



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

1. DEFINITIONS

“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 following NOAA National Weather Service Atlas 14 data for Tennessee:
http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. Other data sources may be acceptable with prior written approval by TDEC Division of Water Resources.

“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.

“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” or **“Water Quality Riparian Buffer”** is a strip of dense undisturbed perennial native vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands and seeps. Buffer zones are established for the purposes of slowing water runoff, enhancing water infiltration and minimizing the risk of any potential sediments, nutrients or other pollutants from leaving the upland area and reaching surface waters. Buffer zones are most effective when stormwater runoff is flowing into and through the buffer zone as shallow sheet

⁷ The EPA considers inventorying a site’s natural features is a technique called fingerprinting. More info can be found in EPA’s document - EPA’s Developing Your SWPPP – A Guide for Construction Sites (EPA-833-R-06-004 May 2007).

flow, rather than in concentrated form such as in channels, gullies, or [wet weather conveyances](#). Therefore, it is critical that the design of any development include management practices, to the maximum extent practical, that will result in stormwater runoff flowing into and through the buffer zone as shallow sheet flow. Buffer zones are established for the primary purpose of protecting water quality and maintaining a healthy aquatic ecosystem in receiving waters.

“Clearing” in the definition of discharges associated with construction activity, typically 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; for instance, clearing forested land in order to convert forestland to pasture for wildlife management purposes. 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 of construction” The initial disturbance of soils associated with clearing, grading, excavating or other construction activities.

“Common plan of development or sale” is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design) or physical demarcation (including boundary signs, lot stakes, surveyor markings) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different [operators](#).

“Control measure” As used in this permit, refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to [waters of the state](#).

“CWA” means the Clean Water Act of 1977 or the Federal Water Pollution Control Act ([33 U.S.C. 1251](#), et seq.)

“Department” means the Department of Environment and Conservation.

“Director” means the director, or authorized representative, of the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation.

“Discharge of stormwater associated with construction activity” As used in this permit, refers to stormwater point source discharges from areas where soil disturbing activities (e.g., clearing, grading, excavation), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material) are located.

“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, 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 and water utilities, stormwater drainage structures, etc., to make the property marketable.

“Division” means the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation.

“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.

“Final Stabilization” means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- a) 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.
- b) 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.
- c) For construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.

“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.

“Inspector” An inspector is a person with following qualifications:

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

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

- a) Oversee the requirements of other construction-related permits, such as an [Aquatic Resources Alteration Permit](#) (ARAP) or Corps of Engineers permit for construction activities in or around [waters of the state](#).
- b) Update field [SWPPPs](#).

- c) Conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed.
- d) Inform the permit holder of activities that may be necessary to gain or remain in compliance with the CGP and other environmental permits.

“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,” as used in the context of discharges or withdrawals – Changes in parameters of waters that are of sufficient magnitude to be detectable by the best available instrumentation or laboratory analyses.

(Note: Because analytical techniques change, the Department may consider either the most sensitive detection method needed to comply with state standards or any biological, chemical, physical, or analytical method, conducted in accordance with U.S. EPA approved methods as identified in 40 C.F.R. part 136. Consistent with T.C.A. § 69-3-108, for scenarios involving cumulative, non-measurable activities or parameters that are managed by a narrative criterion, the Department will use mathematical models and ecological indices to ensure no degradation will result from the authorization of such activities, consistent with the state’s mixing zone policy.)

“Monthly” refers to calendar months.

“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.

“NOI” means notice of intent to be covered by this permit (see Part 2 above)

“NOT” means notice of termination (see Part 8 above).

“Operator” for the purpose of this permit and in the context of stormwater associated with construction activity, means any person associated with a construction project 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, and is considered the primary permittee.
- 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.”

“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.

“Qualifying State, Tribal, or local erosion and sediment control program” is one that includes, as defined in [40 CFR 122.44\(s\)](#):

- a) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.
- b) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
- c) Requirements for construction site operators to develop and implement a stormwater pollution prevention plan. A stormwater pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures and identification of non-stormwater discharges.
- d) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

“Quality Assurance Site Assessment” means a documented site inspection to verify the functionality and performance of the [SWPPP](#) and for determining if construction, operation and maintenance accurately comply with permit requirements as presented in the narrative, engineering specifications, maps, plans, drawings and details for EPSC measures and stormwater management.

“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” 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” 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” 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” means the action or process of forming or depositing sediment.

“Significant contributor of pollutants to waters of the state” means any discharge containing pollutants that are reasonably expected to cause or contribute to a violation of a water quality criteria or receiving stream designated uses.

“Soil” 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” 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” means rainfall runoff, snow melt runoff, and surface runoff and drainage.

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.

“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.

“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).

“Stormwater Pollution Prevention Plan” (SWPPP) means a written plan required by this permit that includes a site map, a description of construction activities that could introduce pollutants to stormwater runoff and a description of measures or practices to control these pollutants. It must be prepared and approved 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](#). 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](#). It also aids in the development of SWPPPs and other reports, plans or specifications required when participating in Tennessee's water quality regulations.

“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.

“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.

“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:

$$\text{TMDL} = \text{sum of non point sources (LA)} + \text{sum of point sources (WLA)} + \text{margin of safety}$$

A list of completed TMDLs that have been approved by EPA can be found at our web site: <http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program>.

“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” is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.

“Waste site” 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”** 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.

“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, pollutants of concern include, but are not limited to: siltation (silt/sediment) and/or habitat alterations due to in-channel erosion. 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 (<http://tdeconline.tn.gov/dwrwqa/>), 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 <http://tn.gov/environment/article/wr-wq- water-quality-reports-publications>.

“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\(3\)](#)).

2. LIST OF ACRONYMS

ARAP	Aquatic Resource Alteration Permit
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGP	Construction General Permit
CWA	Clean Water Act
EFO	Environmental Field Office
EPA	(U.S.) Environmental Protection Agency
EPSC	Erosion Prevention and Sediment Control
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Coverage
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
ONRW	Outstanding National Resource Waters
POTW	Publicly Owned Treatment Works
QLP	Qualifying Local Program
SWPPP	Stormwater Pollution Prevention Plan
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TMDL	Total Maximum Daily Load
TMSP	Tennessee Multi-Sector General Permit for the Discharge of Stormwater from an Industrial Activity
TVA	Tennessee Valley Authority
TWQCA	Tennessee Water Quality Control Act
UIC	Underground Injection Control
USGS	United States Geological Survey