STATE OF TENNESSEE
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

June 26, 2023

Mr. Butch Eley
Deputy Governor & Commissioner of Transportation
e-copy: TDOT.COMMISSIONER'S.Office@tn.gov
Tennessee Department of Transportation

Subject: **NPDES Permit No. TNS077585**
Tennessee Department of Transportation (TDOT)
Tennessee (Statewide Permit)

Dear Mr. Eley:

In accordance with the provisions of the Tennessee Water Quality Control Act, Tennessee Code Annotated (T.C.A.), Sections 69-3-101 through 69-3-120, the Division of Water Resources hereby issues the enclosed NPDES Permit. The continuance and/or reissuance of this NPDES Permit is contingent upon your meeting the conditions and requirements as stated therein.

Please be advised that a petition for permit appeal may be filed, pursuant to T.C.A. Section 69-3-105, subsection (i), by the permit applicant or by any aggrieved person who participated in the public comment period or gave testimony at a formal public hearing whose appeal is based upon any of the issues that were provided to the commissioner in writing during the public comment period or in testimony at a formal public hearing on the permit application.

Additionally, for those permits for which the department gives public notice of a draft permit, any permit applicant or aggrieved person may base a permit appeal on any material change to conditions in the final permit from those in the draft, unless the material change has been subject to additional opportunity for public comment.

Any petition for permit appeal under this subsection (i) shall be filed with the Technical Secretary of the Water Quality, Oil and Gas Board within thirty (30) days after public notice of the commissioner's decision to issue or deny the permit. A copy of the filing should also be sent to TDEC's Office of General Counsel.

TDEC has activated a new email address to accept appeals electronically. If you wish to file an appeal, you may do so by emailing the appeal and any attachments to TDEC.Appeals@tn.gov. If you file an appeal electronically, you do not have to send a paper copy. If you have questions about your electronic filing, you can call (615) 532-0131. Electronic filing is encouraged, but not required.

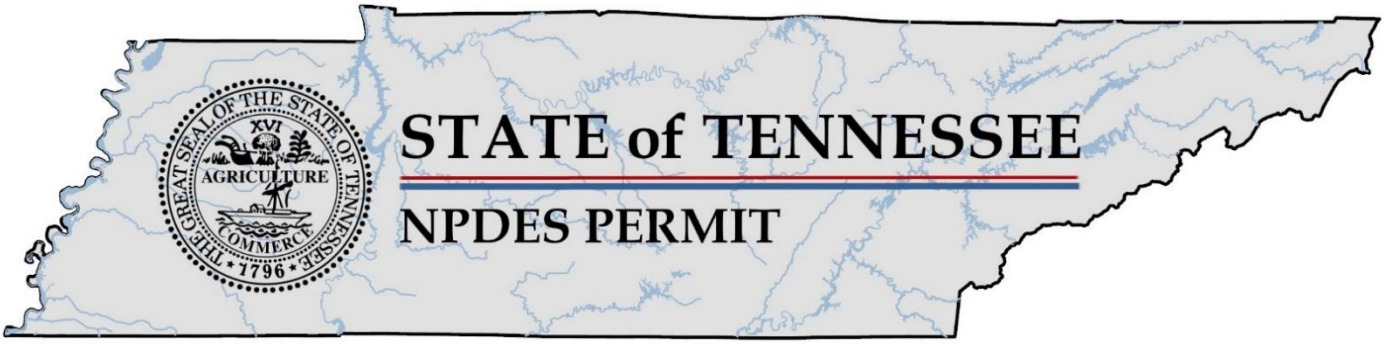
If you have questions, please contact the Statewide Environmental Field Office at 1-888-891-TDEC; or, at this office, please contact Ms. Ariel Wessel-Fuss at (615) 532-0642 or by E-mail at *Ariel.Wessel-Fuss@tn.gov*.

Sincerely,

Vojin Janjić
Manager, Water-Based Systems

Enclosure

cc: Permit File
Ms. Mary Kuo, US EPA Region 4, kuo.mary@epa.gov
Mr. Klint Rommel, TDOT Environmental Compliance Office , Tennessee Department of Transportation (TDOT), klint.rommel@tn.gov
Mr. Jacob Dorman, Contech Engineered Solutions LLC, Jacob.Dorman@ContechES.com
NPDES Permit Section, EPA Region IV, r4npdespermits@epa.gov
Ms. Carma H. Smith, Tennessee Department of Transportation, carma.h.smith@tn.gov



Authorization to Discharge Under the National Pollutant Discharge Elimination System (NPDES) Permit Number TNS077585

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 delegation of authority from 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.)

As an operator of a statewide transportation separate storm sewer system, the **Tennessee Department of Transportation (TDOT)** is authorized to discharge stormwater runoff into waters of the State of Tennessee in accordance with the various eligibility criteria, administrative procedures, program requirements in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on: **August 1, 2023**

This permit shall expire on: **July 31, 2028**

Issuance date: **June 26, 2023**

Vojin Janjic

Digitally signed by Vojin Janjic
DN: cn=Vojin Janjic, o=Tennessee Department of Environment and Conversation, ou=Division of Water Resources, email=Vojin.Janjic@tn.gov, c=US
Date: 2023.06.21 12:49:10 -05'00'

for Jennifer Dodd
Director

Table of Contents

1. AUTHORIZATION AND SCOPE OF THE PERMIT

1.1. AUTHORIZED DISCHARGES

The Tennessee Department of Transportation (TDOT) is authorized to discharge from point sources to waters of the state, in accordance with the following conditions and provisions, stormwater and allowable non-stormwater from all portions of its transportation separate storm sewer system (TS4) (as defined in subpart 1.2) within the State of Tennessee, which includes but is not limited to interstate highways, divided highways, multiple lane roads and primary roads and its owned/operated facilities.

1.2. AREA OF PERMIT COVERAGE

This permit authorizes discharges of stormwater runoff from:

- the state roads, interstate highways, and associated right-of-ways that TDOT either owns or maintains and;
- facilities covered under this permit (see paragraph below) that TDOT owns or, operates throughout Tennessee.

Covered Facilities includes Region Headquarters Facilities, District Headquarters Facilities, County Garages, Truck Weigh Stations, Welcome Centers, Rest Areas, Floating Maintenance Facilities, Floating Salt Storage Facilities, Floating HELP Truck Facilities, and other facilities owned and/or operated by TDOT. (Note: “Floating” facilities are those that are separate from TDOT Region HQ Facilities, District HQ Facilities, or County Garages.)

The Areas listed in this subpart will be collectively referred to as the Transportation Separate Storm Sewer System (TS4).

1.3. ELIGIBILITY

This permit authorizes stormwater discharges from TDOT highways and from TDOT covered facilities, as well as the following non-stormwater sources, provided that TDOT has not determined these sources to be contributors of pollutants to waters:

- Water line flushing;
- Landscape irrigation;
- Diverted stream flows;

- Rising ground waters;
- Uncontaminated ground water infiltration (Infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.);
- Uncontaminated pumped ground water;
- Discharges from potable water sources;
- Foundation drains;
- Air conditioning condensate;
- Irrigation water;
- Springs;
- Water from crawl space pumps,
- Footing drains;
- Individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Sidewalk, driveway, and street wash water (including tunnel cleaning); and
- Discharges or flows from firefighting activities.

For discharges not eligible for coverage under this permit, TDOT must apply for and receive an individual or other applicable general NPDES permit prior to discharging.

1.4. RESPONSIBILITY OF THE PERMITTEE

1.4.1. TDOT Responsibilities

TDOT is responsible for the following:

a. Compliance with permit conditions relating to discharges where they are owner and/or operator;

b. Where permit conditions are established for specific portions of the TS4, the permittee need only comply with the permit conditions relating to those portions of the TS4 for which they are the owner/operator; and

c. Submission of annual reporting requirements as specified in Part 5;

d. Collection of monitoring data as required by Section 2.7, and according to such agreements as may be established between the TDOT and the division; and

e. Ensuring implementation of system-wide stormwater management program elements, including any system-wide public education efforts.

1.5. LIMITATIONS ON COVERAGE

The following discharges are not authorized by this permit and may be required to have additional permit coverage:

1.5.1. Discharges of stormwater from construction projects disturbing one or more acres.

These discharges are to be covered under the General NPDES Permit for Discharges of Stormwater Associated with Construction Activity or other applicable general permits or may require an individual NPDES permit.

Discharges that are mixed with sources of non-stormwater unless such non-stormwater discharges are:

- Authorized under a separate NPDES permit; or
- A non-stormwater discharge as listed in 1.3

1.5.2. Stormwater discharges currently covered under another permit.

1.5.3. Discharges of materials resulting from a spill.

Exception: emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges.

1.5.4. Discharges not protective of aquatic or semi-aquatic threatened and endangered species.

Stormwater 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.

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

Discharges or conducting discharge-related activities that will cause a prohibited "take" of state listed aquatic species[1], unless such take is authorized under the provisions of T.C.A. § 70-8-106(e).

1.5.5. Stormwater Discharges that would cause or contribute to in-stream exceedances of water quality standards including but not limited to:

a. Discharges for which the division requires a different individual permit or alternative general permit.;

b. Discharges of any pollutant into any water for which a Total Maximum Daily Load (**TMDL**) has been approved by EPA pursuant to 40 C.F.R. § 130.7, unless the discharge is consistent with the assumptions and requirements of any available wasteload allocation (WLA). This eligibility condition applies at permit effective date. If a condition changes after permit effective date, permit coverage will continue provided that the permittee complies with the applicable requirements of this permit. If the Director determines that more stringent requirements are necessary to support compliance with any future TMDLs, the Director will impose such requirements through a modification of this permit or by their inclusion in this permit upon reissuance.; and

c. Discharges that do not comply with the division's anti-degradation policy for water quality standards, pursuant to the Rules of the Tennessee Department of Environment and Conservation (TDEC), Chapter 0400-40-3-.06, titled "Antidegradation Statement."

[1] 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.

2. STORMWATER MANAGEMENT PROGRAM

2.1. REQUIREMENT TO REDUCE POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE

a. Discharges under this permit are subject to the condition that TDOT develop, implement and enforce a TS4 Stormwater Management Program (TS4 SWMP). The TS4 SWMP shall minimize the discharge of pollutants to the maximum extent practicable (MEP) and shall not cause or contribute to violations of State water quality criteria of the receiving streams in stormwater runoff from TDOT highways and related facilities. The stormwater management program must contain the following minimum control measures:

(1) Public Education and Outreach on Stormwater Impacts (subpart 2.2.1),
(2) Public Involvement/Participation (subpart 2.2.2),
(3) Illicit Discharge Detection and Elimination (subpart 2.2.3),
(4) Construction Site Stormwater Runoff Control (subpart 2.2.4),
(5) Post-Construction/Permanent Stormwater Management in New Development and Redevelopment (subpart 2.2.5), and
(6) Pollution Prevention/Good Housekeeping for TDOT Covered Facilities (subpart 2.2.6).

b. These permit conditions apply to TDOT throughout the state, except for subpart 2.2.3 Illicit Discharge Detection and Elimination (IDDE), which will apply only within urbanized area as defined by having either an Individual MS4 permit or General MS4 coverage issued by TDEC.

2.2. MINIMUM CONTROL MEASURES

2.2.1. Public Education and Outreach on Stormwater Impacts

TDOT shall continue to implement an education program that includes public education and outreach on transportation stormwater impacts as a component of the stormwater management program. The objective of this program is to reduce or eliminate behaviors and practices that cause or contribute to the impacts of stormwater discharges on water bodies and the steps that the audiences can take to reduce pollutants in stormwater runoff to the maximum extent practicable. This program will be designed to reach three major audiences, (1) the public (2.2.1.1), (2) TDOT contractors (2.2.1.2), and (3) TDOT employees (2.2.1.3). The program shall include the following at a minimum:

2.2.1.1. Public

TDOT must continue to implement, and maintain a public education program to educate the public about the impacts of pollutants in transportation related stormwater discharges on adjacent streams and lakes and the steps that the public can take to reduce pollutants in transportation related stormwater runoff. Where possible, TDOT should participate and coordinate with Tennessee Cities and County governments.

Management Measure	Measurable Goals	Annual Report Requirement
Educate the public through TDOT's website. Enhance, update, and maintain website to inform the public about TDOT's TS4 SWMP and its activities.	Monitor website traffic through website counters.	- Count of website traffic - The difference in the website traffic count from the previous reporting period
Educate the public in accordance with TCA § 67-4-402 and TCA § 57-5-201. (note: TDOT is provided with a revenue source that will continue to be dedicated to the specific purpose of highway litter prevention, roadside dumping abatement, and public education. This will include support for waterway cleanups, support for local recycling programs, and funding for statewide programs, for example: Keep Tennessee Beautiful, Litter Hotline, Adopt-A-Highway, and Litter Grants for all 95 counties. Additionally, TCA § 54-1-401 requires TDOT to establish a system for citizens to report acts of littering from motor vehicles.)	Implement and/or Fund local and statewide education campaigns	Brief description of activity, subject/objective, target audience

2.2.1.2. Contractors

TDOT shall continue to implement and maintain the education and training program for contractors conducting construction, repairs, or maintenance of TDOT highways, rights-of-ways, and other facilities.

Project supervisor(s) for contractors (as defined in §101.03 TERMS of TDOT's Standards of Construction for Road and Bridge Construction) shall successfully

complete TDEC's Fundamentals of Erosion and Sediment Control, or the successor or equivalent course from other sources subject to TDEC approval

Management Measure	Measurable Goals	Annual Report Requirement
Ensure contractors are aware of the requirements for stormwater control measures (SCM) and best management practices (BMPs) and are implementing appropriate SCM or BMP the project implementation. Continue to verify compliance with EPSC measures during the construction phase via QA/QC inspections	- All projects with SCMs & BMPs reviewed during preconstruction or construction phase - Inspect projects that meet QA/QC criteria	Percentage of projects that are inspected that meet QA/QC criteria
Continue the requirement for TDOT contractors to obtain TDEC EPSC Level 1 Certification prior to preconstruction meeting.	Provide evidence of contractor certification process	Include a copy of requirement in the first year annual report, note any changes to the requirement in subsequent annual reports.

2.2.1.3. TDOT Employees

TDOT shall continue to implement and maintain an education and training program for employees that conduct activities that may have impacts on stormwater runoff. The program shall include employees involved in the design of highways (i.e., those that design drainage systems), employees involved in maintenance of highways and right-of–ways, employees involved with the preparation of contracts, selection of contractors, and review of contractor work, and employees working at TDOT garages, regional maintenance facilities, or other appropriate locations.

Management Measure	Measurable Goals	Annual Report Requirement
Continue TDOT Fundamentals of Erosion Prevention and Sediment Control Training Program course tailored to fit TDOT construction project needs (see 2.2.1.4 for specific requirements)	Develop and implement a training schedule for ongoing training.	- Report the total number of training opportunities provided for employees and the total number of employees attending. - provide an electronic spreadsheet with attendance and exam scores
Continue stormwater management-training for Covered Facilities tailored to fit TDOT highway and other maintenance and facilities personnel. Training for Standard Environmental Procedures (SEP) for various maintenance activities. (See 2.2.6.1)	- Maintain list of position titles requiring training - The date that training was conducted	Total number employees that are fully trained to all appropriate SEP

2.2.1.4. TDOT Fundamentals of Erosion Prevention and Sediment Control Training Program

The TDOT Fundamentals of Erosion Prevention and Sediment Control Training Program (Program) is a class which provides information for individuals involved in construction/ land- disturbing activities on TDOT projects. The objective of the class is to build a working knowledge of regulations, erosion, and sedimentation processes, EPSC measures, and practices related to TDOT specific processes and requirements. Topics discussed in the class include:

- CGP and related Stormwater Pollution Prevention Plan (SWPPP) requirements;
- The function, installation, limitations, inspection, and maintenance of EPSC measures; - roles of agencies involved in the permitting and regulatory process;
- Role and Responsibilities of the Inspector;
- Basic information regarding hydrologic and erosion processes; and
- TDOT specific processes and requirements in regards to the EPSC implementation and inspection on projects

The Program can only certify that participants successfully complete the class. TDOT will issue a certificate of completion to attendees that attended the full training and successfully passed the examination. This certificate will include an expiration date. This certification will allow the individual to perform EPSC inspections on TDOT projects only. An employee's certification will become invalid upon their separation of service with the Department.

Each certification will be valid for a period of three (3) years. Prior to expiration of this certification, each individual will be required to successfully complete the Program training class to remain certified to conduct EPSC inspections.

Instructors for the Program will be composed of senior staff from the Environmental Division, Environmental Compliance Office. These instructors will have a strong working knowledge regarding the principles of EPSC, field experience, and an understanding of applicable regulations.

The permittee will either develop and implement the TDOT EPSC Training program or utilize the TDEC Level 1 class.

Management Measure	Measurable Goals	Annual Report Requirement
All instructors will be required to attend one (1) session with the Program Manager regarding class format and rationale regarding the material selected for presentation. All new instructors will be required to participate in the organization and presentation of one (1) class prior to instruction. All TDOT training instructors will be required to maintain their TDEC Level 1 and TDEC Level 2 or CPESC Certifications while participating in this Program.	Maintain a list of instructors with appropriate training	Provide the list of instructor's names and TDEC certification number
TDOT instructors will meet each year to determine annual training needs. This meeting should be conducted in advance of the Annual Report due by this permit.	Schedule and locations of classes.	Provide the schedule and locations of classes.

2.2.2. Public Involvement/Participation

TDOT must continue to implement a program for public involvement and participation as a component of the stormwater management program. The objective is to promote, publicize and facilitate citizen's participation in the development and implementation of the stormwater management program in order to reduce the discharge of pollutants to the maximum extent practicable. This program must include the following at a minimum

Management Measure	Measurable Goals	Annual Report Requirement
Provide access to the public to the SWMP records, including a written description of the stormwater management program, available to the public at reasonable times during regular business hours	- Make SWMP and other documentation available on the TDOT webpage	- Provide the web address for the SWMP
Develop and implement a formal public involvement process including: - documenting and responding to public comments - mechanism to identify major modification to the SWMP that require a formal public notice process (see 2.6.2)	- Prior to the first annual report due date complete the formal public involvement process for the entire SWMP including response to comments. For subsequent years, formal public notice is required only when major changes (see 2.6.2) are made to the SWMP	- For years when the program is required to be formally placed on public notice, a copy of the public notice and response to comments shall be submitted with the annual report - For years when the program is not formally placed on public notice, indicate as such in the annual report - Detail applicable changes as directed in 2.6.2
Encourage and promote citizen reporting of illegal spillage, dumping, or	- Continue to implement a public reporting system e.g. hotline to facilitate and track	- The number of reports received from the public

Management Measure	Measurable Goals	Annual Report Requirement
otherwise disposal of materials onto TDOT highways and right-of-way (see 2.2.3)	public reports of spills, discharges, and dumping to its storm sewer system.	
Engage the public through volunteer opportunities including supporting Adopt-a-Highway, Keep America Beautiful, anti-litter programs and the TN Great American Cleanup programs.	Document the dates of events, number of volunteers, the lane miles cleaned annually or amount of trash removed.	- Number of events - Number of volunteers - Number the lane miles cleaned - Amount of trash removed.

2.2.3. Illicit Discharge Detection and Elimination

TDOT must continue to implement and enforce as allowable by law a program to detect and eliminate illicit discharges into TDOT rights-of-ways and into TDOT storm sewer systems within urbanized areas (UA) as a component of the stormwater management program. Stormwater discharges listed in subpart 1.3, above, are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to waters of the state. The objective is to detect and eliminate illicit discharges to the maximum extent practicable. This program must include the following at a minimum

- Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters that receive discharges from those outfalls;

- To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism[2], non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions

- Continue to implement TDOT IDDE Plan to detect and address non-stormwater discharges, including illegal dumping, to the system; and

- Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

- Address the following categories of non-stormwater discharges or flows (*i.e.,* illicit discharges) only if the permittee identifies them as a significant contributor of pollutants to the TS4: Water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(b)(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water(including tunnel cleaning) (discharges or flows from firefighting activities are excluded from the effective prohibition against non-stormwater and need only be addressed where they are identified as significant sources of pollutants to waters).

