DALLAS COUNTY, TEXAS

Unincorporated Urbanized Areas

TPDES General Permit # TXR040000 2019 through 2024

Storm Water Management Program (SWMP) Five (5) Year Comprehensive Plan

July 2, 2019 Revised October 8, 2021 Dallas County TPDES Management Program

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Note:

Detailed information about the Texas Commission on Environmental Quality (TCEQ) storm water permit rule, executive decision, and fact sheets are available at the TCEQ website, <u>www.tceq.state.tx.us</u>, and at the Dallas County Public Works Department offices.

Section I – Overview, Definitions, and Acronyms

I.1. Storm Water Rule Overview

Phase 1 of the U.S. Environmental Protection Agency's (EPA) municipal storm water program began in 1990 under the authority of the Federal Clean Water Act (CWA). Phase I relies on the National Pollutant Discharge Elimination System (NPDES) permit coverage to address pollutants from storm water runoff and dry weather discharges. Phase I permits are required for large and medium Municipal Separate Storm Sewer Systems (MS4's) serving populations of 100,000 or greater.

The Storm Water Phase 2 Final Rule (promulgated December 8, 1999) was the next step in the EPA's efforts to protect the nation's water resources from polluted storm water runoff and dry weather discharges into storm drain / sewer systems. The Phase 2 program requires local governments to implement programs and practices to control water pollution to the "Maximum Extent Practicable" (MEP) in urbanized areas of small MS4's (population less than 100,000).

The program requires Phase 2 local governments to obtain a permit that includes "Minimum Control Measures" (MCM's) that must be implemented for coverage. The six (6) MCM's include: public education and outreach, public involvement / participation, illicit discharge detection and elimination, construction site storm water runoff control, post-construction storm water management in new development and redevelopment, and pollution prevention / good housekeeping for municipal operations. There are significant penalties for non-compliance with federal permit provisions.

The Texas Commission on Environmental Quality (TCEQ) was authorized by the EPA to issue and enforce the Texas Pollutant Discharge Elimination System (TPDES) Phase 1 and 2 Storm Water permits in lieu of the federal NPDES permits. Effective 08/13/2007 TCEQ Commissioners approved the TPDES General permit to authorize the discharge of storm water from regulated Phase 2 MS4's.

The application must include a Notice of Intent (NOI) for coverage and a Storm Water Management Program (SWMP). The NOI is a document that provides the TCEQ with an official notification to seek permit coverage and identifies legally responsible parties for permit enforcement. The SWMP describes what actions are to be implemented by the permittee to address the required elements of a storm water program. The SWMP describes in detail which Best Management Practices (BMP's) will be utilized through implementation of the Minimum Control Measures (MCM's) to meet permit requirements. The current permit term covers a five (5) year period from January 24, 2019 to January 24, 2024. The permit will be renewed at five (5) year intervals which may require changes to the SWMP for future permit approvals.

I.2. Definitions

<u>Best Management Practices (BMPs)</u>-Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills, waste disposal, or drainage from raw material storage areas.

<u>Classified Segment</u>- Refers to a water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 TAC § 307.10.

<u>Clean Water Act (CWA)</u>-The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

<u>Conveyance</u>- Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport storm water runoff.

<u>Discharge</u>- When used without a qualifier, refers to the discharge of storm water runoff or certain non-storm water discharges as allowed under the authorization of this general permit.

<u>Hyper-chlorinated Water</u>- Water resulting from hyper chlorination of waterlines or vessels, with chlorine concentration greater than 10 milligrams per liter (mg/l).

<u>Illicit Connection</u>- Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

<u>Illicit Discharge</u>- Any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency firefighting activities.

<u>Impaired Water</u>-A surface water body that is identified as impaired on the latest approved CWA 303(d) list or waters with an EPA approved or established TMDL that are found on the latest EPA approved *Texas Integrated Report of Surface Water Quality of CWA sections 305(b) and 303(d)* which lists the category 4 and 5 waterbodies.

<u>Implementation Plan</u> (I-Plan)-A detailed plan of action that describes the measures or activities necessary to achieve the pollutant reductions identified in the total maximum daily load (TMDL).

