should be terraced at regular intervals. Terraces will slow down the runoff and provide a place for small amounts of sediment to settle out.
- Slope benches may be constructed with either ditches along them or back-sloped at a
  gentle angle toward the hill. These benches and ditches intercept runoff before it can reach
  an erosive velocity and divert it to a stable outlet.
- Creating a rough surface for runoff to cross (such as tall grass) can reduce overland flow velocities.

#### **Inspection and Maintenance**

Inspection and maintenance are the key elements in controlling erosion and sediment. Erosion and sediment control devices are installed as necessary and moved around the project site. Inspection should be performed after each rainfall and at least weekly. Maintenance must be performed immediately whenever deficiencies are noted. Checklists can help to document the inspection and maintenance process. A sample Erosion and Sediment Control Plan Review Checklist and a sample Site Inspection Checklist are included in Appendix E.

Larger projects should generally arrange for a preconstruction assistance meeting in order to coordinate erosion control objectives and methods with the city inspector prior to commencing clearing and grading. The city inspector will visit the project periodically and will also be involved in the final inspection checklists and approval.

Many BMP controls work on the same principle; the velocity of sediment-laden runoff is slowed by temporary barriers or traps, which pond the storm water, allowing the sediments to settle out. Therefore, sediment removal is an important activity in maintaining several BMPs. Excessive sediment should be removed from the storm water both within and along the perimeter of the project site. Appropriate strategies for the inspection and maintenance of erosion and sediment control features include:

1. Verify that sediment-laden storm water is directed to temporary sediment traps or basins. Verify that sediment basins and traps are at low points below disturbed areas.

- 2. Protect all existing or newly installed storm drainage structures from sediment clogging by providing inlet protection for area drains and curb inlets. Storm water inlet protection can utilize sand bags, sediment traps, or other similar devices.
- 3. Excavate permanent storm water detention ponds early in the project, use them as sedimentation ponds during construction, remove accumulated sediment, and landscape the ponds when the upstream drainage area is stabilized.
- 4. Inspect temporary sediment barriers such as silt fences, straw bale barriers, rock filters, and continuous berms after each rainfall. These barriers should only be used in areas where sheet flow runoff occurs. They are ineffective if the runoff is concentrated into rill or gully flow.
- 5. Internal outfalls must also be protected to reduce scour from high velocity flows leaving pipes or other drainage facilities.

### **Factors for Construction Sites**

Certain contractor activities may cause pollution if not properly managed. Not all BMPs will apply to every construction site, however, all of the suggested BMPs should be evaluated. Considerations for selecting BMPs for contractor activities include the following:

- Is it expected to rain? BMPs may be different on rainy days versus dry days, winter versus summer, etc. For instance, a material storage area may be covered with a tarp during the rainy season, but not in the summer. However, it should be noted that plans should be made for some amount of rain even if it is not expected to generate a flooding event.
- How much material is used? Less-intensive BMP implementation may be necessary if a "small" amount of pollutant containing material is used. However, remember that some materials may be more dangerous or have the potential to cause widespread pollution.
- How much water is used? The more water used and wastewater generated, the more likely that pollutants transported by this water will reach the storm water system or be transported offsite. Washing out one concrete truck on a flat area of the site may be sufficient (as long as the concrete is safely removed later), but a pit should be constructed if several trucks will be washed out at the same site.
- What are the site conditions? BMPs selected will differ depending on whether the activity is conducted on a slope or flat ground, near a storm water structure or watercourse, etc.

Anticipating problems and conducting activities away from environmentally sensitive areas will reduce the cost and inconvenience of performing certain BMPs.

• In general, establishing a BMP for each conceivable pollutant discharge may be very costly and significantly disrupt construction. As a rule of thumb, establish controls for common (daily or weekly) activities and be prepared to respond quickly to accidents. This rule of thumb only applies to contractors handling unusual materials that are not usually at the project site. Industries and commercial facilities are expected to have contingency plans and spill measures for every material that is used regularly.

Therefore, keep in mind that the BMPs for contractor activities are suggested practices, which may or may not apply in every case. Construction personnel should be instructed to develop additional or alternative BMPs, which are more cost-effective for a particular project.

The best BMP is a construction workforce aware of the pollution potential of their activities and committed to a clean work site.