Management Measure	Measurable Goals	Annual Report Requirement
Storm sewer map that contains the latitude and longitude of all known outfalls within the UA and the names and location of waters receiving those discharges[3]	Continue to update mapping within the UA.	Provide location for Spatial Rest Service Outfall Map Layer

[3] The TDEC-DWR GIS layer maybe used in lieu of permittee developing their own receiving stream layer. TDEC rest services can be found at https://tdeconline.tn.gov/arcgis/rest/services/DWR_Public/MapServer

Management Measure	Measurable Goals	Annual Report Requirement
Continue to document and implement policies and procedures for the Illicit discharge detection and elimination (IDDE) program for public, TDOT employees and contractors . This includes - Reporting the discharge to the appropriate jurisdiction - Informing public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and how to identify and report these discharges (see 2.2.2) - Intentional/Non-intentional disposal of materials from vehicles	Document and report on the effectiveness of the citizen reporting of illicit discharges (see 2.2.2)	- The number of investigations of illicit discharge reported by the public that have been closed - The number of illicit discharges reported by the public referred to other agencies - The number of investigations of illicit discharge reported by internal personnel - The number of illicit discharges reported by internal personnel referred to other agencies

Management Measure	Measurable Goals	Annual Report Requirement
Continue interagency coordination of hazardous waste or material spills response and cleanup. Work with the TEMA (Tennessee Emergency Management Agency) through a Memorandum of Understanding (MOU), local fire departments and other agencies that respond to accidents and spill incidents on TDOT's roadways regarding potential stream impacts. Continue to coordinate with these agencies to develop a program that minimizes the potential for their response to spills of chemicals or hazardous materials to cause pollutants to enter waters.	- Annually review procedures for spill response and cleanup - Modify procedures as necessary to protect streams from contaminated runoff.	- Report on any modifications made to the MOU that may affect streams.
Notify an adjacent MS4 of any spills that may have an impact on their ability to comply with their municipal stormwater permit	- Maintain a record of notifications made to adjacent MS4	- Report the number of notifications made to adjacent MS4

Management Measure	Measurable Goals	Annual Report Requirement
Report Dry Weather flows from TDOT Construction, Operations and Maintenance that could be a threat to human health or the environment to the local EFO as soon as possible, but no later than 24 hours of becoming aware of the flow Note: This notification requirement is not intended to be an additional requirement for Incidents that are responded to by TEMA and reported under those processes.	- Maintain a record of dry weather flows identified	- Report the percentage of dry weather flows that could be a threat to human health or the environment reported to the EFO within 24 hours of becoming aware of the flow
Intentional/Non-intentional disposal of materials from vehicles.	Continue to recommend actions to reduce litter and illegal dumping along TDOT's ROWs.	- Provide listing of programs addressing litter
	Implement recommended action items.	

2.2.4. Construction Site Stormwater Runoff Control

TDOT must continue to implement and enforce as allowable by law a program to reduce pollutants in any stormwater runoff to the TS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The objective is to reduce pollutants in any stormwater runoff to the TS4 from construction activities to the maximum extent practicable. This program must include the following, at a minimum:

- An ordinance, contract, or other regulatory mechanism[4] to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;

- Requirements for construction site operators to implement appropriate erosion and sediment control best management practices utilizing appropriate TDOT Design Standards and Specifications, TDOT EPSC Manual [5] as well as buffer requirements as required by the construction permit.;

- 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;

- Procedures for receipt and consideration of information submitted by the public;

- Procedures for site inspection and enforcement (see 2.4) of control measures;

- Procedures to notify other parties conducting work on TDOT rights-of-ways, businesses seeking roadway access, or others seeking storm drainage access of the requirements to obtain coverage under the General NPDES Permit for Discharges of Stormwater Associated with Construction activity or other applicable NPDES discharge permit and of the prohibitions regarding discharge of non-stormwater into TDOT's storm sewer system;

- Procedures to notify highway access permit applicants to obtain NPDES or ARAP coverage where required;

- Procedures to detect and remedy where significant amounts of soils are being tracked, washed, or otherwise deposited onto TDOT rights-of-way or highways from construction activity (including disincentives for tracking soils onto the right-of-way);

- Requirement to obtain coverage and comply with the requirements under the Tennessee General Permit No. TNR100000, Stormwater Discharges from Construction Activities (CGP) An individual NDPES construction permit for TDOT sites greater than one acre or less than one acre if that construction activity is part

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[5]TDOT's standard design drawings library can be found online at https://www.tn.gov/content/tn/tdot/roadway-design/standard-drawings-library/standard-roadway-drawings/erosion-prevention-and-sediment-control.html

of a larger common plan of development or sale that would disturb one acre or more;

- Evaluation of compliance requirements for contractors relating to stormwater management, including incentives and disincentives;

- Quality Assurance/Quality Control Teams (QA/QC Teams), which shall operate independently of TDOT's project supervisors. The QA/QC team should consist of a staff position that has expertise in the review of EPSC plans. Minimum qualifications for this position shall include a bachelor's level degree in engineering, soil science, or geology or a related field, and professional experience with prevention of soil erosion and sediment control. These people shall have successfully completed the TDEC EPSC level 1 (or TDOT equivalent) and level 2 course or CPESC. These teams shall inspect all areas on which clearing, grubbing, excavation, grading, cutting or filling has occurred on projects, including the potentially impacted streams, at least once a month until such areas are permanently stabilized;

- TDOT Inspectors shall have successfully completed the EPSC level 1 course or the TDOT Fundamentals of EPSC Training Class;

- TDOT Project Supervisors shall have successfully completed the EPSC level 1 or the TDOT Fundamentals of EPSC Training Class;

- TDOT shall attend all public hearings held by TDEC on permit applications submitted by TDOT under the Act and be available to respond to questions related to the application,

- Contracts for projects in which a general or individual NPDES permit or an ARAP is required

1. Shall mandate that the contractor cease work on part or all of a project when directed to do so by a TDOT project inspector or project supervisor due to identified permit deficiencies.
2. Shall include disincentives for environmental violations.

- Requirement to obtain coverage under an Aquatic Resource Alteration Permit (ARAP) for all impacts to jurisdictional streams and wetlands subject to permitting requirements.

Management Measure	Measurable Goals	Annual Report Requirement
Obtain CGP or individual permit coverage for TDOT sites	- 100% of all sites greater than 1 acre (or less than one acre if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more) will have CGP coverage (note: a site having coverage under an individual construction permit issued by TDEC meets this requirement)	- Percentage of sites requiring CGP coverage that have CGP coverage
Obtain ARAP coverage for TDOT sites	- 100% of all sites that have impacts to jurisdictional streams and wetlands subject to permitting requirements will have ARAP coverage	- Percentage of sites requiring ARAP coverage that have ARAP coverage
Maintain up to date Standard design drawings and specifications for erosion prevention and sediment control BMPs	- Standard design drawings and specifications for erosion prevention and sediment control BMPs.	- Provide access to all EPSC BMP standard design drawings and specifications and the revision dates
TDOT and/or its contractor(s) shall conduct inspections of EPSC measures and potentially impacted streams, at the frequency specified in the Individual or General NPDES Construction Permit until the site is permanently stabilized.	100% of all projects requiring Individual or General NPDES Construction Permit coverage shall be inspected at the frequency specified in the individual construction permit or CGP until final stabilization is reached	Percentage of sites inspected in accordance with the measurable goal
Implement procedures to Notify highway access permit applicants to have appropriate EPSC devices designed according to TDOT Standards according to Tennessee Rule 1680-10-01	- Ensure all application forms for highway access permits includes the notification for appropriate EPSC devices.	- Have the forms changed? (yes/no) Does application form notification for appropriate EPSC devices (yes/no)

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

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

2.2.5.1. Permanent Stormwater Management Program.

(a) The permittee shall develop and implement a permanent stormwater management program to reduce pollutants in stormwater discharges through management practices, control techniques, and systems, design, and engineering practices implemented to the maximum extent practicable (MEP), as set forth herein.

(b) The permanent stormwater management program shall include plans review, site inspections, and a means to ensure that permanent stormwater control measures (SCMs) are adequately operated and maintained.

(c) The permittee must develop and implement, and modify as necessary, an ordinance or other regulatory mechanism[6] to address permanent stormwater management at new development and redevelopment projects.

(d) The permittee must submit an implementation plan for its permanent stormwater management program not later than 90 days after the effective date of the first new or revised permit issued after the effective date of Tennessee Rule 0400-40-05-.15. The implementation plan shall include a brief description of the main components of the permittee's permanent stormwater management program, which should include: codes, ordinance, or other legal authority development and implementation; procedures for plans review and criteria for approval; procedures for conducting and tracking site inspections; and SCM operation and maintenance policies. The implementation plan shall also include a timeline to develop and implement the program. If the permittee has implemented a permanent stormwater management program that complies with all requirements of the new or revised permit, the permittee may submit an

[6] Other legal authority or regulatory mechanism may include: statute, law, rule, ordinance, permit, contract, order, or similar means including but not limited to design guidelines.

implementation plan explaining how its program complies and identifying any new or modified elements of its program. The schedule must indicate completion as soon as feasible but no later than 24 months from the effective date of the first permit issued after the effective date of Tennessee Rule 0400-40-05-.15. Further, if implementation will take longer than 12 months, the plan must include interim milestones. Implementation plans must be submitted to the Division.

2.2.5.2. Permanent Stormwater Standards.

(a) The permanent stormwater management program must require new development and redevelopment projects to be designed to reduce pollutants to the MEP, as set forth herein. Compliance with permanent stormwater standards for new development and redevelopment projects is determined by designing and installing SCMs as established by Tennessee Rule 0400-40-05-.15 and complying with other requirements of Tennessee Rule 0400-40-05-.15. For design purposes, total suspended solids (TSS) may be used as the indicator for the reduction of pollutants.

(b) SCMs must be designed to provide full treatment capacity within 72 hours following the end of the preceding rain event for the life of the new development or redevelopment project. The permittee shall identify a suite of SCMs to be used in various situations. Information relevant to identified SCMs should be made readily available. Application of innovative SCMs is encouraged. If the permittee decides to significantly limit the number of SCM options, it must be documented as part of the stormwater management program how the performance standards of Tennessee Rule 0400-40-05-.15 can be met with the limited set of control measures that are allowed.

(c) For the purposes of this paragraph, the water quality treatment design storm is a 1-year, 24-hour storm event as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland or its digital product equivalent. The water quality treatment volume (WQTV) is a portion of the runoff generated from impervious surfaces at a new development or redevelopment project by the design storm, as set forth below. SCMs must be designed, at a minimum, to achieve an overall treatment efficiency of 80% TSS removal from the WQTV. The quantity of the WQTV depends on the type of treatment provided, as established in the following table:

Water Quality Treatment Volume and the Corresponding SCM

Treatment Type for the 1-year 24-hour design storm		
SCM Treatment Type	WQTV	Notes
infiltration, evaporation, transpiration, and/or reuse	runoff generated from the first 1 inch of the design storm	Examples include, but are not limited to, bioretention, stormwater wetlands, and infiltration systems.
biologically active filtration, with an underdrain	runoff generated from the first 1.25 inches of the design storm	To achieve biologically active filtration, SCMs must provide minimum of 12 inches of internal water storage
sand or gravel filtration, settling ponds, extended detention ponds, and wet ponds	runoff generated from the first 2.5 inches of the design storm or the first 75% of the design storm, whichever is less	Examples include, but are not limited to, sand filters, permeable pavers, and underground gravel detention systems. Ponds must provide forebays comprising a minimum of 10% of the total design volume. Existing regional detention ponds are not subject to the forebay requirement.
hydrodynamic separation, baffle box settling, other flow-through manufactured treatment devices (MTDs), and treatment trains using MTDs	maximum runoff generated from the entire design storm	Flow-through MTDs must provide an overall treatment efficiency of at least 80% TSS reduction. Refer to subparagraph (2)(d) of Tennessee Rule 0400-40-05-.15.
Alternative permanent stormwater standards that provide equal or equivalent reduction of pollutants to the above may be submitted to the Division for approval.		

(d) Treatment Train Calculations

1. Treatment trains using MTDs.

Treatment trains using MTDs must provide an overall treatment efficiency of at least 80% TSS reduction utilizing the following formula:

The calculation:

$R = A + B - (A \times B)/100$

Where:
R = total TSS percent removal from application of both SCMs,

A = the TSS percent removal rate applicable to the first SCM, and
B = the TSS percent removal rate applicable to the second SCM

TSS removal rates for MTDs must be evaluated using industry-wide standard. TSS removal rates for other SCMs must be from published reference literature.

2. Treatment trains not using MTDs.

Treatment trains using infiltration, evaporation, transpiration, reuse, or biologically active filtration followed by sand of gravel filtration, settling ponds, extended detention ponds, or wet ponds may subtract the treated WQTV of the upstream SCMs from the WQTV of the downstream SCMs.

(e) The permittee may also develop a mitigation program and/or system of payment into a public stormwater fund as described in paragraph (3) of Tennessee Rule 0400-40-05-.15.

(f) The permanent stormwater management program may allow for a reduction of the WQTV for a new development or redevelopment project up to 20% for any one of the following conditions, and up to a total maximum of 50% for a combination of the following conditions:

1. Redevelopment projects (including, but not limited to, brownfield redevelopment);

2. Vertical density (floor to area ratio of at least 2, or at least 18 units per acre); and

3. Incentives as identified by the permittee, submitted to the Division and approved by the Division in writing, and documented as part of the stormwater management program.

2.2.5.3. Stormwater Mitigation and Public Stormwater Fund.

(a) A permittee may choose to develop an offsite mitigation program or payment in lieu into a public stormwater fund to offset the portion of the WQTV that cannot be treated on site to the MEP. The program must ensure that off-site stormwater mitigation will be accomplished within the same USGS 12-digit hydrologic unit code watershed as the new development or redevelopment project, if practicable, and will treat a minimum of 1.5 times the portion of the WQTV not treated on site. The permittee may identify priority areas within the watershed in which

stormwater mitigation projects are to be completed. The program must have a mitigation project approval procedure, and all projects must meet all requirements in this permit. Procedures and requirements in the offsite mitigation and payment in lieu programs should be documented as part of the stormwater management program and available for review.

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

2.2.5.4. Water Quality Riparian Buffers.

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

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

(b) Water quality riparian buffers must have the following minimum widths, unless site-specific conditions necessitate alternative widths, as described later in this paragraph:

	Average buffer width (feet)	Minimum buffer width (feet)	Notes
Waters with available parameters for siltation or habitat alteration or unassessed waters	30	15	The criteria 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 the required minimum width at any measured location. If the new development or redevelopment site
Exceptional Tennessee Waters or waters with unavailable parameters for siltation or habitat alteration	60	30	

			encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.

The predominant vegetation within the minimum buffer area should be trees. The remaining riparian buffers may be composed of herbaceous cover or infiltration-based SCMs.

(c) Permittees may establish permissible land uses or activities within the buffer, such as biking and walking trails, infiltration-based SCMs, selective landscaping, habitat improvement, road and utility crossings or other limited uses as determined by the permittee. The permittee must have a process to review proposed activities within buffers to ensure the pollutant removal function of the buffer will be retained. Trails constructed within the buffer should prevent or minimize the generation of pollutants. If trails are constructed from impervious materials, runoff must either be directed to infiltration-based SCMs or the buffer width must be increased by the width of the trail.

(d) Permittees may authorize alternative buffer widths for new development and redevelopment projects where averaged water quality riparian buffers cannot be fully implemented on-site. In order to allow alternative widths, the permittee must develop and apply criteria for determining the circumstances under which required buffer widths cannot be achieved based on the type of project, existing land use, and physical conditions that restrict the use of water quality riparian buffers. Any such procedures and criteria for alternative buffer widths must ensure that implementing full buffer widths would be impracticable and that the maximum practicable buffer widths are required. Procedures and criteria for alternative buffer widths must be submitted to the Division, approved by the Division in writing, and documented as part of the stormwater management program.

(e) Water quality riparian buffer widths are measured from the top of bank also referred to as the “ordinary high-water mark.”

(f) Ordinances and local requirements adopted prior to November 13, 2018, and that mandate a minimum 30-foot water quality riparian buffers for drainage areas less than one square mile, and a minimum 60-foot water quality riparian buffers for drainage areas of greater than one square mile (with provisions for buffer

averaging down to a minimum 30-foot width), are deemed to satisfy the conditions of this paragraph.

2.2.5.5. Codes and Ordinances Review and Update.

(a) Reserved

(b) Current permittees shall continue to implement the existing permanent stormwater management program and update legal instruments according to the compliance schedule in subparagraph (1)(d) of Tennessee Rule 0400-40-05-.15.

2.2.5.6. Development Project Plan Review, Approval, and Enforcement.

The permittee shall develop and implement project plan review, approval, and enforcement procedures applicable, at a minimum, to all new development and redevelopment projects, which shall include:

(a) Procedures for review and approval of development site plans, including inter-departmental consultations and a re-submittal process when modifications to the project require changes to an approved site development design plan;

(b) A plans review process that requires SCMs to be properly designed, installed, and maintained to meet the performance standards established in Tennessee Rule 0400-40-05-.15. The process must also include incentives adopted by the permittee as authorized by paragraph (2) of Tennessee Rule 0400-40-05-.15, along with water quality buffers as required by paragraph (4) of Tennessee Rule 0400-40-05-.15 ; and

(c) A verification process to document that SCMs have been installed per design specifications within 90 days of installation. Verification shall include submission of as-built plans to the permittee, permittee inspection, or inspection by a qualified design professional. The verification process shall include enforcement procedures to bring noncompliant projects into compliance, which shall be detailed in the enforcement response plan. (see 2.4)

2.2.5.7. Maintenance of Permanent Stormwater Control Measure Assets.

(a) Permanent SCMs, including SCMs used at mitigation projects, must be installed, implemented, and maintained to meet the performance standards of

paragraph (2) of Tennessee Rule 0400-40-05-.15, and provide full treatment capacity within 72 hours following the end of the preceding rain event.

(b) The permittee must develop and implement a program to require implementation of appropriate SCM maintenance procedures to sustain pollutant reduction-efficiency for the life of the new development or redevelopment project. All procedures, reports, and documented as part of the stormwater management program. The program must include at a minimum:

1. The development and documentation of maintenance and inspection procedures and frequencies for approved SCMs which shall require all SCMs to be inspected at least once every five years by the permittee, a licensed professional engineer, a licensed landscape architect, or other qualified professional familiar with applicable SCM design and maintenance requirements or submit an alternative schedule to the Division for approval;

2. The development and documentation of the procedure the permittee will use to verify that SCMs are being inspected and maintained including any written reports from the responsible party;

3. A clear, documented, legally binding agreement assigning SCM maintenance responsibility to the owner/operator, a third party, or the permittee as appropriate. For SCMs designed to manage stormwater from multiple properties, appropriate deed restrictions shall be recorded; and

4. An allowance or agreement for permittee personnel to access the SCMs for inspections and provide for enforcement action for failure to maintain SCMs according to agreement.

2.2.5.8. Inventory and Tracking of Permanent Stormwater Control Measure Assets.

(a) Existing permittees must continue to implement and maintain a system to inventory and track the status of all public and private SCMs installed on new development and redevelopment projects. New permittees must implement the system within 24 months of permit effective date.

(b) The inventory and tracking system must be a searchable database, either paper or electronic, that retrieves SCM information by location or other similar identification. The system must be made available to the Division or to members of the public upon request. Other than the basic information of location and

project identification, the system should include information and records the permittee will use to demonstrate that SCMs are properly maintained, including but not limited to:

1. A brief description of the type of SCM and basic design characteristics;

2. The responsible party contact information;

3. Inspection schedules (both permittee and responsible party);

4. A brief description of or reference to maintenance procedures and frequency;

5. Photographs of the installed SCMs; and

6. Maintenance and inspection records.

2.2.5.9. Management Measures, Goals and Annual Report Requirements

Management Measure	Measurable Goals	Annual Report Requirement[7]
Stormwater Mitigation and Public Stormwater Fund as outlined in 2.2.5.3 (note this management measure is only required if the permittee has developed such a program or fund)	100% of all mitigation projects must be completed	- Details of Stormwater Mitigation and TDOT Stormwater Fund - # of uncompleted mitigation projects at the end of the previous reporting period - # of mitigation projects completed during the reporting period -# of uncompleted Projects at the end of the current reporting period - # of uncompleted projects at the end of the reporting period that began more than 24 months prior to the end of the reporting period
	100% of all mitigation projects funded by the Stormwater Mitigation and TDOT Stormwater Fund	- $ in TDOT Stormwater Fund

[7] Annual reporting identified in this section will begin with the first annual report due after completion of the implementation plan in 2.2.5.2 but no later than 24 months from the effective date of the permit.