<u>Maximum Extent Practicable (MEP)</u>-The technology-based discharge standard for municipal separate storm sewer system (MS4s) to reduce pollutants in stormwater discharges that was established by CWA §402(p). A discussion of MEP as it applies to small MS4s is found at 40 CFR §122.34. <u>MS4 Operator</u>- For the purpose of this permit, the public entity or entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

<u>Municipal Separate Storm Sewer System (MS4)</u>- A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, 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 the CWA §208 that discharges to surface water in the State: (b) That is designed or used for collecting or conveying stormwater; (c) That is not a combined sewer; and (d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR §122.2; and (e) Which was not previously authorized under a NPDES or TPDES individual permit as a medium or large MS4, as defined at 40 CFR §§ 122.26(b)(4) and (b)(7).

<u>Non-Traditional Small MS4</u>-A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4's include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons, and universities.

<u>Outfall</u>- A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewer system, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right of way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

<u>Small Municipal Separate Storm Sewer System (MS4)</u>- A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, 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 the CWA §208: (b) Designed or used for collecting or conveying stormwater; (c) Which is not a combined sewer; and (d) Which is not part of a (POTW) as defined in 40 CFR §122.2; and (e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or Texas Pollution Discharge Elimination System (TPDES) individual permit as a medium or large

municipal separate storm sewer system, as defined in 40 CFR §§122.26(b)(4) and (b)(7). This term includes systems similar to separate storm sewer systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discreet areas, such as individual buildings. For the purpose of this permit, a very discreet system also includes storm drains associated with certain municipal office and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to an MS4 that is also operated by that public entity.

<u>Stormwater Management Program (SWMP)</u>-a comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

<u>Surface Water in the State</u> - Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

<u>Total Maximum Daily Load (TMDL)</u>-The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

<u>Urbanized Area (UA)</u>- An area of high population density that may include multiple small MS4s as defined and used by the U.S. Census Bureau in the 2000 and the 2010 Decennial census.

<u>Unincorporated Urbanized Area (UUA)</u>- An urbanized area within the unincorporated territory of Dallas County.

<u>Waters of the U.S.</u>-(According to 40 CFR§122.2) Waters of the United States or waters of the U.S. means: (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) all interstate waters, including interstate wetlands; (c) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industrial purposes by industries in interstate commerce; (d) all impoundments of waters otherwise defined as waters of the United States under this definition; (e) tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) the territorial sea; and (g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the U.S. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

I.3. Acronyms

BMP's - Best Management Practices CSN – Construction Site Notice CWA - Clean Water Act DCFM - Dallas County Fire Marshal DCHHS - Dallas County Health and Human Services DCPW - Dallas County Public Works DCP&D - Dallas County Planning and Development DCR&B – Dallas County Road and Bridge Districts EHD - Environmental Health Division EPA – Environmental Protection Agency ETJ – Extra Territorial Jurisdiction FEMA - Federal Emergency Management Agency GIS – Geographic Information System HAZ MAT – Hazardous Materials, Substance, and / or Waste, etc. **IP** - Implementation Plan iSWM - integrated Storm Water Management MCM – Minimum Control Measures MEP - Maximum Extent Practicable MPO – Metropolitan Planning Organization MS4 – Municipal Separate Storm Sewer System NCTCOG – North Central Texas Council of Governments NFIP -- National Flood Insurance Program NOI – Notice of Intent **OSSF** – On Site Sewage Facilities POTW - Publicly Owned Treatment Works RDI – Regionally Developed Initiative SWMP – Storm Water Management Program SW3P or SWPPP – Storm Water Pollution Prevention Plan TCEQ – Texas Commission on Environmental Quality TMDL - Total Maximum Daily Load **TPDES - Texas Pollutant Discharge Elimination System** TRC CDC - Trinity River Corridor Corridor Development Certificate UA- Urbanized Area UUA – Unincorporated Urbanized Area USACE – U.S. Army Corps of Engineers UTRFS - Upper Trinity River Feasibility Study

Section II – Permit Applicability and Coverage

II.1. Dallas County as a Category of Regulated MS-4

Dallas County falls in the Level 2 category based on Small MS-4 - General Permit requirements. The definition in TPDES General Permit TXR040000 is as follows: "Level 2 are operators of traditional small MS-4 that serve a population of at least 10,000 but less than 40,000 within an UA. This category also includes all non-traditional small MS-4 s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the UA, unless the non-traditional MS-4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served".