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**Appendix D: Spill Response Notification** 



# Memphis-Shelby County Airport Authority COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN

For Contractors Performing
Construction Activities at the
Memphis International Airport
Under Permits TNR10-0000 and TNR15-0091

## **Comprehensive Storm Water Pollution Prevention Plan**

**Appendix A: Figures** 

**Appendix B: Permit and Forms** 

Appendix C: Best Management Practices
Appendix D: Spill Response Notification

**Appendix E: Inspection Form** 

**Prepared By:** 

**MSCAA Manager of Environmental Services** 

August 2023

Addendum 1 - issued 4/11/24

# IMMEDIATE RESPONSE PROCEDURES ON-SCENE PERSONNEL

- 1. Initiate evacuation, if necessary.
- 2. Notify MSCAA General Aviation Manager at (901) 358-0028 and Environmental Manager at (901) 922-8754, and report the following information, if it is known or can reasonably be determined:
  - Name of individual reporting spill
  - Location of spill
  - Number of injured personnel and number of injuries, if applicable
  - Substance spilled
  - Estimated amount spilled
  - Estimated rate at which material is currently spilling
  - Estimated time of spill occurrence
  - Extent of spill travel
  - Necessity of fire department to respond to protect life, property, and environment
  - Any additional pertinent information such as other potential hazards.
- 3. Stop spill flow when possible without undue risk of personal injury.
- 4. Contain the spill using whatever means is readily available.
- 5. Make spill scene OFF LIMITS to unauthorized personnel.
- 6. Restrict all sources of ignition when flammable substances are involved.
- 7. Report to the emergency spill response designee upon his/her arrival to the scene.

### **EMERGENCY NOTIFICATIONS AND RESPONSE RESOURCES**

Table D-1 contains installation and local phone numbers that are to be used to alert personnel of the incident or to request additional assistance. (to be used by Airport General Manager or Environmental Manager only)

Table D-1 Emergency Telephone Numbers				
Prioritized Contact List	Response Role	Contact Timeline	Day Phone	24-Hour Phone
USEPA, Region 4, Emergency Response (24-hour Hotline)	Regulator	As indicated in Table D-2	(404) 562-8700	(404) 562-8700
USEPA, Region 4, Emergency Response (Main Office)	Regulator	As indicated in Table D-2	(404) 562-9900 or (800) 241-1754	(404) 562-9900
U.S. Coast Guard, 8 <sup>th</sup> District Marine Safety Office (for coastal waters)	Regulator	As indicated in Table D-2	(901) 544-3912 x2122	(901) 544-3912 x2122 or (866) 777-2784
Tennessee Department of Environment & Conservation (TDEC) Memphis Office	Regulator	As indicated in Table D-2	(901) 371-3000	(800) 262-3300
TN Emergency Management Agency (TEMA) 24-hr	Regulator	As indicated in Table D-2	(800) 262-3300 or (615) 741-0001	(800) 262-3300
National Response Center www.nrc.uscg.mil	Receiver of all reports of spills to waters of the U.S., or potential to affect waters.	Immediately	(800) 424-8802	(800) 424-8802
Shelby County Storm Water Hotline	Regulator	Immediately	Immediately (901) 545-3870	
Shelby County Fire Department and Local Emergency Planning	Emergency Assistance	Immediately	911	911
Committee (LEPC) within 15 minutes of spill	MFD Hazmat	As needed	(901) 386-1728	(901) 386-1728
Shelby County Fire Department	Emergency Assistance	As needed	(901) 386-1728	(901) 386-1728
United States Environmental Services (USES) — John Barrett	Spill Response Contractor	As needed	(662) 280-3232	(901) 201-9470
B&P Enterprises LLC — Terrell Crowson	Spill Response Contractor	As needed	(662) 781-2780	(901) 574-9238
Hepaco, Inc	Spill Response Contractor	As needed	(800) 888-7689	(800) 888-7689
MLGW Emergency Utility Issues		As needed	(901) 528-4465	(901) 528-4465
Local Health Department	Public Health Concerns	As needed	(901) 576-7600	(901) 576-7600

#### Note:

The NRC will notify the U.S. Coast Guard and USEPA.

## **NOTIFICATION REQUIREMENTS**

Table D-2 provides a cross-reference matrix that identifies specific release scenarios and associated reporting and notification requirements, including respective timeframes.