Management Measure	Measurable Goals	Annual Report Requirement[7]
Develop and implement a set of requirements to establish, protect, and maintain permanent water quality riparian buffers	-100% of projects must have the buffer as required by the CGP, ARAP and TS4 permit	This measurable goal reporting is met by the reporting requirement in section 2.2.4 (ARAP, CGP or individual permit coverage for TDOT sites)
Develop, implement, and enforce policies and procedures for the submittal and review of plans for projects as required by 2.2.5.6	Establish policies and procedures for review of all plans and review 100% of all projects accordingly	- Total number of projects reviewed in accordance with established policies and procedures - % of projects reviewed in accordance with the established policy and procedure
Review and Update legal instruments in accordance with 2.2.5.5	Update legal instruments upon completion of the compliance schedule in 2.2.5.1	Confirm legal instruments are updated appropriately .
Develop, implement, and enforce policies and procedures for SCM Installation verification as required by 2.2.5.6	Verify installation of SCMs per design specifications in accordance with approved plan within 90 days Verify100% of all installations within 90 days	- Total number of projects verified - Percentage of projects verified within the established timeframe
Develop and implement enforcement procedures to bring non-compliant projects into compliance as required by 2.2.5.6	Establish escalating enforcement actions in the Enforcement Response Plan (ERP) (see 2.4) Implement the ERP at 100% of all non-compliant projects	- Number of Projects granted Concurrence for submittal of NOT in accordance with the established procedures

Management Measure	Measurable Goals	Annual Report Requirement[7]
Develop and implement maintenance and inspection procedures and frequencies for approved structural SCMs (Existing Installations) as required by 2.2.5.7	- All structural SCMs must be inspected once every 5 years Or - All structural SCMs must be inspected in accordance with the alternative schedule approved by the Division	- Total number of structural SCM inspected - Percentage of structural SCM inspected within the established timeframe
Continue to Implement and maintain a system to inventory and track the status of all structural SCMs as required by 2.2.5.8	The system must be made available to the Division or members of the public upon request.	Total number of requests made
	100% of all structural SCMs must be included in the database/tracking mechanism with complete information as described in subpart 2.2.5.8.b.	- % of structural SCMs in the database - % of structural SCMs with incomplete information

2.2.6. Pollution Prevention/Good Housekeeping for TDOT Covered Facilities

TDOT must continue to implement an operation and maintenance program for pollution prevention/good housekeeping for TDOT covered facilities as a component of the stormwater management program. This minimum control measure is designated to address TDOT covered facilities across Tennessee. All operations at these facilities with the potential for causing pollutants to enter stormwater runoff are to be addressed, including, but not limited to, anti-icing, deicing and other chemical/oil storage, equipment maintenance and repair, equipment washing, material storage (e.g., soils, sand, aggregate, asphalt, construction debris, clearing and grubbing debris), waste disposal practices, and use of floor drains. The objective is to prevent or reduce pollutant runoff from TDOT operations to the maximum extent practicable. This program must include the following at a minimum:

- Continue to implement the policy that requires all TDOT vehicles and equipment to be either washed off-site at a commercial facility, or on a covered, dedicated wash pad that collects all wastewater and transfers it to a sanitary

sewer system or a wastewater collection system. TDOT will implement this policy to assure that no wastewater from the washing of vehicles and equipment at TDOT facilities enters stormwater runoff or stormwater runoff control systems.

- Continue to inspect all buildings where equipment maintenance is performed in accordance with the facility SWPPP. Continue to ensure floor drains at covered facilities are connected to the appropriate treatment.

- Submit No exposure certifications electronically via MyTDEC Forms at https://forms.tdec.tn.gov/

- Continue to implement policy or procedures to inspect and inventory all TDOT covered facilities (as defined in section 1.2) to determine whether activities and materials at these facilities may be contributing pollutants to stormwater runoff. TDOT shall continue to prepare and maintain a stormwater pollution prevention plan (SWPPP) for each TDOT owned, or operated, facility which does not receive approval of the No Exposure Certification. Such SWPPPs shall be prepared in accordance with good engineering practices and meet the content requirements set forth in Attachment a.g.A and reviewed annually. General SWPPPs are permissible.

Management Measure	Measurable Goals	Annual Report Requirement
Vehicle and Equipment Washing	No wastewater from the washing of vehicles and equipment at TDOT facilities enters stormwater runoff or stormwater runoff control systems.	- Provide a list of facilities with vehicle washing activities - Number of instances of wastewater from the washing of vehicles and equipment at TDOT facilities that discharge to receiving waters.
TDOT covered facilities SWPPP	100% all facilities subject to SWPPP shall have an current SWPPP	- Provide a list of facilities and the latest revision/review date of the SWPPP

and No Exposure Certification	100% of all of facilities that are eligible for exclusion from stormwater regulations shall have a certification of no exposure forms submitted electronically through the online reporting portal https://forms.tdec.tn.gov/ (Existing facilities shall have the form submitted prior to the first annual report)	- Provide a list of all facilities with No exposure certification and the date the certification was acknowledged by the division

2.2.6.1. Standard Environmental Procedures (SEPs)

TDOT shall continue to implement written Standard Environmental Procedures addressing the prevention of and response to spills in areas where potential spills, which could contribute pollutants to stormwater discharges, may occur. TDOT shall also ensure that TDOT personnel have appropriate resources available (i.e., equipment, materials, and/or contractors), and are trained in their use, to effectively respond to and promptly clean up any such spills that might occur. Descriptions of these procedures, resources, and training programs shall be incorporated in each facility's SWPPP.

TDOT shall continue to review, at least annually, and revise as necessary, the standard environmental procedures (SEP) for its Region, District, and County maintenance facilities to assure that they do not conflict with SWPPP provisions and that they address environmental concerns. Procedures to be addressed include washing, fueling, fluid changing, painting, and proper handling, storage, recycling, disposal and accountability of fuels, lubricants, chemicals, hazardous materials, deicing materials, and wastes.

Management Measure	Measurable Goals	Annual Report Requirement
Continue to implement Standard Environmental Procedures (SEPs) (see 2.2.1.3)	Annually review and update 100% of the SEPs for TDOT facilities to address *stormwater* pollution prevention	Provide a list of SEPs and the date of review/revision

2.3. VIOLATIONS OF WATER QUALITY STANDARDS

This TS4 SWMP shall reduce the discharge of pollutants to the Maximum Extent Practicable (MEP) and shall not cause or contribute to violations of State water quality criteria of the receiving streams. A violation of state water quality criteria is considered a potential threat to human health or the environment and shall be reported in accordance with section 3.12.1a of the permit.

Management Measure	Measurable Goals	Annual Report Requirement
Report all violations of water quality standards to TDEC in accordance with 3.12.1a	100% of all violations of water quality standards are reported within 24 hours	Percentage of violations of water quality standards reported within 24 hours
	For 100% of all violations of water quality standards, a follow up report is submitted within 5 days	Percentage of violations of water quality standards that have had a follow up report submitted within 5 days

2.4. COMPLIANCE RESPONSE PLAN

Maintain and implement, the compliance response plan (CRP) as defined below. The plan must set out the permittee's potential responses to violations and address repeat violations through progressive enforcement as needed to achieve compliance. The plan must include the following at a minimum:

- Mechanisms to receive reports of possible illicit discharges (including dumping, or deposition of stormwater contamination) from both internal or external sources;
- Mechanisms to evaluate illicit discharges for prioritization
- Notification to TDEC of any non-compliance that could be a threat to human health or the environment in accordance with subpart 3.12.1a;
- Maintain a tracking system; and
- Process for referring matters to the appropriate agency for enforcement.

The permittee must have the legal ability to employ progressive enforcement actions such as those below (or their functional equivalent) and to escalate enforcement responses where necessary to address persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm. Where TDOT lacks direct legal authority to prohibit illicit discharges, require compliance, receive, and collect information, inspect, respond to violations, levy monetary

penalties or impose civil/ criminal penalties, TDOT shall establish agreements or procedures with other agencies, to the extent allowable by state law.

a. Verbal Warnings –At a minimum, verbal warnings should be as specific as possible to the nature of the violation and be documented.

b. Written Notices – Written notices stipulate the nature of the violation and the required corrective action, with deadlines for taking such action.

c. Citations with Administrative Penalties – These actions indicate when the permittee will assess monetary penalties, which may include civil and administrative penalties.

d. Stop Work Orders – These actions have the authority to require activities at a facility to be halted, except for those activities directed at cleaning up, abating discharge, and installing appropriate control measures.

e. Withholding of Plan Approvals or Other Authorizations – Where a facility is in non-compliance, the ERP may address how the permittee's approval process affecting the facility's ability to discharge to the TS4 can be used to abate the violation.

f. Additional Measures – The permittee may also use other escalated measures provided under local legal authorities. The permittee may perform work necessary to improve erosion control measures and collect the funds from the responsible party in an appropriate manner, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials.

2.5. LEGAL AUTHORITY

To the extent allowed by law, each permittee shall ensure legal authority to control discharges to and from those portions of the TS4 over which it has jurisdiction. This legal authority may be a combination of statute, law, rule, ordinance, permit, contract, order, or interjurisdictional agreements between permittees with adequate existing legal authority to accomplish items 2.5.1-2.5.6 below:

2.5.1. Illicit Discharges

Prohibit non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures (see 2.4) and actions;

2.5.2. Spills, Dumping or Disposal of Materials

Prohibit through statute, law, rule, ordinance, permit, contract, order, or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than stormwater;

2.5.3. Interagency/Interjurisdictional Agreements

Control through interagency agreements among co-applicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;

2.5.4. Duty to Comply

Require compliance with conditions in statute, law, rule, ordinance, permit, contract, order, or similar means; and

2.5.5. Inspection and Monitoring

Carry out all inspection, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the transportation separate storm sewer.

2.5.6. Permanent Stormwater Management

Implement the requirements established by Section 2.2.5.

Management Measure	Measurable Goals	Annual Report Requirement
The permittee has the legal authority to adequately implement and enforce the Stormwater Management Program	The legal authority described in 2.5.1 - 2.5.6 is identified	Provide the description of the legal authority for each of the required elements described in 2.5.1 - 2.5.6 (Note 1: documents may be referenced in whole or in part Note 2: the reporting for 2.5.6 will begin in the first annual report after completion of the implementation plan described in 2.2.5)

2.6. STORMWATER MANAGEMENT PROGRAM REVIEW AND MODIFICATION

2.6.1. Stormwater Management Program Evaluation

TDOT shall conduct an annual evaluation of the current TS4 SWMP to evaluate compliance with the terms and conditions of the permit, including the effectiveness of the components of its stormwater management program, and

the status of achieving the measurable requirements in the permit. The results shall be reported in the Annual Report.

The SWMP evaluation for each TS4 SWMP element shall include the following:

a. Objective of each element;
b. General discussion of evaluation results of the element. Explanation will include reason for deficiencies (e.g.: activities described in the program that have not been fully implemented or completed). Results of activities shall be summarized and discussed (e.g.: maintenance caused by inspection, pollutants detected by monitoring, investigations as a result of dry and wet weather screening, education activities participation);
c. Status of TS4 SWMP element with compliance, implementation, and augmentation schedules in the permit;
d. Assessment of controls; including assessment of accuracy in recording and following up on investigations, in recording results of follow-up;
e. TS4 SWMP Element strengths and weaknesses;
f. Corrective actions for deficiencies or weaknesses; and
g. Discussion of revisions.

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Management Measure	Measurable Goals	Annual Report Requirement
SWMP Evaluation Report	Conduct an annual evaluation of the current TS4 SWMP and include in the annual report	- Include SWMP Evaluation report as described above in the annual report

2.6.2. Program Modification

TDOT may modify the SWMP during the life of the permit in accordance with the following:

2.6.2.1. Minor Modifications

Minor Modification are required to be reported in accordance with 2.2.2. These changes **do not require** a formal public notice.

a. Modifications that add, but neither subtract nor replace, components, controls, or requirements to the approved TS4 SWMP may be made by the permittee at any time. A description of the modification shall be included in the subsequent Annual Report.

b. Correct typographical errors

c. Increase in Monitoring

d. Remove an outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

e. Modifications that replace an ineffective or infeasible BMP, which is specifically identified in the TS4 SWMP along with an alternate BMP, may be made by the permittee at any time. A description of the replacement BMP shall be included in the subsequent Annual Report along with the following information:
   1. An analysis of why the former BMP was ineffective or infeasible;
   2. Expectations on the effectiveness of the replacement BMP; and
   3. An analysis, if applicable, of why the replacement BMP will ensure the optimization of equipment use.

h. Addition of Facilities covered under this permit.

2.6.2.2. Major Modifications

Major Modification are required to be reported in accordance with 2.2.2. These changes **do require** a formal public notice. TDEC-DWR shall be notified at water.permits@tn.gov 30 days prior to the public of the proposed modifications.

a. Modifications that subtract components, controls, or requirements of the TS4 SWMP may not be made by the permittee unless it can be clearly demonstrated that with the elimination of this component, the TS4 SWMP will continue to achieve a reduction in pollutants to the MEP and shall not cause or contribute to violations of State water quality standards in the receiving stream. In the case where this type of modification is appropriate, the permittee may make the required modification and shall include in the subsequent Annual Report a description of the component which has been eliminated along with the following information:
   1. An analysis of why the component was ineffective or infeasible; and

2. A detailed explanation of why, with the elimination of this component, the TS4 SWMP will continue to achieve a reduction in pollutants to the MEP and shall not cause or contribute to violations of State water quality standards in the receiving stream.

Management Measure	Measurable Goals	Annual Report Requirement
Identify Modifications as Minor or Major in accordance with the permit and report as required.	Report all Minor and Major Modifications to SWMP as required	- Include a description of the modification(s) made under 2.6.2.1a - Include a description of the modification(s) made under 2.6.2.1e - Include a description of the modification(s) made under 2.6.2.1h - Include a description of the modification(s) made under 2.6.2.2a

2.6.3. Transfer of Ownership, Operational Authority, or Responsibility for Stormwater Management Program Implementation

The permittee shall implement the TS4 SWMP on all new areas added to their portion of the municipal separate storm sewer system (or for which they become responsible for implementation of stormwater quality controls) as expeditiously as practicable. Implementation of the program in any new area shall consider the plans in the TS4 SWMP of the previous TS4 ownership.

2.7. FIELD MONITORING

TDOT shall continue to develop and implement a Stormwater Field Monitoring Program (SFMP). The objective of this program is to reduce pollutants in stormwater runoff to the maximum extent practicable. This program will be designed around two major areas, (1) Covered Facilities (2.7.1), (2) Effluent Characterization and BMP or SCM Efficiencies (2.7.1). The program shall include the following at a minimum:

2.7.1. Stormwater Monitoring - Covered Facilities

TDOT is required to conduct analytical monitoring per 2.7.1.1 and visual examinations per 2.7.1.2 at TDOT Owned/Operated Facilities.

2.7.1.1. Analytical Monitoring

- Define parameters and define the benchmark concentrations to be utilized. Note: exceedances of benchmark values are not considered an effluent limit violation.

Parameter	Benchmark
pH	6-9 s.u. (TWQC)
Chemical Oxygen Demand	120 mg/l (TMSP)
Total Suspended Solids	150 mg/l(TMSP)
Oil & Grease	15 mg/l(TMSP)
Chloride	1200 mg/l
e. Coli at Regional Facilities only	941 #/100ml (TWQC)

- TDOT performs stormwater sampling and analysis annually at a minimum of 10% of Covered Facilities that do not receive the No Exposure Certification.
- TDOT will perform follow-up stormwater sampling and analysis within one year at any Covered Facilities where previous analysis exceeded benchmark concentration(s).

2.7.1.2. Visual Examination

TDOT shall perform and document quarterly visual examinations of stormwater quality at outfalls located at all Covered Facilities that does not receive approval of the No Exposure Certification. Such visual examinations shall be performed in accordance with the requirements set forth below. The examination(s) must be made at least once in each quarter during facility operation in the daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

A. Site Inspections

Operators of active facilities are required to conduct quarterly visual inspections of all SCMs. Temporarily and permanently inactive operations are required to perform annual inspections. The inspections shall include: 1) an assessment of the integrity of stormwater discharge diversions, conveyance systems, sediment

control and collection systems, and containment structures; 2) visual inspections of vegetative SCMs, serrated slopes, and benched slopes to determine if soil erosion has occurred; and 3) visual inspections of material handling and storage areas and other potential sources of pollution for evidence of actual or potential pollutant discharges of contaminated stormwater.

B. Procedures

Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.01 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.01 inch rainfall) storm event. Where practicable, the same individual will carry out the collection and examination of discharges for the life of the permit.

C. Reports

Visual examination reports must be maintained onsite in the pollution prevention plan or with other compliance records. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.

D. Outfalls

When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfalls provided that the permittee includes in the stormwater pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

E. Adverse Climate Conditions

When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic conditions, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examinations. Adverse weather conditions, which may prohibit the collection of samples, include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricanes, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.

Management Measure	Measurable Goals	Annual Report Requirement
Conduct stormwater sampling and analysis annually at a limited number of Covered Facilities which do not receive approval of the No Exposure Certification.)	10% of all of Covered Facilities which do not receive approval of the No Exposure Certification	Identify all facilities subject to analytical sampling and note date of sampling event and any follow up sampling events.
		% of facilities sampled in the reporting period (do not include follow up sampling events for benchmark exceedances.)
		- Summary of the data from any monitoring completed[8] -Discussion of any results or conclusions derived from the monitoring completed

[8] Laboratory reports do not need to be submitted, a narrative summary or table of facilities, parameters and results will suffice.

For all Covered Facilities, which do not receive approval of the No Exposure Certification either - Quarterly visual examinations of stormwater quality at outfalls or - Annual examinations for unmanned or permanently inactive sites	100% of all of Covered Facilities which do not receive approval of the No Exposure Certification	Identify all facilities and date of quarterly or annual visual site inspections
- outfall visual screening schedule for UAs and monitoring protocols for illicit discharge detection see 2.2.3	Conduct visual screening of illicit discharges on # of known outfalls in the UA	- Report the number of outfalls screened - Report the % of outfalls screened to the goal - Report the number of illicit discharges found during screening and the steps taken to eliminate the illicit discharge

2.7.1. Stormwater Monitoring - Effluent Characterization and BMP/SCM Effectiveness

Develop, implement, and conduct effluent characterization and BMP/SCM Effectiveness monitoring in the Stormwater Field Monitoring Program. The intent of this section of the SWFP is to measure stormwater runoff quality at a stormwater outfall before and after BMP/SCM implementation and determine effectiveness. This monitoring will be conducted on at least one of type BMPs across the state. This program shall include the following:

- A description of the BMP/SCM evaluated, (BMP/SCMs selected may be either construction or permanent stormwater measures)
- A description of the site including the drainage area, portion impervious, portion pervious, type surface cover, and slopes, (sites chosen shall be representative of the geographic regions of Tennessee),
- List of pollutants for which analysis is to be made,
- Sampling and Analysis must be conducted for a period of at least 12 months and representative of the seasonal variation
- Description of equipment and methods used for sampling and analysis.

Management Measure	Measurable Goals	Annual Report Requirement
effluent characterization and BMP/SCM Effectiveness monitoring	Complete BMP/SCM monitoring plan prior to the first annual report and provide updates on the implementation of the study prior to submitting the final report. The final report shall include comparing the before and after analytical data and evaluating the effectiveness of the BMPs and the feasibility of implementation of this BMP at applicable highway sites	- Submit a copy of the BMP/SCM monitoring plan in the first annual report. - A update shall be included in the annual report in years 2-4 of the permit term - Final report shall be submitted in the 5th year annual report

2.8. MONITORING PROCEDURES

2.8.1. Representative Sampling

Samples and measurements taken in compliance with the monitoring requirements specified herein shall be representative of the volume and nature of the monitored discharge and shall be taken at the nearest accessible point after treatment and prior to mixing with uncontaminated stormwater runoff or the receiving stream. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed and calibrated by a qualified source at least once every 12 months[9], and maintained to ensure that the accuracy of the measurements is consistent with accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of plus or minus 10% from the true discharge rates throughout the range of expected discharge volumes.

[9] The Division expects for permittees to meet EPA's guidance on proper operation and maintenance of flow measurement devices, as stated in the NPDES Compliance Inspection Manual.

2.8.2. Test Procedures

a) Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304 (h) of the Clean Water Act (the "Act"), as amended, under which such procedures may be required.

b) Unless otherwise noted in the permit, all pollutant parameters shall be determined using sufficiently sensitive methods in Title 40 CFR § 136, as amended, and promulgated pursuant to Section 304 (h) of the Act. The chosen methods must be sufficiently sensitive as required in state rule 0400-40-03-.05(8).

c) If the ML for all methods available in accordance with 40 CFR § 136 are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest ML shall be used.

d) Where the analytical results are below the method detection limit (MDL), the permittee shall report the actual laboratory MDL and ML values.

e) When there is no analytical method that has been approved under 40 CFR §136 or required under 40 CFR chapter I, subchapter N or O, and a specific method is not otherwise required by the Director, the permittee may use any suitable method but shall provide a description of the method. When selecting a suitable method, factors such as a method's precision, accuracy, or resolution must be considered when assessing the performance of the method.

2.8.3. Recording of Results

For each measurement, visual observation, or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

a) The date, exact place, and time of sampling or measurements;

b) The individual(s) who performed the sampling or measurements;

c) The date analyses were performed;

d) The individual(s) who performed the analyses;

e) The laboratory where the analyses were performed;

f) The analytical techniques or methods used; and

g) The results of such analyses.

3. STANDARD PERMIT REQUIREMENTS

3.1. DUTY TO COMPLY

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

3.2. DUTY TO REAPPLY

The permittee is not authorized to discharge after the expiration date of this permit. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information and forms as are required to the Division Director no later than 180 days prior to the expiration date. Such forms shall be properly signed and certified.

3.3. PROPER OPERATION AND MAINTENANCE

The permittee shall, at all times, properly operate and maintain all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory and process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. Backup continuous pH and flow monitoring equipment are not required.

3.4. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

3.5. RIGHT OF ENTRY

The permittee shall allow the Director, the Regional Administrator of the U.S. Environmental Protection Agency, or their authorized representatives, upon the presentation of credentials, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by the Director.

3.6. MONITORING, RECORDS AND REPORTING.

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all records, reports and documents required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

1. Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The laboratory where the analyses were performed;
(vi) The analytical techniques or methods used; and
(vii) The results of such analyses.

2. Monitoring results shall be conducted according to test procedures approved under 40 CFR part 136.

3. Regular reporting (at a frequency of not less than once per year) to assure that compliance is being achieved will normally be required of the discharger in any permit as indicated below:

(i) Monitoring results shall be reported on forms provided or specified by the Director. Monitoring may also be reported via electronic reporting methods established by the Director.
(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or other reporting form specified by the Director.
(iii) Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in the permit.

3.7. PROPERTY RIGHTS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

3.8. SEVERABILITY

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

3.9. OTHER INFORMATION

If the permittee becomes aware of failure to submit any relevant facts in a permit application, or of submission of incorrect information in a permit application or in any report to the Director, then the permittee shall promptly submit such facts or information.

3.10. SIGNATORY REQUIREMENT

All reports or information submitted to the Director shall be signed and certified by

a. A principal executive officer (i.e., the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency); or
b. Ranking elected official., or

c. by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person identified 3.10 (a or b) (above)

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity or an individual or position having overall responsibility for environmental matters; and

3. The written authorization is submitted to the Director.

3.11. CHANGES AFFECTING THE PERMIT

3.11.1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as defined in Rule 0400-40-05-.02;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit nor to notification requirements under 40 CFR § 122.42(a)(1); or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices.

3.11.2. Permit Modification, Revocation, or Termination

a. This permit may be modified, revoked, and reissued, or terminated for cause as described in 40 CFR § 122.62 and § 122.64, Federal Register, Volume 49, No. 188 (Wednesday, September 26, 1984), as amended. Causes for such permit action include but are not limited to the following:

i. Violation of any terms or conditions of the permit;

ii. Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; and
iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

b. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating this permit, or to determine compliance with this permit.

c. If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established for any toxic pollutant under Section 307(a) of the Federal Water Pollution Control Act, as amended, the Director shall modify or revoke and reissue the permit to conform to the prohibition or to the effluent standard, providing that the effluent standard is more stringent than the limitation in the permit for the toxic pollutant. The permittee shall comply with these effluent standards or prohibitions within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified or revoked and reissued to incorporate the requirement.

d. The filing of a request by the permittee for a modification, revocation, reissuance, termination, or notification of planned changes or anticipated noncompliance does not halt any permit condition.

3.11.3. Change of Ownership

Except as provided in Tennessee Rule Chapter 0400-40-05-.06(5)(a) or (b), this permit may be transferred to another party (provided there are neither modifications to the facility or its operations, nor any other changes which might affect permit limits and conditions contained in the permit) by the permittee if:

a. The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;

b. The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and liability between them; and

c. The permittee shall provide the following information to the Director in their formal notice of intent to transfer ownership:

i. The permit number of the subject permit;
ii. The effective date of the proposed transfer;
iii. The name, address, and contact information of the transferor;
iv. The name, address, and contact information of the transferee;
v. The names of the responsible parties for both the transferor and transferee;
vi. A statement that the transferee assumes responsibility for the subject permit;
vii. A statement that the transferor relinquishes responsibility for the subject permit;
viii. The signatures of the responsible parties for both the transferor and transferee pursuant to the signatory requirements of subparagraph (i) of Rule 0400-40-05-.07(2); and
ix. A statement regarding any proposed modifications to the facility, its operations, or any other changes, which might affect the permit, limits and conditions contained in the permit.

3.11.4. Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice, the original address of the permittee will be assumed to be correct.

3.12. NONCOMPLIANCE

3.12.1. Reporting of Noncompliance

a. 24-hour Reporting:

In the case of any noncompliance which could cause a threat to public drinking supplies or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate EFO within 24 hours from the time the permittee becomes aware of the circumstances. The EFO should be contacted for names and phone numbers of the environmental response team.

A written submission must be provided within five days of the time the permittee becomes aware of the circumstances unless the Director on a case-by-case basis waives this requirement. The permittee shall provide the Director with the following information:

i. A description of the discharge and cause of noncompliance;

ii. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and

iii. The steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

b. Scheduled Reporting:

For instances of noncompliance which do not cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the permittee shall report the noncompliance on the next annual report. The report shall contain all information concerning the steps taken, or planned, to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

Management Measure	Measurable Goals	Annual Report Requirement
Report all instances of Non compliances that do not cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment	100% of all instances of Non compliances that are not reported under 3.12.1a	Provide a brief narrative description of the non-compliance including location.

3.12.2. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. It shall not be a defense for the 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.

3.12.3. Bypass

a. "*Bypass*" means the intentional diversion of waste streams from any portion of a treatment facility. "*Severe property damage*" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a

bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypasses are prohibited unless all the following conditions are met:

   i. The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
   ii. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
   iii. For anticipated bypass, the permittee submits prior notice, if possible at least ten days before the date of the bypass, or for unanticipated bypass, the permittee submits notice of an unanticipated bypass within 24 hours from the time that the permittee becomes aware of the bypass.

c. Bypasses that do not cause effluent limitations to be exceeded may be allowed only if the bypass is necessary for essential maintenance to assure efficient operation and are not subject to the reporting requirements of part b) iii. above.

3.13. ADDITIONAL MONITORING BY PERMITTEE

If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR § 136, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the monthly operating report or other reporting form specified by the Commissioner. Such increased frequency shall also be indicated.

3.14. FALSIFYING RESULTS AND/OR REPORTS

Knowingly making any false statement on any report required by this permit or falsifying any result may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Water Pollution Control Act, as amended, and in § 69-3-115 of the Tennessee Water Quality Control Act.

3.15. LIABILITIES

3.15.1. Civil and Criminal Liability

Except as provided in permit conditions for "*Bypass*" (**Section 2.3.4**), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee 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 of wastewater to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the permittee to conduct its wastewater treatment and/or discharge activities in a manner such that public or private nuisances or health hazards will not be created.

3.15.2. 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 state law or the Federal Water Pollution Control Act, as amended.

3.16. REOPENER CLAUSE

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 307(a)(2), and 405(d)(2)(D) of the Clean Water Act, as amended, if the effluent standard, limitation, or sludge disposal requirement so issued or approved:

a. Contains different conditions or is otherwise more stringent than any condition in the permit; or

b. Controls any pollutant or disposal method not addressed in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

4. SCHEDULE OF COMPLIANCE

Full compliance and operational levels shall be attained from the effective date of this permit with the exception of the Post-Construction/ Permanent Stormwater Requirements found in 2.2.5 which provides specific compliance timeframe.

5. ANNUAL REPORT

5.1. ANNUAL REPORTING PERIOD, DUE DATE AND SIGNATORY REQUIREMENT

a. The Annual Report shall cover the period beginning on July 1st and ending on June 30th.

b. The Annual Report shall be due on 180 days after the end of the reporting period.

c. The permittee shall sign and certify the Annual Report in accordance with subpart 3.10.

d. The annual report shall be submitted to water.permits@tn.gov until such time as the annual report form for TDOT has been made available electronically through MyTDEC Forms. Upon being made available electronically, submittal through MyTDEC Forms will be required per section 6.

5.2. ANNUAL REPORT REQUIREMENTS

a. All requirements that are indicated to be reported in the annual report including:
- information noted in the "**Annual Report Requirement"** column of the tables in Part 2 of the permit and
- information noted in narrative format

b. List and discuss any changes that the permittee(s) is expected to make to the stormwater management program for the year following the report year.

c. The annual report must also include:
- The status of compliance with permit terms and conditions;
- Summary of results of information collected and analyzed, including monitoring data summary, if any, during the reporting period;
- A summary of the stormwater activities the permittee proposes to undertake to comply with the permit during the next reporting cycle;
- Any changes made during the reporting period to the permittee's stormwater management program;
- Notice that the permittee is relying on another governmental entity to satisfy some of the permit obligations (if applicable); and
- Any other data specifically requested by the division to substantiate statements and conclusions reached in the Annual Reports.

6. ELECTRONIC REPORTING

This permit requires the submission of forms developed by the Director in order for a permittee to comply with certain requirements, including, but not limited to, making reports, submitting monitoring results, and applying for permits. The Director may make these forms available electronically and, if submitted electronically, then that electronic submission shall comply with the requirements of Chapter 0400-01-40.

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 DWRWater.Compliance@tn.gov, in compliance with the Federal NPDES Electronic Reporting Rule.

If an episodic electronic reporting waiver is granted, reports with wet-ink original signatures shall be mailed 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. APPLICATION

The application required by 3.2 shall include the following:

7.1. EPA APPLICATION FORM 1

EPA Application Form 1 (https://www.epa.gov/npdes/npdes-application-forms) which contains:

a. The activities conducted by the applicant which require it to obtain an NPDES permit.

b. Name, mailing address, and location of the facility for which the application is submitted.
c. Up to four SIC and up to four NAICS codes that best reflect the principal products or services provided by the facility.
d. The operator's name, address, telephone number, electronic mail address, ownership status, and status as Federal, State, private, public, or other entity.
e. Whether the facility is located on Indian lands.
f. A listing of all permits or construction approvals received or applied for under any of the following programs:
    1. Hazardous Waste Management program under RCRA.
    2. UIC program under SDWA.
    3. NPDES program under CWA.
    4. Prevention of Significant Deterioration (PSD) program under the Clean Air Act.
    5. Nonattainment program under the Clean Air Act.
    6. National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.
    7. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.
    8. Dredge or fill permits under section 404 of CWA.
    9. Other relevant environmental permits, including State permits.
g. A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area.
h. A brief description of the nature of the business.
i. An indication of whether the facility uses cooling water and the source of the cooling water.
j. An indication of whether the facility is requesting any of the variances at **40 CFR 122.21(m)**, if known at the time of application.

7.2. PROGRAM SPECIFIC APPLICATION REQUIREMENTS

a. The best management practices (BMPs) that the small TS4 operator or another entity proposes to implement for each of the stormwater minimum control measures described in Section 2.2;
b. The proposed measurable goals for each of the BMPs including, as appropriate, the months and years in which the small TS4 operator proposes

to undertake required actions, including interim milestones and the frequency of the action;

c. The person or persons responsible for implementing or coordinating the stormwater management program;
d. An estimate of square mileage served by the TS4;
e. Proposed Field Monitoring Program (see Section 2.7);
f. List of facilities, owners, and operators
g. A storm sewer map showing the location of all known urban outfalls and the names and location of all waters of the State that receive discharges from those outfalls; satisfies the map requirement in 2.2.3.

7.3. SIGNATORY

7.3.1. EPA Form 1

Section 11 of EPA Form 1 (7.1) must be certified and signed in accordance with report must be signed and certified by a ranking elected official or responsible corporate officer as defined in Tennessee Rules, Chapter **0400-40-05-.07(2)(i)**

7.3.2. Program Specific Application Requirements

The Program Specific Application Requirements documentation (7.2) must be certified and signed in accordance with report must be signed and certified by a ranking elected official or responsible corporate officer as defined in Tennessee Rules, Chapter 0400-40-05-.07(2)(i) and must include the following certification statement

> *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

7.4. APPLICATION SUBMITTAL

7.4.1. EPA Form 1 and Program Specific Application Requirements (except Maps)

With the exception of the maps required in 7.1g and 7.2g, the application shall be submitted electronically via email to Water.Permits@tn.gov until such time as the annual report form for TDOT has been made available electronically through

MyTDEC Forms. Upon being made available electronically, submittal through MyTDEC Forms will be required per section 6.

7.4.2. TOPO Map & Storm Sewer Map

The maps required by 7.1g and 7.2g shall be submitted electronically preferably via a spatial REST service. If critical infrastructure as identified under T.C.A. 10-7-504(a)(21)(A)(i) is included as part of the storm sewer system, those elements shall be submitted separately with the need for confidentiality clearly noted.

8. PERMIT MODIFICATION

8.1. MODIFICATION OF THE PERMIT

The permit may be reopened and modified during the life of the permit to:
a. Address impacts on receiving water quality caused, or contributed to, by discharges from the TS4;
b. Address changes in State or Federal statutory or regulatory requirements;
c. Include the addition of a new permittee who is the owner or operator of a portion of the Transportation Separate Storm Sewer System; or
d. Include other modifications deemed necessary by the Director to comply with the goals and requirements of the Clean Water Act. All modifications to the permit will be made in accordance with 40 CFR 122.62, 122.63, and 124.5 and applicable State regulations.

8.2. TERMINATION OF COVERAGE FOR A SINGLE PERMITEE

Permit coverage may be terminated, in accordance with the provisions of 40 CFR 122.64 and 124.5, for a single permittee without terminating coverage for other permittees.

8.3. MODIFICATION OF THE TS4 STORMWATER MANAGEMENT PROGRAM (TS4 SWMP)

Only those portions of the TS4 Stormwater Management Program specifically required as permit conditions shall be subject to the modification requirements of 40 CFR 124.5. Replacement of an ineffective or infeasible BMP implementing a required component of the TS4 Stormwater Management Program with an alternate BMP expected to achieve the goals of the ineffective or infeasible BMP shall be considered minor modifications to the TS4 Stormwater Management Program and not modifications to the permit. (See also Section 2.6)

8.4. CHANGES IN MODIFIED OUTFALLS

This permit is issued on a system-wide basis in accordance with CWA §402(p)(3)(B)(i) and authorizes discharges from all portions of the transportation separate storm sewer system. Since all outfalls are authorized, changes in monitoring outfalls, if any, shall be considered minor modifications to the monitoring program and not modifications to the permit.

9. DEFINITIONS AND ACRONYMS

9.1. 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 https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html. 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.

BMP	**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 raw material 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	**Borrow Pit** is an excavation from which erodible material (typically soil) 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
bypass	A ***bypass*** is defined as the intentional diversion of waste streams from any portion of a treatment facility.
Calendar day	A ***calendar day*** is defined as the 24-hour period from midnight to midnight or any other 24-hour period that reasonably approximates the midnight to midnight time period.
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 soils 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.
Composite sample	A ***composite sample*** means a combination of not less than eight influent or effluent portions (aliquots), collected over a 24-hour period. Under certain circumstances a lesser time period may be allowed, but in no case less than eight hours. A sufficient volume of sample to perform all required analyses plus any additional amount for quality control must be obtained. For automatic samplers that use a peristaltic pump, a minimum 100 ml aliquot must be obtained.
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.

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.
CWA	**CWA** means the Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.)
director	**Director** means the director, or authorized representative, of the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation.
degradation	**Degradation** 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	**De Minimis** is degradation of a small magnitude, as provided in this paragraph: (a) Discharges and withdrawals: 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. 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. 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	**Discharge** or **discharge of a pollutant** 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	**Division** 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 0400-40-03-.06(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.
grab sample	A ***grab sample*** is a single instream, influent or effluent sample collected at a particular time.
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: 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 Level1 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.
National Pollutant	***National Pollutant Discharge Elimination System*** or "NPDES" means the national program for issuing, modifying,

Discharge Elimination System	revoking, and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the federal CWA. The term includes an "approved program."
new or increased discharge	***New or increased discharge*** is a new discharge of pollutants to waters of the state or an increase in the authorized loading of a pollutant above either (1) numeric effluent limitations established in a National Pollutant Discharge Elimination System permit for that discharge, or (2) if no such limitations exist, the actual discharges of that pollutant.
new source	***New source*** means any building, structure, facility, area, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced after the publication of state or federal regulations prescribing a standard of performance.
one-week period (or *calendar-week*)	means the period from Sunday through Saturday. For weekly average reporting purposes, a calendar week that contains a change of month shall be considered part of the latter month.
operator	**Operator** for the purpose of this permit and in the context of stormwater 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**Error! Reference source not f ound.** of TNR100000).
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.
quarter	A ***quarter*** is defined as any one of the following three-month periods: January 1 through March 31, April 1 through June 30, July 1 through September 30, and/or October 1 through December 31.
rainfall event	A **rainfall event** means 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. For purposes of Rule 0400-40-05-.14, "rainfall event" also includes, a 10-year, 24-hour rainfall event, 25-year, 24-hour rainfall event, and 100-year, 24-hour rainfall event are mean precipitation events with a probable recurrence interval of once in 10 years, or 25 years, or 100 years, respectively, as defined by Precipitation-Frequency Atlas of the United States. Atlas 14. Volume 2. Version 3.0. U.S. Department of Commerce. National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Springs, Maryland, or its digital product equivalent.
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	**Sediment** 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	**Sedimentation** means the action or process of forming or depositing sediment.
sewage	***Sewage*** means water-carried waste or discharges from human beings or animals, from residences, public or private buildings, or industrial establishments, or boats, together with such other wastes and ground, surface, storm, or other water as may be present.
severe property damage,	***Severe property damage,*** when used to consider the allowance of a bypass, means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Small Municipal Separate Storm Sewer System	***Small municipal Separate Storm Sewer System*** means all separate storm sewers that are: (i) Owned or operated by the United States, 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. (ii) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to 40 C.F.R. Part 122.26 (iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
soil	**Soil** or **Topsoil** 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	**Stormwater** means rainfall runoff, snow melt runoff, and surface runoff and drainage.
Stormwater control measure (SCM)	**Stormwater control measure or SCM** means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.
stream	A **Stream** 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	**Take** 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 A list 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-load--tmdl--program.html
Transportation Separate Storm	***Transportation Separate Storm Sewer System TS4*** is defined in Part 1 of this permit.

Sewer System (TS4)	
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	**Turbidity** 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.
Urbanized Area (UA)	**Urbanize Areas** represent densely developed territory, and encompass residential, commercial, and other non-residential urban land uses that meet the minimum population density requirements as determined by the 2010 Decennial Census by the Bureau of the Census.
waste site	**Waste site** 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 (https://tdeconline.tn.gov/dwr/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of

	waters with unavailable parameters, can be found at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html.
week	A **one-week period** is a synonym of a **calendar-week**; typically, a period from Sunday through Saturday.
wet weather conveyance	**Wet weather conveyances** are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following: a) The conveyance carries flow only in direct response to precipitation runoff in its immediate locality. b) The conveyance's channels are at all times above the ground water table. c) The flow carried by the conveyance is not suitable for drinking water supplies. d) Hydrological and biological analyses indicate that, due to naturally occurring ephemeral or low flow under normal weather conditions, there is not sufficient water 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 0400-40-3-.04(3)).