	Table D-2 Notification Requirements				
Scenario No.	Basis For Reporting	Agencies To Contact	Time Frame For Contact	Information To Be Provided	
1	Discharge of Petroleum Product to the Grass/Soil — A 25-gallon or greater release of petroleum product to grassy or soil areas must be reported.	A	Within 24 hours	<ul> <li>Location , source(s), time, and duration of the release</li> <li>Chemical name or identity and of any substance involved in the release</li> <li>Estimate of the quantity (pounds or gallons) released</li> <li>The medium (land, water, or air) in which the release occurred or exists</li> <li>Extent of the release</li> <li>Any known or anticipated acute or chronic health risks with the release and advice regarding medical attention necessary for exposed individuals</li> <li>Proper precautions to take as a result of the release or discharge, including evacuation and other proposed response actions</li> <li>The name and telephone number of the person(s) to be contacted for further information</li> </ul>	
2	Discharge of Petroleum Product to Surface Water — A discharge of petroleum product that violates 40 CFR 110.6 must be reported. This is basically any amount of petroleum product that reaches surface water (overland or through sewers).	A, B, C, D, E, G	Immediately	Same as Scenario 1 with these additions:  Location of spill and name of receiving water  Shelby County Code Section 30-62 requires a written report within five days to Memphis and Shelby Emergency Management Agency at:  Manager, P.O. Box 111249, Memphis 38111. The following particulars must be included in the report:  A description of the discharge, including an estimate of the volume.  The exact dates, times, and duration of the discharge.  Steps being taken to eliminate and prevent recurrence.  A site drawing showing the location of the spill, direction of flow, and topographical grade of the property, the impacted watercourse(s), and the properties adjacent to the spill site.	

#### Notes:

- A Tennessee Emergency Management Agency (800) 262-3300/Local TDEC Office (901) 368-7939
- B NRC (800) 424-8802
- C USEPA, Region 4 (404) 562-8700 (NRC will call)
- D U.S. Coast Guard, 8<sup>th</sup> District Marine Safety Office (901) 544-3912 x2122 (NRC will call)
- E Memphis-Shelby Emergency Management Agency /city of Memphis Fire Department (901) 458-1515/911
- F City of Memphis's WWTP (901) 353-2392
- G City of Memphis or Shelby County Storm Water Hotline city at (901) 576-6721 / County at (901) 545-3870

	Table D-2				
Scenario	Notification Requirements  Scenario Agencies To Time Frame For				
No.	Basis For Reporting	Contact	Contact	Information To Be Provided	
4	Discharge of Petroleum Product to Surface Water in Excess of 1,000 gal.— If the facility has a spill in 1,000 gal or has two spills that violate 40 CFR 110.6, a report to the USEPA Regional Administer is required (40 CFR 112.4).	A, B, C, E, G  A, C	Immediately  Within 3 days of event that violates 40 CFR 112.4	Same as Scenario 2  Written report that describes:  Name of facility	
5	Spill of Hazardous Substances in Excess of the Reportable Quantity — Table 302.4 (40 CFR 302.4 and Attachment K of this SPR) lists the spill quantity of hazardous substances that triggers reporting under 40 CFR 302. (Use "Final RQ" column) If a hazardous substance does not have a reportable quantity, use 100 pounds.	A, B, C, G E	Immediately Within 2 hours	Facility name and address     Reporter's name and phone number     Type and quantity of material spilled     Time of spill     Is spill continuing?     Location of spill     Current response action	
6	Discharge to Sanitary Sewer — Accidental spill of petroleum product, hazardous waste/material, or any other material which by reason of their nature or quantity are sufficient to cause fire or explosion or be injurious in any other way to the sewerage system or to the operation of the waste reclamation facilities.	A, E, F B, E	Immediately Immediately (depending upon substance and quantity)	<ul> <li>Facility name and address</li> <li>Reporter's name and phone number</li> <li>Type and quantity of material spilled</li> <li>Time of spill</li> <li>Is spill continuing?</li> <li>Location of spill</li> <li>Current response action</li> </ul>	

### Notes:

- Tennessee Emergency Management Agency (800) 262-3300/Local TDEC Office (901) 368-7939 NRC (800) 424-8802

- D
- USEPA, Region 4 (404) 562-8700 (NRC will call)
  U.S. Coast Guard, 8<sup>th</sup> District Marine Safety Office (901) 544-3912 x2122 (NRC will call)
  Memphis-Shelby Emergency Management Agency / city of Memphis Fire Department (901) 458-1515/911 E F
- City of Memphis's WWTP (901) 353-2392
- City of Memphis or Shelby County Storm Water Hotline city at (901) 576-6721/County at (901) 545-3870

**Appendix E: Inspection Form** 



# Memphis-Shelby County Airport Authority COMPREHENSIVE STORM WATER POLLUTION PREVENTION PLAN

For Contractors Performing
Construction Activities at the
Memphis International Airport
Under Permits TNR10-0000 and TNR15-0091

## **Comprehensive Storm Water Pollution Prevention Plan**

**Appendix A: Figures** 

**Appendix B: Permit and Forms** 

Appendix C: Best Management Practices
Appendix D: Spill Response Notification

**Appendix E: Inspection Form** 

**Prepared By:** 

**MSCAA Manager of Environmental Services** 

August 2023

Addendum 1 - issued 4/11/24

# use TDEC's inspection form