9.2. ACRONYMS AND ABBREVIATIONS

1Q10	1-day minimum, 10-year recurrence interval
30Q5	30-day minimum, 5-year recurrence interval
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
D.O.	dissolved oxygen
E. coli	*Escherichia coli*
EPA	Environmental Protection Agency
EFO	Environmental Field Office
EPSC	Erosion Prevention and Sediment Control
MS4	Municipal Separate Storm Sewer System

NPDES	National Pollutant Discharge Elimination System
ONRW	Outstanding National Resource Waters
SCM	Stormwater Control Measure
SWPPP	Stormwater Pollution Prevention Plan
TCA	Tennessee code annotated
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
TS4	transportation separate storm sewer system
TVA	Tennessee Valley Authority
TWQCA	Tennessee Water Quality Control Act
UIC	Underground Injection Control
USGS	United States Geological Survey

9.3. RESOURCES, HYPERLINKS, AND WEB PAGES

Electronic Code of Federal Regulations (eCFR), Title 40 (40 CFR § 1 through § 1099)
https://www.ecfr.gov/cgi-bin/text-idx?SID=75202eb5d09974cab585afeea981220b&mc=true&tpl=/ecfrbrowse/Title40/40chaperl.tpl

Electronic Reporting (NetDMR) Waiver Request
https://www.tn.gov/content/dam/tn/environment/water/documents/wr_ereporting_waiver.pdf

NetDMR Login
https://cdxnodengn.epa.gov/net-netdmr/

NetDMR, MyTDEC Forms, & Electronic Reporting Information
https://www.tn.gov/environment/program-areas/wr-water-resources/netdmr-and-electronic-reporting.html

NPDES Compliance Inspection Manual (EPA)
https://www.epa.gov/sites/production/files/2017-01/documents/npdesinspect.pdf

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
https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html

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

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

USGS StreamStats
https://www.usgs.gov/mission-areas/water-resources/science/streamstats-streamflow-statistics-and-spatial-analysis-tools?qt-science_center_objects=0#qt-science_center_objects

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

ATTACHMENT A

STORMWATER POLLUTION PREVENTION PLAN REQUIREMENTS

A. General Contents of Plan

Each Stormwater Pollution Control Plan (SWPPP) shall include, at a minimum, the following items:

1.1. Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a Stormwater Pollution Prevention Team that are responsible for developing the stormwater pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's stormwater pollution prevention plan.

1.2. Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to stormwater discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all industrial activities and significant materials, which may potentially be significant pollutant sources. Each plan shall specifically identify the physical features of the facility that may contribute to stormwater runoff. Each plan shall include at a minimum:

a. *Drainage* -- A site map indicating the outfall locations and types of discharges contained in the drainage areas of the outfalls, an outline of the portions of the drainage area of each stormwater outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in stormwater runoff, surface water bodies, locations where significant materials are exposed to precipitation, and locations where major spills or leaks identified under item 5 below have occurred.

For each area of the facility that generates stormwater discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in stormwater discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharge; the likelihood of contact with stormwater; and history of significant leaks or spills of toxic or hazardous pollutants. In addition, flows with a

significant potential for causing erosion shall be identified such as heavy equipment use areas, drainage from roofs, parking lots, etc.

b. *Inventory of Exposed Materials* -- An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to stormwater between the time of 3 years prior to the effective date of this permit and the present; the method(s) and location(s) of onsite storage or disposal; the materials management practices employed to minimize contact of materials with stormwater runoff between the time of 3 years prior to the effective date of this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in stormwater runoff; and a description of any treatment the stormwater receives.

c. *Spills and Leaks* -- A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit.

d. *Sampling Data* -- A summary of existing discharge sampling data describing pollutants in stormwater discharges from the facility, including a summary of sampling data collected during the term of this permit.

e. *Risk Identification and Summary of Potential Pollutant Sources* -- A narrative description of the potential pollutant sources from the following activities: loading and unloading operations, chemicals, and raw materials; outdoor storage activities for raw materials; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical, or chemical oxygen demand, chromium, total suspended solids, oil, and grease, etc.) of concern shall be identified.

1.3. Measures and Controls. Each facility covered by this permit shall develop a description of stormwater management controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description

of stormwater management controls shall address the following minimum components, including a schedule for implementing such controls:

1.3.1. *Good Housekeeping* -- Good housekeeping requires the maintenance of areas which may contribute pollutants to stormwater discharges in a clean, orderly manner.

1.3.2. *Preventive Maintenance* -- Preventive maintenance measures shall include timely inspection and maintenance of stormwater management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.

1.3.3. *Spill Prevention and Response Procedures* -- Areas where potential spills which could contribute pollutants to stormwater discharges may occur, and their accompanying drainage points shall be identified clearly in the stormwater pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a cleanup should be available to personnel.

1.3.4. *Inspections* -- Qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

At a minimum, vehicles, storage tanks, chemical or deicing material storage containers, piping, pumps, oil/water separators, and any equipment located at the facility will be inspected once per quarter for malfunctions, fluid leaks, or improper operation. Completed forms documenting these inspections will be maintained as attachments to the SWPPP.

1.3.5. *Employee Training* -- Employee training programs shall inform personnel responsible for implementing activities identified in the stormwater pollution prevention plan or otherwise responsible for stormwater management at all levels of responsibility of the components and goals of the stormwater pollution prevention plan. Training should address topics such as

spill response (including reporting), good housekeeping, and material management practices. The pollution prevention plan shall identify periodic dates for such training. At a minimum, the training for TDOT employees shall be conducted annually.

1.3.6. *Recordkeeping and Internal Reporting Procedures* -- A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of stormwater discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.

g. *Non-Stormwater Discharges*

i. Certification -- The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-stormwater discharges. The certification shall include the identification of potential significant sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with paragraph 4.11 of this permit. Such certification may not be feasible if the facility operating the stormwater discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit, which receives the discharge. In such cases, the source identification section of the stormwater pollution prevention plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-stormwater at the site. A discharger that is unable to provide the certification required by this paragraph must notify the Division of Water Pollution Control in accordance with paragraph “Failure to Certify” (item iii below).

ii. Combined Discharges -- Sources of non-stormwater that are combined with stormwater discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Any non-stormwater discharges that are not permitted under an individual NPDES permit should be brought to the attention of the Division’s local Environmental Field Office.

iii. Failure to Certify -- Any facility that is unable to provide the certification required (testing for non-stormwater discharges), must notify the Division of Water Pollution Control by not later than 180 days after to the effective date of this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-stormwater discharges; the results of such test or other relevant observations; potential sources on non-stormwater discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-stormwater discharges to waters of the State, which are not authorized by an NPDES permit are unlawful and must be terminated.

h. *Sediment and Erosion Control* -- The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall identify structural, vegetative, and/or stabilization measures to be used to limit erosion. These shall include but not be limited to grass swales, filter strips, treatment works, or other equivalent measures.

i. *Management of Runoff* -- The plan shall contain a narrative consideration of the appropriateness of traditional stormwater management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. The plan shall provide that measures that the permittee determines to be reasonable and appropriate shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to stormwater discharges associated with industrial activities shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected stormwater (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

1.4. Comprehensive Site Compliance Evaluation. Qualified personnel shall conduct site compliance evaluations at least once a year. Such evaluations shall include:

1.4.1. *Visual Inspections* -- Visual inspection of areas contributing to a stormwater discharge for evidence of, or the potential for, pollutants entering the drainage system. Inspection shall address areas associated with the storage of raw metals, storage of spent solvents and chemicals, drainage from roof, unloading and loading areas, equipment storage areas, recycling areas,

and retention ponds (sludge). Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural stormwater management measures, such as detention basins and channels, gutters or drains to direct discharge flow, oil/water separators in storm drains, containment structures, concrete pads, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment and containment drums, shall be made to determine if the equipment is functioning properly and that drums are not in a corrosive or deteriorating state.

1.4.2. *Revisions to Plan* -- Based on the results of the evaluation, the descriptions of potential pollutant sources identified in the plan in accordance with paragraph A.2 above and pollution prevention measures and controls identified in the plan in accordance with paragraph A.3 above shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

c. *Report of Evaluation* -- A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the stormwater pollution prevention plan, and actions taken in accordance with paragraph A.4.b above shall be made and retained as a part of the stormwater pollution prevention plan for at least 3 years from the date of the inspection. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the stormwater pollution prevention plan and this permit. The report shall be signed in accordance with Paragraph 4.11 of this permit.

d. *Schedule Overlap* -- Where compliance evaluation schedules overlap with inspections required under paragraph A.3.d above, the compliance evaluation may be conducted in place of one such inspection.

B. Specific Plan Content Requirements

As applicable, based on the activities performed at the facility and the features and condition of the site, the SWPPP must also meet the following requirements:

1. Construction Compliance Schedule -- In cases where construction of a preventive or control measure is necessary, the SWPPP shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 2 years following the date the SWPPP is signed. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate non-structural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

2. Incorporation of SPCC Plan Requirements -- At those TDOT facilities subject to the requirement under 40 CFR Part 112 to have an oil Spill Prevention, Control and Countermeasures (SPCC) Plan, the SWPPP will incorporate – either by reference or by integrating the two plans into a single plan – the SPCC Plan requirements.

3. Consideration of Other Wastewater Discharge Authorizations

   a. *Other NPDES Permits* – If a TDOT facility has received a NPDES permit for discharge of sanitary or industrial wastewater or vehicle and equipment washwater, then a copy of that permit must be attached to or referenced in the plan. If a TDOT facility has applied for such a permit but the permit has not yet been issued, then a copy of the pending application must be attached to or referenced in the plan.

   b. *Discharges to Sanitary Sewers* – For TDOT facilities that discharge vehicle and equipment washwaters or other industrial process wastewaters to the sanitary sewer system, the operator of the sanitary system and associated treatment plant must be notified. In such cases, a copy of the notification letter must be attached to the plan.

   c. *Other Permit Conditions* – In all cases identified in paragraphs B.3.a and B.3.b above, any permit conditions or pretreatment requirements must be considered in the plan.

   d. *Other Management of Washwaters* – If vehicle and equipment washwaters are handled in a manner other than discharge to waters of the state via another NPDES permit or to a sanitary sewer (e.g., hauled offsite), then the disposal method must be described and all pertinent documentation (e.g., frequency, volume, destination, etc.) must be attached to the plan.

4. Vehicle and Equipment Storage Areas -- The storage of vehicles (including aircraft) and equipment awaiting maintenance with actual or potential fluid leaks must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the stormwater runoff from

these areas. The facility shall consider the use of drip pans under vehicles and equipment, indoor storage of the vehicles and equipment, installation of berming and diking of this area, use of absorbents, roofing or covering storage areas, cleaning pavement surface to remove oil and grease, or other equivalent methods.

5. Fueling Areas -- The plan must describe measures that prevent or minimize contamination of the stormwater runoff from fueling areas. The facility shall consider covering the fueling area, using spill and overflow protection and cleanup equipment, minimizing runon/runoff of stormwater to the fueling area, using dry cleanup methods, collecting the stormwater runoff, and providing treatment or recycling, or other equivalent measures.

6. Material Storage Areas -- Storage units of all liquid materials associated with vehicle (including aircraft) maintenance and equipment cleaning (e.g., used oil, used oil filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids) must be maintained in good condition, so as to prevent contamination of stormwater, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The plan must describe measures that prevent or minimize contamination of the stormwater runoff from such storage areas. The facility shall consider indoor storage of the materials, installation of berming and diking of the area, minimizing runon/runoff of stormwater to the areas, using dry cleanup methods, collecting the stormwater runoff, and providing treatment, or other equivalent methods.

7. Vehicle and Equipment Cleaning Areas -- The plan must describe measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle (including aircraft) and equipment cleaning. The facility shall consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all washwaters drain to the intended collection system (i.e., not the stormwater drainage system unless NPDES permitted), collecting the stormwater runoff from the cleaning area and providing treatment or recycling, or other equivalent measures. The discharge of vehicle and equipment wash waters, including tank cleaning operations, are not authorized by this permit, and must be covered under a separate NPDES permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

8. Vehicle and Equipment Maintenance Areas -- The plan must describe measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle (including aircraft) and equipment maintenance. The facility shall consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting wet clean up practices where the practices would result in the discharge of pollutants to stormwater drainage systems, using

dry cleanup methods, collecting the stormwater runoff from the maintenance area and providing treatment or recycling, minimizing runon/runoff of stormwater areas or other equivalent measures.

9. Management of Salt and Brine – The plan must specifically identify the tanks, bins, and areas used for the storage and handling of salt and brine (including calcium chloride) and salt/brine handling equipment. Measures that minimize contamination of stormwater runoff from all such areas must be included and described. All salt storage piles must be placed on impervious surfaces (e.g., asphalt or concrete surfaces in good condition) and must be covered to prevent contact by precipitation (e.g., roofed bins). Consideration should be given to providing secondary containment for brine (including calcium chloride) mixing and storage tanks that are located such that a tank failure could result in brine draining into a stream or beyond the site boundaries.

10. High Traffic Volume Areas – At interstate Welcome Centers, Rest Areas, truck Weigh Stations, and other facilities, which similarly receive high volumes of vehicular traffic, the plan must specifically address the control and management of stormwater from the paved vehicle roadways and parking areas. To the extent feasible, such runoff should be controlled and directed to a minimum number of discharge points. Consideration should be given to the installation and maintenance of control devices (e.g., screens, oil-water separators) to remove litter, oil, and grease from stormwater prior to discharge. Consideration should also be given to designing and sizing such devices so as to provide for the capture of likely fuel spills and leaks.

C. Maintaining and Amending the Plan

Each SWPPP will be maintained and amended as follows:

1. The current SWPPP shall be maintained on-site, including unstaffed facilities, at all times. The current SWPPP shall also be maintained at the TDOT Region or District facility within the geographic jurisdiction.

2. Each SWPPP shall be reviewed and updated at a minimum of annually.

3. TDOT shall amend a SWPPP:

   a. Whenever there is a change in design, construction, operation, or maintenance, that has a significant effect on the potential for the discharge of pollutants to the waters of the State;

b. If the SWPPP proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the plan or other sources identified subsequent to preparation of the plan;

c. If the SWPPP proves to be ineffective in otherwise achieving the general objectives of controlling pollutants in stormwater discharges associated with facility operations; or

d. Upon being notified by the Division of Water Pollution Control of a deficiency in the SWPPP. Such notification shall identify those provisions of this permit that are not being met by the plan and identify which provisions of the plan require modification in order to meet the permit requirements. Within 60 days of receipt of such notification, or as otherwise provided by the Division of Water Pollution Control, TDOT shall make the required changes to the plan and shall submit to the Division a written certification that the requested changes have been made.

ADDENDUM TO RATIONALE

Tennessee Department of Transportation (TDOT)
Statewide TS4
NPDES Permit No. TNS077585
Date: 9/7/22
Permit Writer: Ariel Wessel-Fuss

Both the Tennessee Department of Transportation and Contech Engineered Solutions submitted comments on the draft permit during the public comment period. The response to these comments are summarized below.

Comment 1:
Numerous comments were made requesting the terms *Best Management Practices* or *BMPs* be changed to *Stormwater Control Measures* or *SCM*s.

Response 1:
With the adoption of rules on permanent stormwater management the term *Stormwater Control Measures* or *SCM*s was defined in Rule 0400-40-05-.02(84)

"Stormwater control measure" or "SCM" means permanent practices and measures designed to reduce the discharge of pollutants from new development projects or redevelopment projects.

An SCM is a type of BMP. The permit has been reviewed and the term was clarified where appropriate.

Comment 2:
Page 21: In 2.2.5.2.c The process and/or standards for determining equivalency with water quality rules should be publicly established as part of this permit.

Response 2:
Per the advice of the Department's Office of General Council, an additional public notice is not required.

Comment 3:
Various "reference source not found" errors were noted.

Response 3:
Cross referencing errors were corrected.

Comment 4:
age 53: "Bypass" is defined as "means the intentional diversion of waste streams from any portion of a treatment facility." The use of waste stream is odd for a stormwater permit. Bypass in a stormwater context is commonly referred to as "peak conveyance flow for site exceeds treatment capacity."

Response 4:
This is a definition from Rule 0400-40-05-.02. It is related to a standard condition of NPDES permits for bypasses found in subpart 3.12.3. A bypass of treatment is not typically expected of treatment of stormwater. However, due to the wide variation of control measures that could be used, there is still the potential that this provision could be needed. As such, it was included in the permit.

Comment 5:
Page 69: definition of Operator is carried over from previous page and contains a reference code error that needs to be corrected.

Response 5:
The citation has been updated to the correct location in the CGP.

The following comments are from TDOT
Comment 6:
TDOT provided comments in the form of a tracked changes version of the permit. Many of the suggested changes were related to ensuring consistent terminology, formatting, and correcting typographical errors and were incorporated into the final permit.

Comment 7:
Limitations on Coverage subpart 1.5.5.
TDOT requests to see TDEC data that verifies TDOT is a point source for contamination. What scientific data supports the rational for including this section? What are the benchmarks for the pollutants?

TDOT requests this section be removed until verification can be provided. If in the future it is found that TDOT is a point source for exceedance, propose discussions be held to modify the permit.

Response 7:
Subpart 1.5 is listing the discharges that are NOT authorized under this permit. If a discharge as described in subpart 1.5.5. is identified, TDOT would be required to submit an application or a notice of intent as appropriate for that discharge. Removing this section would cause

confusion regarding applicable permitting requirements and not be protective of water quality.

Comment 8:
Subpart 2.1. a.(5) TDOT recommend the addition of "projects that are in the preliminary phase of project development by permit issuance date". This will allow a reasonable transition period to adjust to the new permit requirements.

Response 8:
Subpart 2.1 a (1-6) is a list of the different MCMs required. This list has been updated to provide a cross reference to the appropriate section of the permit for each MCM and to ensure the MCM titles are used consistently. However, the suggested language was not included in the final permit. The inclusion of the suggested language would be counter productive to the intent of allowing a "reasonable transition period." For example, the rules provide 24 months from the effective date of the permit to implement the permanent stormwater requirements. The addition of the suggested language would effectively take away that implementation period. The Division strongly encourages the permittee to establish a clear demarcation for projects as part of their stormwater management program documentation.

Comment 9:
Subpart 2.2.3
- To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater discharges into the storm sewer system and implement appropriate enforcement procedures and actions

TDOT request this be removed. TDOT does not have the capability to enact ordinances or other regulatory mechanisms which include enforcement actions. TDEC is the mandated state government enforcement entity for environmental regulatory enforcement.

Response 9:
This is a requirement from 40 CFR 122.34(b)(3)(i)(B) and cannot be removed. The Division acknowledges that TDOT cannot enact ordinances, however, it does have other regulatory mechanisms available. For example, the contracts can prohibit the contract operations from disposing of waste materials from the site into the storm sewer system. For appropriate enforcement procedures and action, TDOT would provide available documentation and refer it issue to the appropriate agency. The Stormwater Management Program IDDE plan should describe how TDOT will meet the permit requirement with the mechanisms that are available under state law.

Comment 10:
- An ordinance, contract, or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;

TDOT requests this paragraph be removed. TDOT does not have the capability to enact ordinances or other regulatory mechanisms.

All TDOT construction work is performed under the direct supervision of TDOT. No third parties are involved so there is no need for any capability for external authority.

Response 10:
This is a requirement from 40 CFR 122.34(b)(4)(i)(A) and cannot be removed. The Division acknowledges that TDOT cannot enact ordinances, however, it does have other regulatory mechanisms available. Even though all work is preformed under the direct supervision of TDOT, the language of the contracts utilized for the different aspects of construction need to ensure proper use of EPSCs and remedies for non-compliance. The Division acknowledges that TDOT's legal authority is fundamentally different than that of a traditional MS4. The Construction Site Stormwater Runoff Control plan documentation should be used to describe how the various elements such as contract language, standard specification, or other design guides are used to implement this minimum control measure.

Comment 11:
TDOT recommends the Level 2 course requirement be removed. The TDOT Project Supervisors should not need the Level 2 course.

Response 11:
The recommended change has been made.

Comment 12:
TDOT requests that "including but not limited to design guidelines' be added to Notation 6.

Response 12:
The clarification has been added.

Comment 13:
TDOT requested extensions of the various due dates in subpart 2.2.5. due to the complexity and expansiveness of the TDOT service area.

Response 13:
The requirements (including due dates) found in subpart 2.2.5. are established by Rule 0400-40-10-.04(1)(d) and cannot be changed by the permit.

Comment 14:
Subpart 2.2.5.2.
TDOT recommends the addition of the selected wording. TDOT is a statewide linear transportation program that functions differently that traditional MS4s.

Development of permanent stormwater standards for TDOT must consider that TDOT's project design and construction processes are much different than the processes of traditional MS4s (e.g., cities and towns). Some of the differences include:

- Safety of motorists is the primary concern for design, operation, and maintenance of highways;.
- Most of the TDOT design and construction processes are mandated by federal standards and state statutes;
- Linear transportation systems often stretch for many miles, and cross numerous waterways, watersheds, and MS4 jurisdictions;
- Over 67% of the TDOT TS4CS is located outside the urbanized areas where the MS4 rules and regulations do not apply to any other government entity or jurisdictions and those other government entities or jurisdictions
- are not required to incorporate the permanent stormwater requirements;
- The area of the transportation ROW is usually a very small percentage of the watersheds (typically less than 3%) and the resulting quantity of stormwater runoff is also proportionally very small compared to a traditional MS4;
- Transportation ROWs often have limited space to install stormwater management structures and limited stormwater discharge options due to
- surrounding urbanization;
- Transportation stormwater conveyance systems often convey and discharge stormwater that originates outside of the transportation ROW;
- Transportation systems often serve a literally transient population;
- TDOT has no enforcement authority to implement actions outside of the
- transportation ROW;
- The planning, design, ROW acquisition, and construction process for highway projects typically extend over a significant period of time, which can be as long as 10-12 years; and

- Stormwater management costs incurred by TDOT directly reduce the overall highway construction and maintenance budgets. TDOT cannot pass on these costs on to commercial entities or impose a stormwater utility fee on residents or users, as can a traditional MS4.

The TDOT TS4 post-construction stormwater management strategies focus on and emphasize achieving water quality goals on a state-wide scale not just specific project locations.

Response 14:
The Division fully acknowledges that TDOT is fundamentally different from other traditional small MS4s. It is reasonable for the list of facts presented to be taken into consideration by TDOT in developing its Stormwater Management Program and developing its BMPs for all management control measures. However, the bulleted list are not permit conditions or BMPs in themselves. It would be problematic to include that list in the permit.

Additionally, the last statement *"The TDOT TS4 post-construction stormwater management strategies focus on and emphasize achieving water quality goals on a state-wide scale not just specific project locations"* will not be included in the permit since it contradicts the federal and state requirements. Rule 0400-40-05-.15 and 40 CFR 122.34(b)(5)(i) both require the management of post construction/permanent stormwater on new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4.

Comment 15:
Subpart 2.2.5.2.(b-d)
TDOT recommends significant modifications of the language of subpart 2.2.5.2.(b-d)

Response 15:
The language in this section of the permit is directly from Rule. With the exception of removing optional language that the permittee does not wish to include, the Division must implement the Rule in the permit as written.

Comment 16:
TDOT requests clarification. If a 10-hour dry period between events is the standard defining separate events (per definition of rainfall event in Section 9.1), does the 72-hour infiltration period begin after the completion of the 10 hour dry period, or retroactively from the last measured rainfall when the original rainfall event is eventually determined to have ended?

Response 16:
The Rule states "SCMs must be designed to provide full treatment capacity within 72 hours following the end of the preceding rain event for the life of the new development or redevelopment project."

The 72 hour period begins at the end of the rain event. If there is a less than 10 hour dry period, it is considered the same rain event. As such, the end of the rain event would be at the conclusion of the subsequent rainfall.

Comment 17:
The water quality benefits from the riparian buffers can be considered as part of the overall compliance with the Permanent Stormwater Standards. For example, recent TDOT sponsored research by Tennessee Technological University has found that roadside vegetated swales, which in many cases will be similar in configuration to riparian buffers, may provide run-off reduction of as much 70%, thus effectively achieving much of the prescribed runoff reduction and/or 80% TSS removal requirement for many storm events effectively complying with the WQTV reduction requirements.

Response 17:
TDEC agrees that water quality provide runoff reduction and pollutant removal. To maximize stormwater treatment, buffers are required in riparian areas in addition to SCMs as part of the MEP standard.

Comment 18:
The WQTV for manufactured treatment devices specifies "*maximum runoff generated from the entire design storm*" with the design storm apparently being the 1-year 24-hour

precipitation depth. However, the calculation of peak treated flowrate in the design of a manufactured stormwater treatment device must be based on precipitation intensity and not precipitation depth.

TDOT requests that TDEC specify a design storm precipitation intensity. The intensity is meaningful for designing the proper treated flow rate for manufactured stormwater treatment devices.

Response 18:
The design storm provides distribution of depth and intensity values as they vary across the state. The 1-year, 24-hour storm is the smallest design storm readily available in engineering reference literature in general and in the NOAA Atlas 14 in particular. However, only a portion of the design storm is used in the calculation of the WQTV. Hydrodynamic separators and other Manufactured Treatment Devices are designed for flowrate that is a function of rainfall intensity. The smallest design storm that NOAA Atlas 14 provides intensity values for is the 1-year, 24-hour storm.

Comment 19:
TDOT requests that TDEC provide explanation on how to determine the baseline TSS concentration from which this 80% reduction would be calculated and the range of particle size for which the removal rate applies.

For example, if the level of TSS in a MS4's post-construction stormwater discharge can be demonstrated to be less than 50 mg/l, very few SCMs (or treatment trains of multiple SCMs) would be able to achieve 80% TSS removal (i.e. reduction of TSS to achieve a TSS level of 10 mg/l), however, a TSS level of no more than 50 mg/l in stormwater discharges would clearly be considered protective of water quality and achieve the goals of this permit.

TDOT requests that the permit specify a lower bound on TSS levels in MS4 post-construction stormwater levels that would be exempt from the 80% reduction requirement.

Alternately, TDEC should consider that the 80% TSS removal level could be specified as only required for post-construction stormwater discharges in which the subject stormwater discharge TSS levels have not been quantified or which have been demonstrated to exceed a TSS level of 150 mg/l, which is the TSS benchmark level for most sectors specified in the Tennessee Stormwater Multi-Sector General Permit for Industrial Activities, and thus presumed to be protective of water quality in Tennessee.

Additionally, since TSS concentrations in stormwater have been demonstrated to correlate with precipitation intensity, the 80% TSS removal requirement should not be applicable for

rainfall events which exceed the 10-year 1-hour precipitation intensity for the subject location.

Response 19:
The rule reflects federal standards in which the types of pollutants are not limited. Therefore, all pollutants are to be reduced through implementation of these post-construction stormwater control measures. 80% TSS removal is not the standard; the standard is to implement the entirety of the narrative and numeric effluent limitations established in this rule.

Comment 20:
TDOT recommends the significant modifications of the language for Subpart 2.2.5.2.(f).

Response 20:
As mentioned previously, the language in this section of the permit must be consistent with the rule and cannot be changed as suggested. The proposed criteria for implementing this provision should be included in the stormwater management program documentation. However, the Division cautions that some of the provisions listed above are less stringent than the rule and therefore not allowed. E.g. including new development projects with a greater than 20% reduction of the WQTV, allowing 100% reduction of the WQTV etc.

Comment 21:
TDOT recommends significant modifications of the language for Subpart 2.2.5.3.

Response 21:
As mentioned previously, the language in this section of the permit must be consistent with the rule and cannot be changed as suggested. It is important to note the rule states "The program must ensure that off-site stormwater mitigation will be accomplished within the same USGS 12-digit hydrologic unit code watershed as the new development or redevelopment project, **if practicable,** and will treat a minimum of 1.5 times the portion of the WQTV not treated on site.'

Emphasis is added to if practicable. When it comes to implementation of this provision, the permittee is allowed to complete off-site stormwater mitigation projects outside of the USGS 12-digit HUC code watershed when it is deemed impracticable to conduct those activities inside of the intended watershed. The reasoning that it was deemed impracticable must be documented and maintained in accordance with the record keeping requirements of the permit.

Comment 22:
Subpart 2.2.5.4. TDOT recommends referring to the current version of the Tennessee Construction General Permit which has been referenced in the proposed language at the beginning of the section 2.2.5.4. Including the buffer widths in the permit could cause a conflict between an updated version of the CGP and the TS4 permit.

TDOT recommends the following modifications of the language

All TDOT new development and redevelopment projects must incorporate into the design process permanent riparian buffers that are consistent with the water quality riparian buffer zone requirements in the current version of the Tennessee Construction General Permit. The water quality benefits from the riparian buffers can be considered as part of the overall compliance with the Permanent Stormwater Standards. TDOT projects are exempt from this requirement when all of the project's stormwater discharges to a river which drains a 100 sq. mile area, or larger. Additionally, the following portions of TDOT projects will be exempt from the riparian buffer requirements:

- the areas immediately adjacent to bridge structures, abutments and access ramps;
- reaches of streams that pass through, or immediately parallel, a pre-exiting transportation corridor and/or are within the existing TDOT ROW or facility;
- the areas immediately adjacent to stormwater outfall easements;
- the areas immediately adjacent to stormwater treatment installations;
- the areas immediately adjacent to access roads necessary for TDOT maintenance activities;
- the areas immediately adjacent to lighting structures and other devices necessary for highway safety;
- the areas immediately adjacent to ferry structures, abutments and access ramps, or other boat ramps;
- implementation of the permanent buffer standards would require unavoidable significant damage to a cultural resource;
- implementation of the permanent buffer standards would require significant damage to a community resource, or invoke environmental justice concerns;
- implementation of the permanent buffer standards would result in the unavoidable displacement of a residence or business;
- projects where the proposed buffer site has shallow bedrock;
- projects where the proposed buffer site has pre-existing soil contamination.

Response 22:
As mentioned previously, the language in this section of the permit must be consistent with the rule and cannot be changed as suggested.

The buffers related to the MS4 program cannot be changed without going through the rulemaking process which allows for public comment. While Division does not anticipate modifying the buffer requirements of the construction general permit (CGP) at this time, the public comment period of future draft CGPs is the best means to communicate conflicts and request resolution or additional clarification.

Comment 23:
TDOT recommends removing 2.2.5.4 (f) and 2.2.5.5. in its entirety.

Response 23:
By leaving it in the permit, TDOT can utilized the flexibility provided by this provision if needed. If it is not needed, the provision would functionally be dormant. Since removing 2.2.5.4 (f) could be problematic for TDOT, it was retained.

The draft permit removed the provisions of subpart 2.2.5.5. that were not applicable to TDOT as an existing permittee. While the title could be confusing for TDOT which does not have the authority to implement codes or ordinance, the provision itself is a requirement to update "legal instruments" which TDOT does utilize typically in the form of contracts.

Comment 24:
TDOT recommends the following modifications of the language

(a)→Permanent·SCMs,··must·be·installed,·implemented,·and·maintained·to·meet·the·performance·standards·of·paragraph·(2)·of·Tennessee·Rule·0400-40-05-.15,·and·provide·full·treatment·capacity·within·72·hours·following·the·end·of·the·preceding·rain·event·(per·the·definition·of·rainfall·event·in·Section·9.1).·¶

Response 24:
The definitions found in subpart 9.1 are applicable to the entirety of the permit unless stated otherwise for a particular subpart. As such, it is unnecessary to reference the definition section.

Comment 25:
TDOT recommends removing 2.2.5.5. (b) 3. & 4.
TDOT recommends these sections be removed. Any SCMs installed on the TDOT TS4 will be operated and maintained under the direct supervision of TDOT. No third-party owner/operators will be involved. Items 3 and 4 under this section do not apply to TDOT and should be deleted.

Response 25:
Since this comment was submitted, the State has passed what is called the Transportation Modernization Act which may lead to 3rd parties becoming responsible for operating and maintain SCMs. While TDOT is the only entity that provides operation and maintenance of SCMs currently, the stormwater management program documentation may simply state that fact to show compliance with the permit/rules.

Comment 26:
2.2.5.6.
Clarification for the responsible party contact information was requested.

Response 26:
Since TDOT maintains its own SCMs, it may choose to use a general department number/email or this field could identify a region office contact or personnel responsible for the SCM.

Comment 27:
2.2.5.6.
For linear transportation projects it is not feasible to inspect all grassy ditches and buffers statewide. TDOT recommends maintenance and inspection records be limited to large SCMs such as basins.

Response 27:
TDEC agrees since Buffers are not considered SCMs. It is at TDOTs discretion how they want include grassy ditches in their SCM inventory since they do provide significant pollutant removal. Inspections may be conducted from areal images or other desktop methods.

Comment 28:
TDOT recommends all marked out wording in this table be deleted. All construction performed within the TDOT TS4 is designed by TDOT and implemented under the direct contractual supervision of TDOT. There are no third-party developers independently designing or implementing projects on the TDOT TS4. This section is not applicable to the TDOT TS4 and should be deleted.

Review and Update legal instruments in accordance with 2.2.5.5	Update legal instruments upon completion of the compliance schedule in 2.2.5.1	Confirm legal instruments are updated appropriately.
Develop, implement, and enforce policies and procedures for the submittal and review of plans for projects as required by 2.2.5.6	Establish policies and procedures for review of all plans and review 100% of all projects accordingly	-- Total number of projects reviewed in accordance with established policies and procedures --% of projects reviewed in accordance with the established policy and procedure
Develop, implement, and enforce policies and procedures for SCM Installation verification as required by 2.2.5.6	Verify installation of SCMs per design specifications in accordance with approved plan within 90 days Verify 100% of all installations within 90 days	-- Total number of projects verified --Percentage of projects verified within the established timeframe
Develop and implement enforcement procedures to bring non-compliant projects into compliance as required by 2.2.5.6	Establish escalating enforcement actions in the Enforcement Response Plan (ERP) (see 2.4) Implement the ERP at 100% of all non-compliant projects	- → Number of Projects granted Concurrence for submittal of NOT in accordance with the established procedures

Response 28:
The rule does not state that these requirements only exist when SCM is designed, owned, or operated by a 3rd party. These requirements are applicable for all SCMs. The permit allows TDOT the flexibility to implement its program based on the specific considerations unique to TDOT. The policies, procedures, contractual language for SCMs "implemented under the direct contractual supervision of TDOT" may be different than for those SCMs were TDOT is the only entity involved in the entire process.

Comment 29:
TDOT recommended the following:

Management Measure	Measurable Goals	Annual Report Requirement
Develop and implement maintenance and inspection procedures and frequencies for approved structural SCMs (Existing Installations) as required by 2.2.5.5.	- All structural SCMs must be inspected once every 5 years. or Establish a time frame for SCM site inspections based on observed required maintenance interval. - Inspect 100% of all sites within that timeframe	- Total number of structural SCM inspected - Percentage of structural SCM inspected within the established timeframe
Continue to implement and maintain a system to inventory and track the status of all public and private structural SCMs as required by 2.2.5.8.	The system must be made available to the Division or members of the public upon request.	Total number of requests made
	100% of all structural SCMs must be included in the database/tracking mechanism with complete information including.....?	- % of structural SCMs in the database - % of structural SCMs with incomplete information

Response 29:

Upon review of this comment, the measurable goal was modified to better reflect the flexibility provided in the rule for permittees under an individual permit develop an alternative schedule for SCM inspections. See below

Management Measure	Measurable Goals	Annual Report Requirement[7]
Develop and implement maintenance and inspection procedures and frequencies for approved structural SCMs (Existing Installations) as required by 2.2.5.7	- All structural SCMs must be inspected once every 5 years Or - All structural SCMs must be inspected in accordance with the alternative schedule approved by the Division	- Total number of structural SCM inspected - Percentage of structural SCM inspected within the established timeframe
Continue to Implement and maintain a system to inventory and track the status of all structural SCMs as required by 2.2.5.8	The system must be made available to the Division or members of the public upon request.	Total number of requests made
	100% of all structural SCMs must be included in the database/tracking mechanism with complete information as described in subpart 2.2.5.8.b.	- % of structural SCMs in the database - % of structural SCMs with incomplete information

Comment 30:

Development of a TDOT Implementation Plan will be much more involved than for a typical small municipality. Multiple TDOT Divisions will be involved, as well as input from the four regional offices. TDOT requests that the schedule for submission of the Implementation Plan be extended to 270 days from the effective date of this permit.

Additionally, TDOT requested 48 months for implementation of the permanent stormwater/post construction program.

Response 30:
The rule does not allow for extensions of the timeframe for the implementation plan or implementation of the permanent stormwater/post construction program.

It is important to note that the implementation plan required by the rules/permit is not a highly detailed comprehensive plan. For reference, most implementation plans are expected to be between 2-4 pages long.

Comment 31:
Subpart 2.2.6
TDOT recommends this *(requirements associated with floor drains)* be removed. Floor drains are an injection well issue and not a stormwater issue. This requirement was included in the original TDOT MS4 permit only as a vestige of the original TDOT Facilities Consent Order.

Response 31:
Subpart 2.2.6
Floor drains are not permitted as an underground injection well. Any wastes disposed of in a floor drain must be

1. Treated prior to discharge to a POTW in accordance with local regulations,
2. Treated and discharged in accordance with an NPDES permit, or
3. Contained and removed from the premises for disposal as hazardous or non-hazardous waste (as applicable,)

Comment 32:
Subpart 2.2.6
TDOT Recommends removing “Number of instances of wastewater from the washing of vehicles and equipment at TDOT facilities that discharge to receiving waters.” TDOT has wash pads located at various locations which filter into an oil-water separator system prior to discharge into a holding tank or the local municipal system.

Response 32:

The annual report must include the status of compliance with the permit terms and conditions. This annual report requirement is establishing if TDOT is in compliance with the measurable goal of "No wastewater from the washing of vehicles and equipment at TDOT facilities enters storm water runoff or storm water runoff control systems." Removing the reporting requirement is contrary to the intent of the annual report.

Revision 33:
Subpart 2.2.6 was clarified to state that general SWPPPs are permissible.

Comment 34:
Subpart 2.2.6.2.
The elements of this new minimum control measure are already regulated under a separate NPDES permit: General NPDES Permit for Discharges from the Application of Pesticides (Permit No. TNP000011). TDOT has had statewide coverage under this permit since May17, 2013. The "Roadside Vegetation Management" minimum control measure is redundant to the coverage of the Pesticide Permit and this section should be deleted from the TS4 Permit.

Response 34:
Since NPDES permit: General NPDES Permit for Discharges from the Application of Pesticides (Permit No. TNP000011) regulates pesticide application on waters as such this subpart has been removed.

Comment 35:
2.4
TDOT provided in great detail suggested additions to subpart 2.4.

Response 35:
The suggested language belongs in the TS4 program documentation. The division strongly suggests NOT using the term "immediately" when establishing timeframes. Additionally, the division recognizes that TDOT relies on other agencies (e.g. TDEC, Department of Safety & Homeland Security, TBI or local jurisdictions) for some aspects of enforcement. It is important that the enforcement response plan (ERP) and staff training clearly outline when to contact other agencies. It is acceptable for the ERP to outline different enforcement responses depending on the respective Minimum Control Measure in non-compliance.

Comment 36:
TDOT requested removal of "statute, law, rule, ordinance" in various places of the permit.

Response 36:
The legal authority of TDOT can be established through various legal mechanisms. It is not uncommon for DOTs in other states to implement the MS4 program utilizing legal

mechanisms such as laws or rules. The permit language does not require these legal mechanisms be implemented. Removal of this language would reduce the flexibility of TDOT to implement its program in the future.

Comment 37:
2.7.1.1 TDOT Requested a Chlorides benchmark value of 1200 mg/l, for e. coli to only be sampled at the four regional facilities and to require sampling at 10% of the facilities.

Response 37:
The requested changes have been made which is consistent with the current sampling plan. Please note, the 1200 mg/l benchmark for chlorides is greater than the proposed water quality criteria. The 1200 mg/l benchmark is sufficient for determining BMP effectiveness, but may result in violating water quality criteria and not meet TMDL waste load allocation assumptions.

Comment 38:
2.7.1.2.B TDOT requested the language state (greater than 0.1 inch rainfall) storm event.

Response 38:
This change cannot be included since it conflicts with the definition of rainfall event from 0400-40-05-.02(73).

Comment 39:
TDOT requested clarification of Urbanized Area.

Response 39:
The definition utilized in the draft permit (which uses the 2010 census) will implemented in the final permit. States are still awaiting clarification of definition of Urbanized area as it applies to the 2020 census.

Comment 40:
2.7.1. TDOT recommends the removal. Industry standard approved BMPs should not require verification and monitoring.

Response 40:
The comment indicates a misunderstanding of the requirement. This requirement is a continuation of the BMP established under the previous permit. In the previous permit it was included as part of the Post Construction (subpart 2.1.5. E & F).It has been moved to the monitoring section of this permit and modified to allow TDOT greater flexibility to conduct the activity to provide meaningful data to TDOT.

Comment 41:
2.9 TDOT Requested the section be retitled Monitoring Procedures at TDOT Covered Facilities

Response 41:
This change was not incorporated. This subpart is from the standard conditions in Rule 0400-40—05.07 and is applicable to all sampling required by the permit.

Comment 42:
3.5 TDOT recommends rewording "at reasonable times" to "during normal business hours" for clarity.

Response 42:
This change was not incorporated as the language is from Rule 0400-40-05-.07(2)(g)

Comment 43:
3.11.3. TDOT requested removal of the change of ownership subpart.

Response 43:
The language on transfer of ownership is a standard condition required by Rule 0400-40-05-.07 and applicable to all NPDES permits.

Comment 44:
5.1 TDOT recommends a transition period on the Annual Report to account for the permit issuance date in regard to the end of the fiscal year and the previous Annual Report submittal date.

Response 44:
At the time the comment was made, the likely issuance date of the final permit would have split the reporting year almost in ½. Since there was a delay in issuance, it will align closely with the fiscal year. So, this change is no longer necessary.

Comment 45:
7.3.1 Since TDOT has submitted this information for the current permit, TDOT proposes the EPA resubmittal requirement has been fulfilled. The application process would be a significant effort.

Response 45:
Applications are required for individual permit. See T.C.A. §69-3-108, 40 C.F.R. §122.33(b)(2)(i) and 40 C.F.R. §122.21(f).

Due to memos being issued by EPA that caused confusion to the specific application requirements, the requirements have been itemized in the permit. While EPA Form 1 does look tedious when listed out, it is actually a relatively simple form. The items in 7.2 are required by 40 C.F.R. §122.33(b)(2)(i)

Comment 46:
7.2 g. Due to budgetary constraints it is not feasible for TDOT to map all outfalls within the statewide TS4 coverage area.

Response 46:
The development of this map is a requirement of the rules 40 CFR 122.34(b)(3)(i)(A) and 40 CFR 122.21(f)(7). As such, the requirement cannot be removed. The development of this map was included in the previous permit with 5 years provided to complete. The map should already exist with additions being made as TDOT adds new outfalls. It is important to note, this map is restricted to the Urbanized areas, not statewide.

Comment 47:
9.1 TDOT proposed a definition of Maximum Extent Practicable (MEP).

Response 47:
This change was not made. The permit and rules constitute MEP.

Comment 48:
9.1 TDOT requested the definition of QLP be removed.

Response 48:
This change was made along with removal of the acronym.

Comment 49:
9.1 TDOT proposed adding a definition for Re-development Project to the permit.
"TDOT construction projects that add at least 25,000 square feet of impervious surface to an existing TDOT Right-of-Way installation or covered facility. Re-development does not include maintenance and safety improvement activities, such as re-paving, landslide repair, ditch cleaning, driveway access paving, shoulder paving and re-building, or roadway striping/painting. Also not included, unless part of a larger project, are highway sign addition or replacement; guardrail installation, repair, or replacement; sound barrier installation, repair, or replacement; and projects that involve installation or maintenance of the TDOT Intelligent Transportation Systems."

Response 49:

This change was not implemented. Neither the state or federal rules define development or redevelopment projects. The permit did include a definition for construction stormwater from the construction general permit which somewhat addresses concerns. Additionally, Rule 0400-40-05-.15 has an introductory paragraph that direct the inclusion of the permanent stormwater language. This paragraph has been added to the permit to clarify that this MCM is applicable to new development and redevelopment projects that disturb one or more acres of land, or less than one acre if part of a larger common plan of development, and discharge into the permittee's MS4.

Comment 50:
Attachment A section B 10
TDOT Requested the removal of the section "High Traffic Volume Areas – At interstate Welcome Centers, Rest Areas, truck Weigh Stations, and other facilities, which similarly receive high volumes of vehicular traffic, the plan must specifically address the control and management of stormwater from the paved vehicle roadways and parking areas. To the extent feasible, such runoff should be controlled and directed to a minimum number of discharge points. Consideration should be given to the installation and maintenance of control devices (e.g., screens, oil-water separators) to remove litter, oil, and grease from stormwater prior to discharge. Consideration should also be given to designing and sizing such devices so as to provide for the capture of likely fuel spills and leaks."

Response 50:
This section is in the current permit and is already being implemented. It does not require the various devices be installed, only considered as a potential controls. TDOT did not provide any reasoning for the suggested removal.

Change 51: The sentence "Uncontaminated roof runoff may be excluded from the WQTV." Has been removed from subpart 2.2.5. This language is in the process of being removed through Rulemaking as a result of the permit appeal for the small MS4 general permit. This provision was unlikely to be utilized by TDOT due to the nature of the work TDOT performs.

Change 52: Attachment A was modified to remove references which tied requirements to submittal of an NOI, since an individual permit does not require an NOI submittal. Any timeframes were maintained for the same length of time, but now begin with the effective date of this permit. Additionally, the acronyms for NOI and NOT were removed from subpart 9.2.

RATIONALE

Tennessee Department of Transportation (TDOT)
Statewide TS4
NPDES Permit No. TNS077585
Date: 8/2/22
Permit Writer: Ariel Wessel-Fuss

1. DISCHARGER INFORMATION

Permittee Name:	**Tennessee Department of Transportation (TDOT)**
Project Name:	**Statewide TS4**
Location:	Statewide
Contact:	Ms. Susannah Kniazewycz - Assistant Director (615) 532-3265 Susannah.Kniazewycz@tn.gov

2. PREVIOUS PERMIT

Permit Type:	Stormwater
Issuance Date:	28-Apr-06
Expiration Date:	27-Apr-11
Effective Date:	1-Oct-06

During the previous permit term, Division personnel from the Nashville Central Office performed a Compliance Evaluation Inspection (CEI) of the permittee's facility. The CEI of the Public Education and Outreach Program – Public Involvement/Participation Program was performed by Ann Morbitt on March 10, 2020, and the permittee was found to be in compliance. The inspection report described each permit condition, the measurable goal, and the inspection findings.

3. COVERAGE

3.1. LIMITATIONS ON COVERAGE

Approved TMDLs have corresponding language to Subpart 1.5.5 of this permit. This language is typically in section 9.2.2 of the TMDL. Generally, the TMDL states (in part) *These* [MS4] *permits typically require the development and implementation of a Stormwater Management Plan (SWMP) that will reduce the discharge of pollutants to the "maximum extent practicable" and not cause or contribute to violations of state*

water quality standards. A monitoring component to assess the effectiveness of BMPs is also typically included in the SWMP. Regulated MS4s that maintain compliance with the provisions of their NPDES permits are considered to be consistent with the assumptions and requirements of the WLAs of this TMDL.

In practice, the language of subpart 1.5(h) of this permit and the corresponding language of the TMDL means that if the permittee is in compliance with the NPDES MS4 permit the permittee is meeting its obligations under the TMDL. It is important to note that the term TS4 meant to provide clarity that TDOT is operating a non-traditional MS4 since it is a statewide transportation system. However, both traditional and non-traditional permittees are regulated under the same rules commonly referred to as the MS4 program or MS4.

Section 1.5.3 states "Discharges of materials resulting from a spill, except emergency discharges required to prevent imminent threat to human health or to prevent severe property damage, provided reasonable and prudent measures have been taken to minimize the impact of the discharges." This section is intended to clarify that discharges resulting from spills are most likely be classified as an "unpermitted discharge." For example, a discharge from a vehicle accident involving a tractor trailer that releases material into a waterway would not be covered under this permit. In this same scenario, the individuals (or private companies) involved in the vehicle accident would be the responsible parties for the discharge, not TDOT. The exception in this section is a reflection of the standard bypass provision. However, it is rarely expected to be triggered.

3.2. PERMIT TERM

The permit will be issued for a 5 year term.

4. STORMWATER MANAGEMENT PROGRAM (SWMP)

4.1. TERMINOLOGY

In general conversation as well as previous permits, the terms Stormwater Management Program and Stormwater Management Plan with both using the acronym SWMP have been used almost interchangeably. While in conversations this interchanging of words is not typically an issue, it has caused some confusion with the permit. Therefore, this permit will use SWMP to mean Stormwater Management Program.

The Stormwater Management Program is a set of related measures, projects, plans, activities, and documentation that is managed in a coordinated manner under a structure that allows for the delivery of outcomes/goals. It may be helpful

to think of the SWMP documentation as a 3 ring binder. The table of contents for this binder would be very similar to the headings of this permit. Each minimum control measure (MCM) would constitute its own section developed by the permittee to meet the permit requirements. This section could include a plan(document) that describes in detail how the permittee intends to comply with the permit requirements for that MCM. It could also include items like a tracking mechanism, standard operating procedures, policies, or standardized forms such as an inspection form. This 3-ring binder isn't a program unless it is implemented. The SWMP must also include the legal authority to implement and enforce the activities described in the documentation. Additionally, the permittee must also be able to implement the SWMP but show evidence of implementation as well. So next, let's assume that 3 ring binder is on top of a filing cabinet. A staff member makes a copy of the inspection form from the binder and reviews the inspection procedure. Upon returning, the staff member logs the inspection in a tracking mechanism then sends a notice of violation (NOV) in accordance with the enforcement response plan. The completed inspection form and a copy of the NOV are stored in the filing cabinet as records. The documents in the 3 ring binder and the filing cabinet along with the inspection and enforcement activities collectively exemplifies how the term SWMP is used in this permit. The above is for example purposes. The permittee has enormous flexibility to incorporate various technologies into its SWMP such as GIS, databases, or electronic data management systems. It is important to clarify that the broader SWMP may include subprograms like the IDDE program etc.

Urbanized Area

On July 20, 2022, EPA published an interim guidance on Census Elimination of "Urbanized Area" definition. This guidance states:

> On March 24, 2022, the Census Bureau finalized revisions to its criteria for defining urban areas based on the results of the 2020 Decennial Census. As part of that action, the Census Bureau ceased distinguishing between different types of urban areas, including "urbanized areas." This means that the Decennial Census, starting in 2020 and into the future, will not identify "urbanized areas." Because the Phase II regulations are written to cover MS4s located in "urbanized area[s] as determined by the latest Decennial Census," questions have arisen about what effects the Census Bureaus' new change has on which systems are considered regulated small MS4s moving forward.
>
> EPA is currently evaluating next steps to provide clarity on this issue, including whether revisions to the Phase II stormwater regulations may be appropriate."

Due to the specific nature of the TDOT TS4 system, the proposed permit is based on the 2010 urbanized area maps as developed by the census bureau as recommended by the interim guidance document. Any changes to the regulatory definition in federal rules will be implemented either through a permit modification or at the next permit reissuance.

The interim guidance document can be found at EPA's website https://www.epa.gov/npdes/interim-guidance-census-elimination-urbanized-area-definition

4.2. AREA SPECIFIC MS4 SWMP REQUIREMENTS

The previous permit had a section titled "Area Specific MS4 SWMP Requirements". This section identified additional requirements for receiving streams that were designated as impaired (currently referred to as unavailable conditions) or those with a TMDL. This section has been removed from the proposed permit. Tennessee Rule 0400-40-05-.15 established MEP for all receiving stream classifications related to permanent stormwater management. Likewise MEP is established in this permit for construction stormwater, by section 2.2.4 of the permit which incorporates the requirements of the construction general permit (CGP).The CGP already takes into account the stream classification such as ETW or unavailable conditions. The CGP then requires additional BMPs for those classifications as appropriate Therefore, it is unnecessary to add additional requirements for construction or permanent stormwater since it is already included elsewhere in the permit.

This section had additional requirements for streams with a TMDL. As discussed in the Rationale section 3.1, language in this permit (and TMDLs) clarifies that if the permittee is in compliance with this permit, it is considered to be in compliance with the TMDL. This clarification (along with the establishment of MEP as discussed above, makes it unnecessary for the inclusion of this section in the purposed permit. If in the future TMDLs establish a required numerical reduction in pollutant loading specifically for TDOT discharges, this permit would need to be modified to incorporate that new methodology. At this time, the Division has no plans to adopt a new methodology during the proposed permit term.

TDOT has an expansive foot print across the state. As such, they have roadways and storm sewers in almost every county and in every watershed. In some instances, TDOT may be the only entity operating an MS4/TS4 program in a particular watershed. However, due to the linear nature of these roadways, the actual drainage area of the TS4 discharge is minimal especially compared to a typical MS4 of an Urbanize area. Therefore, the question has arisen, "Why is MS4

discharges even listed as a source on the stream assessment or the TMDL?". The answer lies in the federal rules. In a November 22, 2002 (Wayland and Hanlon), EPA memo clarifies that:

NPDES-regulated stormwater discharges must be addressed by the wasteload allocation component of a TMDL. See 40 C.F.R. § 130.2(h).

NPDES-regulated stormwater discharges may not be addressed by the load allocation (LA) component of a TMDL. See 40 C.F.R. § 130.2 (g) & (h).

It may be reasonable to express allocations for NPDES-regulated stormwater discharges from multiple point sources as a single categorical wasteload allocation when data and information are insufficient to assign each source or outfall individual WLAs. See 40 C.F.R. § 130.2(i). In cases where wasteload allocations are developed for categories of discharges, these categories should be defined as narrowly as available information allows.

WQBELs for NPDES-regulated stormwater discharges that implement WLAs in TMDLs may be expressed in the form of best management practices (BMPs) under specified circumstances. See 33 U.S.C. §1342(p)(3)(B)(iii); 40 C.F.R. §122.44(k)(2)&(3). If BMPs alone adequately implement the WLAs, then additional controls are not necessary.

EPA expects that most WQBELs for NPDES-regulated municipal and small construction stormwater discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances.

When a non-numeric water quality-based effluent limit is imposed, the permit's administrative record, including the fact sheet when one is required, needs to support that the BMPs are expected to be sufficient to implement the WLA in the TMDL. See 40 C.F.R. §§ 124.8, 124.9 & 124.18.

The NPDES permit must also specify the monitoring necessary to determine compliance with effluent limitations. See 40 C.F.R. § 122.44(i). Where effluent limits are specified as BMPs, the permit should also specify the monitoring necessary to assess if the expected load reductions attributed to BMP implementation are achieved (e.g., BMP performance data).

The permit should also provide a mechanism to make adjustments to the required BMPs as necessary to ensure their adequate performance.

While there have been additional revisions to clarify the original memo, the rationale for including MS4/TS4s as a source of the wasteload allocation remain the same. Furthermore, this memo helps illustrate that the permit aligns with EPA's intent by including BMPs necessary to meet the TMDL requirements established. It also provides a means to ensure adequate performance (see the monitoring section 2.7) as well as a means make adjustments (see section 2.6.2).

4.3. VIOLATIONS OF WATER QUALITY STANDARDS

This section was titled Receiving Water Limitations in the previous permit. Section 2.1 has been clarified to include the requirement that the permittee shall not cause or contribute to violations of state water quality criteria of the receiving streams. Receiving Water Limitations in the previous permit went into details on what the permittee should do when a violation of water quality standards occurs. These details have been removed and the proposed permit clarifies that violations of water quality standards constitutes a potential threat to human health and the environment. This triggers the 24 hour reporting requirement of 3.12.1a and a 5 day follow up report. This change better clarifies the reporting requirements and allows both the division and the permittee to respond in a timelier manner. It also reduces the paperwork burden by removing the need for a comprehensive report, approval, and implementation process.

4.4. ROLES AND RESPONSIBILITIES OF PERMITTEES

The previous permit had a section titled "Roles And Responsibilities of Permittees" which was removed from this permit. The requirements in this section were a duplication of the authorization in 1.4 and reporting requirements in 2.2.2.

4.5. LEGAL AUTHORITY

40 CFR 122.34(b)(3)(i)(B)
40 CFR 122.26(d)(2)(i)

The requirements of this section is substantially similar to the previous permit with language aligning more closely with 40 CFR 122.26(d)(2)(i) which was used as a basis. Section 2.5.1 language was modified to align specifically with the requirements of 40 CFR 122.34(b)(3)(i)(B). This section now includes specific reporting requirements for the annual report.

4.6. TS4 SWMP REVIEW AND MODIFICATION

40 CFR 122.63
40 CFR 122.34(d)

Clarified this section to better delineated between Minor and Major modifications. This section clarified the requirements of modification as it relates to the public involvement/participation MCM.

The permittee is encouraged to request a determination from the division of a modification if it is unclear as to the classification of a minor or major modification. Generally speaking, the best practice will be to public notice changes if there is any doubt as to if it is minor or major modification.

4.7. MONITORING

40 CFR 122.34(b)(6)

Monitoring was moved from the Good Housekeeping MCM into its own section of the permit. Furthermore appendix c of the previous permit was incorporated into this section as well. The requirements to 1. review the results and implement changes to the SWPPP and 2. Allowance for modification was also removed. These two provisions are now required by section 2.6 of the permit.

In the previous permit term, TDOT conducted an excellent study into BMP effectiveness. The intent of the monitoring identified in this section is to continue that work. The monitoring should be conducted to gain a better understanding of the operation of the BMPs in a real world scenario. This information can in turn be utilized in the design and construction of TDOT projects to maximize pollutant removal with a better understanding of the practicability of the respective measures.

4.8. HISTORICAL CONSENT ORDER

On March 10, 2004, the commissioners of TDEC and TDOT signed a consent order WPC02-0720 related to compliance issues during the construction of State Route 840. This order included requirements that were designed to be incorporated broadly into TDOT operations primarily as part of the MS4 program. The Department approved the proposed Statewide Stormwater Management Plan in a letter dated August 2, 2007, and the implementation plan in a letter dated December 8, 2008. Both of these letters are available on the Divisions Dataviewer for this permit. The relevant section of the order is attached in Appendix A for reference. A summary of those requirements and the current implementation is described below:

XXXIV. C. Development of a Statewide Stormwater Management Plan

1. TDOT shall develop a Statewide Stormwater Management Plan (referred to in the order as the "Plan"). The Plan will be comprehensive and will incorporate all appropriate phases of project development, including environmental planning, design, and construction.

XXXIV. C.6. (a),(b),(c),(d),(l) &(m) and XXXIV. C.7.(b),(f),(g) are implemented through the SWMP as a whole, the requirement for all applicable site be permitted directly under the appropriate NPDES construction or ARAP permit.

XXXIV. C.6. (e) is implemented through Sections 2.2.1.3 and 2.2.1.4

XXXIV. C.6. (f) is implemented through Sections 2.2.4 and 2.2.5.

XXXIV. C.6.(g) & (h) regarding independent review of EPSC plans was an optional provision for long term inclusion,

XXXIV. C.6. (i) & (k) are implemented through Sections 2.2.1 and 2.2.4.

XXXIV. C.6. (j) is implemented through Section 2.7

XXXIV. C.6. (n) is implemented through Sections2.6 and 8

XXXIV. C.7.(c), (i) are implemented through Sections 2.2.4 Note: weekly inspection (C.7.(c)) is required as management measure

XXXIV. C.7 (i)·states "TDOT shall attend all public hearings held by TDEC on permit applications submitted by TDOT un-der the Act and be available to respond to questions related to the application, if any"

XXXIV. E. 1. is implemented through Section 2.2.1.2

XXXIV. E. 2. 3. and XXXIV. F. 2 are implemented through Section 2.2.4

XXXIV. F. 1. is implemented through Section 2.2.4

5. MINIMUM CONTROL MEASURES

40 CFR 122.34(b)

The Measurable Goals Table format used in the previous permit has been modified in the proposed permit to better delineate the measure, goals, and

Annual Report Requirements. This layout is intended to provide clarity to the reporting requirements. It is important to note, that the permittee is expected to maintain documentation supporting the implementation of the goals.

5.1. PUBLIC EDUCATION AND OUTREACH

40 CFR 122.34(b)(1)

Management measures in this section have been clarified from the previous permit to better implement the requirements of 40 C.F.R. §122.34(b)(1).

The proposed permit includes detailed requirements of The TDOT Fundamentals of Erosion Prevention and Sediment Control Training Program that were previously implement under a 2019 memorandum of agreement between TDEC and TDOT. The Program certifies TDOT personnel to perform Erosion Prevention and Sediment Control (EPSC) inspections as specified in the General NPDES Permit for Discharges of Stormwater Associated with Construction Activities (CGP). The training materials presented in the Program are an adaptation of the TDEC Level 1 Tennessee Erosion Prevention and Sediment Control Training Program for Construction Sites (TDEC Level 1) class materials. Because of this, the Program is considered an approved extension of the TDEC Level class. As such TDEC may audit the TDOT class in order to determine compliance with this permit as well as consistency with the TDEC Level 1 class.

Any certification issued through this Program will validate that TDOT employees meet the requirements to conduct EPSC inspections as specified in the CGP and serve as a pre-requisite for the TDEC Level 2 Design Principles of Erosion and Sediment Control for Construction Sites as specified in the CGP.

The permittee may use stormwater educational materials provided by the State, Tribe, EPA, environmental, public interest, or trade organizations, or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce stormwater pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting, and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the permit require the permittee to tailor the public education program, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples

of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling, and watershed and beach cleanups. In addition, EPA recommends that the permit require that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant stormwater impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. The permit should encourage the permittee to tailor the outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

5.2. PUBLIC INVOLVEMENT/PARTICIPATION

40 CFR 122.34(b)(2)
40 CFR 122.34(d)(2)

It is recognized that the Public Education and Public Involvement MCMs may have overlapping elements. The proposed permit moves some management measures between the Public Education and Public Involvement MCMs in order to provide additional clarity. Additional requirements have been added regarding public access of the SWMP in order to better meet the requirements of 40 C.F.R. §122.34(b)(2). This permit requires that the SWMP be placed on public notice prior to the first annual report. This is not intended to be an annual requirement as the section also requires a formal public notice process to be developed which identifies what modifications to the SWMP require public notice. Additional direction on Minor and Major modifications is found in 2.6.2.

EPA recommends that the permit include provisions addressing the need for the public to be included in developing, implementing, and reviewing the stormwater management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local stormwater management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

There is an additional Recordkeeping requirement in 40 CFR 122.34(d)(2) related to public involvement which has been incorporated into the MCM rather than a standalone permit condition. "The permit must require the permittee to make records, including a written description of the stormwater management program, available to the public at reasonable times during regular business hours (see § 122.7 for confidentiality provision). (The permittee may assess a reasonable charge for copying. The permit may allow the permittee to require a member of the public to provide advance notice.)" It is important to note that since TDOT is a state agency additional public records and "sunshine" laws may also apply.

5.3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

40 CFR 122.34(b)(3)

40 C.F.R. §122.34(b)(3) (i) states "The permit must identify the minimum elements and require the development, implementation, and enforcement of a program to detect and eliminate illicit discharges (as defined at §122.26(b)(2)) into the small MS4." It is recognized that as an operator of a TS4, TDOT does not have the same enforcement mechanisms available as a traditional MS4 program. The term "enforcement" is intended to include the legal remedies available to TDOT. For example, these remedies may take the form of enacting contract conditions or requesting enforcement assistance from other agencies.

EPA recommends that the plan to detect and address illicit discharges include the following four components: Procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA also recommends that the permittee to visually screen outfalls during dry weather and conduct field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling, a program to promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials.

5.4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

40 CFR 122.34(b)(4)

It is recognized that as an operator of a TS4, TDOT does not have the same legal authority mechanisms and enforcement mechanisms available as a traditional MS4 program. When the rule refers to "ordinance or other regulatory mechanism", TDOT is expected to utilize the legal authority it has under a wide variety of mechanism such as contracts, policies, memorandums of agreements

etc. The term "enforcement" is intended to include the legal remedies available to TDOT some of which may include contract contingencies or a claim against a bond.

EPA recommends Examples of sanctions to ensure compliance include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance. EPA recommends that the procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality. EPA also recommends that the permit require the permittee to provide appropriate educational and training measures for construction site operators and require stormwater pollution prevention plans for construction sites within the MS4's jurisdiction that discharge into the system. See § 122.44(s)

5.5. POST-CONSTRUCTION/PERMANENT STORMWATER MANAGMENT

40 CFR 122.34(b)(5)
0400-40-05-.15

This permit incorporate the newly adopted rules for post-construction/permanent stormwater management. As such, this control measure if formatted slightly differently than the others. Sections 2.2.5.1 through 2.2.5.8 are copied from Tennessee Rule 0400-40-05.15 with slight editing to clarify references. Tennessee Rule 0400-40-05.15 establishes what constitutes Maximum Extent Practicable (MEP) for this control measure.

Subpart 2.2.5.5a has been deleted from the permit since it is only applicable to new permittees. It has been marked "reserved" to maintain the numbering system.

Subpart 2.2.5.5b has had the first sentence removed as it is only applicable to newly permitted programs.

Section 2.2.5.9 establishes how the elements of MEP will be measured and reported in the annual report. It is important to note some reporting elements won't be required in the annual report until the implementation plan is completed.

The rule requires updated legal instruments for post-construction/permanent stormwater management. The primary legal mechanism for TDOT in this instance is the contracts for projects. Unlike a municipality which has to update, public notice, and pass multiple readings by a council, TDOT simply has to update their template language for this contracts. As such a simple affirmative statement from TDOT is all that is necessary for this measure.

Additionally, the rule requires verification of correct installation of post-construction/permanent SCMs. TDOT's internal process requires that concurrence with EPSC installation or removal and final stabilization by the Environmental Division. If concurrence is not granted by the Environmental Division, the contract is not released to fiscal for payment. Therefore, a non-compliant site does not need traditional enforcement measures such as a NOV to be brought into compliance.

The requirement to establish and maintain adequate legal authority assigning SCM maintenance responsibility and personnel access to the SCM and provide for enforcement action as required by 2.2.5.7 is not being incorporated into the annual report requirements as a management goal. All sites are owned by the State of Tennessee. This inherently establishes the legal authority.

5.6. POLLUTION PREVENTION/GOOD HOUSEKEEPING

40 CFR 122.34(b)(6)

The monitoring that was included in this section in the previous permit has been moved to the Monitoring section so that all analytical and monitoring activities are more clearly communicated. Additionally, this section has been formatted to be more consistent with the other MCMs in this permit where the initial portion outlines the requirements and the management measures/reporting table is located at the end of the section. The term Standard Operating Procedures (SOP) has been changed to Standard Operating Procedures (SEP) to better align with the internal terminology that the permittee uses.

5.6.1. Roadside Vegetation Management

40 CFR 122.34(c)(2)

This section has been updated primarily to shift from the "development" aspect to the "implementation and maintenance" aspect of the program.

6. ANNUAL REPORT

40 CFR 122.34(d)(3)
40 CFR 122.41

This permit requires a submittal of an annual report as described by Part 5. It is important to note that the individual elements of the report are identified throughout the permit typically in a table or narrative format.

7. APPLICATION

The application section has been added to the proposed permit to reflect the requirements of more clearly 40 C.F.R. §122.33(b)(2)(i) and 40 C.F.R. §122.21(f).

7.4.2 requires submittal of the required maps in the application electronically. The current preferred method is through a geo spatial REST service. However, since technology advances rapidly an alternative submittal mechanism may be approved by the division at the time of the application.

8. ELECTRONIC REPORTING

40 CFR 122.34(d)(3)
40 CFR 127

The NPDES Electronic Reporting Rule (eRule), which became effective on December 21, 2016, replaces most paper-based reporting requirements with electronic reporting requirements.

At the time of drafting this proposed permit, the division has not made a stormwater application or annual report electronically available for this individual permit. However, since 40 CFR 122.34(d)(3) requires submittal of annual reports electronically by December 21, 2025, that capability may be developed and implemented during the permit term. Upon notification that these forms are available, the permittee will be required to submit the applicable forms electronically.

9. ANTIDEGRADATION STATEMENT / WATER QUALITY STATUS

Tennessee's Antidegradation Statement is found in the Rules of the Tennessee Department of Environment and Conservation, Chapter 0400-40-03-.06. It is the

purpose of Tennessee's standards to fully protect existing uses of all surface waters as established under the Act.

Streams across Tennessee may be identified as:

Outstanding Natural Resource Water (ORNL)
No new discharge or expansion will be allowed unless 1) existing ONRW water quality conditions will continue to be met or exceeded; or 2) no permanent degradation of water quality above the level of *de minimis* will be allowed.

These streams can be identified on our dataviewer at
https://dataviewers.tdec.tn.gov/pls/enf_reports/f?p=9034:34304::::::

Exceptional Tennessee Water
No permanent degradation of water quality above the level of *de minimis* will be allowed unless the applicant demonstrates to the Division that the degradation is for necessary economic or social development and will not interfere with or become injurious to any existing uses. The specific requirements for this demonstration are described in the Rules of the Tennessee Department of Environment and Conservation, Chapter 0400-40-03-.06(4).

These streams can be identified on our dataviewer at
https://dataviewers.tdec.tn.gov/pls/enf_reports/f?p=9034:34304::::::

Available Conditions Waters (meeting designated uses)
These waters are fully supporting of its designated uses. The Division has maintained, and shall continue to assess, the water quality of the stream to assure that the water quality is adequate to protect the existing uses of the stream fully, and to assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

These streams can be identified on our mapviewer at
https://tdeconline.tn.gov/dwr/

Unavailable Conditions Waters (assessed as needing additional pollution controls)
These waters partially/does not support(s) designated uses due to various causes from various sources.

These streams can be identified on our mapviewer at
https://tdeconline.tn.gov/dwr/

Total Maximum Daily Loads (TMDLs) have been developed and approved can be found on our website at
https://tdec.tn.gov/document-viewer/#/search/tmdl

The proposed terms and conditions of this permit comply with the wasteload allocations of these TMDLs.

APPENDIX 1

C. Development of a Statewide Storm Water Management Plan

1. Within 18 months of the effective date of this Order, or such additional time as TDEC may approve for good cause, TDOT shall develop a Statewide Storm Water Management Plan (hereinafter referred to as the "Plan"). The Plan will be comprehensive and will incorporate all appropriate phases of project development, including environmental planning, design and construction.

2. TDOT will immediately form a working group to initiate formulation of the Plan. At a minimum, the group will include representatives with substantial experience in the following disciplines: environmental protection, design, construction, hydraulics, maintenance, and material testing.

3. In addition, TDOT will initiate the steps necessary to select an outside expert to guide and assist in the development of the Plan. TDOT's selection will be subject to TDEC's approval.

4. TDOT will implement a process, subject to the approval of TDEC, providing for public review and comment during the development of the Plan. At a minimum, TDEC and TDOT shall hold at least three (3) public meetings, at least one in each grand division of the state, to receive comment from the public.

5. The completed Plan shall be subject to TDEC approval. With TDEC's concurrence, parts of the Plan may be approved and implemented prior to final approval of the completed Plan.

6. At a minimum the completed Plan shall include the following elements:

(a) Procedures describing TDOT's project planning activities, including the development of project alternatives, environmental

analysis and selection of final alignment, and these procedures will incorporate the consideration of analyzing the potential impact of increased flows of storm water runoff events, and consideration of a no-build option and of project alternatives or designs that avoid or minimize impacts to the waters of the state;

(b) Investigation, evaluation and development of state-of-the-art erosion prevention and sediment control BMPs;

(c) Consideration of the use of specific erosion prevention controls that, through published comparative test data, have been shown to result in a 90 to 100 percent erosion reduction from bare soil;

(d) Development of BMP guidelines that describe appropriate usage and proper implementation;

(e) Continuing training of TDOT personnel within all TDOT Divisions having responsibility for any aspect of storm water management, including without limitation Environmental Planning and Permits, Design and Construction, and consideration of higher-level training course(s) to be developed in concert with TDEC;

(f) Review of TDOT construction contract provisions related to erosion prevention and sediment control, including consideration of limits on the length of time that soils are left exposed, the total area of exposed soil during construction, and periods of the year during which clearing, grubbing, excavation, grading, cutting or filling will not occur;

(g) Independent review of erosion prevention and sediment control plans;

(h) Consideration of the continued use of independent erosion prevention and sediment control supervisors for construction projects requiring ARAP or NPDES permits;

(i) Development of Quality Assurance/Quality Control teams to conduct an appropriate level of review of construction projects requiring ARAP or NPDES permits, provide recommendations for improved practices, and provide training for construction personnel;

(j) Evaluation of water quality monitoring protocols to assist in evaluating the effectiveness of erosion prevention and sediment control practices;

(k) Evaluation of compliance requirements for contractors relating to storm water management, including incentives and disincentives;

(l) Identification of all potentially impacted waters of the state in the erosion prevention and sediment control plans;

(m) Consideration of incorporating erosion prevention and sediment control requirements for contractor-provided waste and borrow areas; and

(n) Provision for periodic review of the Plan, including the opportunity for public input.

7. Interim measures pending approval of the Plan.

(a) Except as this Order may otherwise specifically provide with respect to SR 840 and SR 26, the provisions of this section of the Order (XXXIV.C.7.) shall apply as indicated to each of TDOT's ongoing or future road projects requiring an NPDES permit until such time as the Plan, or any part of the Plan, has been approved by TDEC for implementation. To the extent that activity on any road project has already progressed to a stage that it is not practical to implement any of the interim measures identified below, these provisions shall not apply to that stage of work unless TDEC disagrees, in writing, to the contrary; however, these provisions shall apply to the remaining stages of work. Upon final approval, the Plan shall supersede the interim provisions of this section. To the extent that any part of the Plan has been approved for implementation prior to final approval of the completed Plan, that part of the Plan shall supersede the interim provisions of this section dealing with the same subject matter.

(b) All ongoing and future projects requiring an NPDES permit shall have erosion prevention and sediment control (EPSC) plans. Each EPSC plan shall specify the timing of implementation of the measures vis-à-vis construction of the road project. At a minimum, each EPSC plan shall require (i) that erosion prevention and sediment control measures be in place before clearing,

grubbing, excavation, grading, cutting or filling occurs, except as such work may be necessary to install EPSC measures; and (ii) that the EPSC measures and/or plan shall be modified as necessary so that they are effective at all times throughout the course of the project. In addition, each EPSC plan shall address periods of the year during which clearing, grubbing, excavation, grading, cutting or filling will not occur and limitations on the total area of exposed soil (areas that do not have temporary or permanent stabilization) at any time during construction. These EPSC plans shall be designed or reviewed by an independent consultant (who has CPESC certification or has substantial professional experience in soil erosion and sediment control and has been approved, in writing, by TDEC) who finds that the BMPs therein, if properly implemented, installed and maintained, are designed to manage erosion and prevent sediment accumulation in the waters of the state and comply with the terms of the General Permit. This finding shall be documented as provided in Exhibit A. These EPSC plans and the Exhibit A documentation shall be provided to TDEC with the NPDES permit application or notice of intent.

(c) Each EPSC plan shall be fully and timely implemented and maintained.

(d) TDOT and/or its contractor(s) shall conduct inspections of EPSC measures and potentially impacted streams, at least once per week,

during any construction, and thereafter until the site is permanently stabilized.

(e) Prior to final approval of the Plan, but in any event not more than 180 days after the effective date of this Order, TDOT shall establish additional Quality Assurance/Quality Control Teams, which shall operate independently of TDOT's project supervisors. These teams shall include individuals with environmental protection training or experience and who are approved by TDEC. These teams shall inspect all areas on which clearing, grubbing, excavation, grading, cutting or filling has occurred on projects, including the potentially impacted streams, at least once a month until such areas are permanently stabilized, or as provided in approved interim provisions of the Plan. At sites that TDEC determines to be high quality waters or that have recurring problems, inspections will occur at least twice each month, or as provided in approved interim provisions of the Plan. All inspection reports shall be provided simultaneously to both TDEC and TDOT, or as provided in approved interim provisions of the Plan.

(f) TDOT and/or its contractor(s) shall install rain gauges in accordance with a plan approved by TDEC at all sites where clearing, grubbing, excavation, grading, cutting or filling is being actively performed, or exposed soil has not yet been permanently

stabilized. TDOT and/or its contractor(s) shall check each gauge after every rainfall event occurring on these sites and maintain detailed records of rainfall events including dates, amounts of rainfall, and the approximate duration or starting and ending times. Inspections of EPSC measures shall also be performed before anticipated rainfall events and during or within twenty-four hours after any rainfall event that exceeds 0.5 inches.

(g) TDOT and/or its contractor(s) shall make necessary maintenance and repair on EPSC measures within twenty-four hours after all inspections, unless conditions make a particular activity impracticable (any such conditions shall be documented). TDOT and/or its contractor(s) shall maintain records of inspections and corrective measures, including documenting photographs of representative items requiring correction and the corrective action taken for it.

(h) Any time that TDOT becomes aware that sedimentation is occurring or has occurred in streams impacted by an on-going project, TDOT shall evaluate the EPSC measures employed, repair or replace defective EPSC measures, and install, as applicable, additional or other EPSC measures with the goal of eliminating future sedimentation.

(i) TDOT shall attend all public hearings held by TDEC on permit applications submitted by TDOT under the Act, and be available to respond to questions related to the application, if any.

E. Construction Contract Management

1. After 90 days from the effective date of this Order, each TDOT contract entered into for a project in which a general or individual NPDES permit or an ARAP is required shall include a requirement that the Contractor's (Contractor is defined in §101.17 of TDOT's *Standards of Construction for Road and Bridge Construction*) project supervisor(s) successfully complete TDEC's *Fundamentals of Erosion and Sediment Control*, or the successor or equivalent course from other sources subject to TDEC approval, and such approval is not to be unreasonably withheld.

2. After 90 days from the effective date of this Order, each TDOT contract entered into for a project in which a general or individual NPDES permit or an ARAP is required shall provide that the contractor shall cease work

on part or all of a project when directed to do so by a TDOT project inspector or project supervisor because of inadequate EPSC measures.

3. TDOT shall, within ninety (90) days of the effective date of this Order, file a Notice of Rulemaking Hearing with the Secretary of State, commencing a rulemaking proceeding that will establish a system for contractor certification and contractor suspension relating to the ability of a contractor to bid on highway construction projects involving certain waters of the state (e.g., high quality waters, impaired waters). TDOT shall file the final rules with the Secretary of State, pursuant to T.C.A. § 4-5-206, no later than three hundred sixty-five (365) days after the filing of the Notice of Rulemaking Hearing, except with the consent of TDEC for good cause.

4. After 90 days from the effective date of this Order, each TDOT contract entered into for a project in which a general or individual NPDES permit or an ARAP is required shall include disincentives for environmental violations similar to the current ones for late completion. If TDEC issues a Notice of Violation to a TDOT Contractor for work on or related to a TDOT road project, TDOT shall be sent a copy by TDEC.

F. Education and Certification

1. Within one year of the effective date of this Consent Order, TDOT shall have two or more staff positions filled in its office that have expertise in, and are involved in the design or review of EPSC plans. Minimum qualifications for these positions shall include a Bachelors level degree in engineering, soil science, or geology or a related field, and four years

professional experience with prevention of soil erosion and sediment control. These people shall have also successfully completed TDEC's *Design of Vegetative and Structural Measures for Erosion and Sediment Control* course, or its successor or equivalent course from other sources subject to TDEC approval. These people shall also obtain the CPESC certification as soon as possible after they have the required experience. The documentation of all such experience and certification shall be submitted to TDEC.

2. TDOT project inspectors and project supervisors who are responsible for implementation and maintenance of EPSC plans shall successfully complete TDEC's *Fundamentals of Erosion Prevention and Sediment Control* course, and TDOT's project supervisors shall also successfully complete TDEC's *Design of Vegetative and Structural Measures for Erosion and Sediment Control* course, or their successors or equivalent courses from other sources subject to TDEC approval, within eighteen (18) months of the effective date of this Consent Order.