II.2. Urbanized Area

The TPDES permit requirements apply only to the portions of the Unincorporated Dallas County that are identified as Urbanized Areas (UUA's for Unincorporated Urbanized Areas). There are approximately fifty eight (58) small non-contiguous Urbanized Areas in the Unincorporated Dallas County. The areas identified were based upon data in the 2010 U.S. Census Map. The map may be viewed at the <u>Dallas County Public Works</u> Stormwater Management Website.

The Dallas County SWMP addresses permit required BMP's only in the Unincorporated Urbanized Area portions of the County; however, certain elements of the SWMP may be implemented by the permittee within the entire Unincorporated Area. One example is Public Education and Outreach which may be implemented County–wide within the Unincorporated Area, such as social media broadcasts or websites associated with the North Central Texas Council of Governments (NCTCOG).

II.3. Regulatory Mechanism Restrictions on Texas Counties

The State of Texas is somewhat unique in the U.S. regarding the restrictions it places upon Counties. Basically, the Texas Constitution and State statutes do not grant Texas Counties the ability to create and enforce ordinances such as the ones Cities (Home Rule) are allowed to create in order to meet the TPDES permit requirements. To address this restriction, TCEQ rules contain text stating enactment or enforcement will be to "the extent allowable under state and local law". This statement is cited several times in Part III, SWMP development and implementation, of the general permit. Dallas County has addressed the various elements in the General permit SWMP requirements by incorporating TDPES requirements into the Dallas County Subdivision Regulations Sections I and J.

Section III – Storm Water Management Program (SWMP)

Overview of Dallas County's SWMP

To the extent allowable under state and local law (see II.3 aforementioned), Dallas County's SWMP was developed and will be implemented according to requirements of Part III of the TPDES General permit TXR040000. The January 24, 2019 TXR040000 replaces the previous TXR040000 issued December 13, 2013, for discharges of storm water to surface water in the State. This SWMP was developed to prevent pollution in storm water drainage systems to the Maximum Extent Practicable. During the five (5) year permit term Best Management Practices (BMP's) will be phased in that meet or exceed Minimum Control Measures (MCM's).

The TXR04000 SWMP addresses Minimum Control Measures (MCM's) required by TCEQ. The MCM's are:

- 1. Public Education and Outreach
- 2. Illicit Discharge Detection and Elimination (IDDE)
- 3. Construction Site Stormwater Runoff Control
- 4. Post-Construction Stormwater Management in New Development and Redevelopment
- 5. Pollution Prevention and Good Housekeeping for Municipal Operations
- 6. Industrial Stormwater Sources (Not Applicable only for level 3 & 4 MS4's)
- 7. Authorization for Construction Activities where the MS-4 is the Site Operator (Not Applicable)

MCM's will be implemented in the Unincorporated Urbanized Areas (UUA's) of Dallas County and may be voluntarily implemented in other Unincorporated Areas if warranted by special conditions such as participation in Regionally Developed Initiatives (RDI's). MCM's will be evaluated based upon accomplishment of each MCM's BMP activities.

The Dallas County storm water staff from two (2) departments shall monitor current and future MCM activities and are identified in each section. Those departments are the Environmental Health Division (EHD) of the Dallas County Health and Human Services (DCHHS), and Dallas County Public Works (DCPW). EHD monitors MCM #2 - Illicit Discharge Detection and Elimination (IDDE) such as surveillance of the following Identified Illicit Discharges in the Unincorporated Areas:

- 1. Improper sewage disposable (domestic / industrial)
- 2. Illegal solid waste disposal (commercial / non-commercial)
- 3. Liquid waste disposal (commercial / non-commercial)
- 4. Hazardous material disposal (commercial)
- 5. Biological waste

The above referenced IDDE help reduce the Total Maximum Daily Load (TMDL) in the impaired water bodies in Dallas County.

Dallas County Public Works Department (DCPW) monitors MCM #1, 3, 4 and 5 being Public Education and Outreach, Construction Site Storm Water Runoff Control, Post-Construction Storm Water Management in New Development and Redevelopment, and Pollution Prevention / Good Housekeeping for Municipal Operations, respectively. Dallas County Road and Bridge Districts forces (DCR&B) are also involved in complying with MCM's #3, 4, and 5 and achieve the goals of Best Management Practices in meeting MCM #5 - Pollution Prevention / Good Housekeeping for Municipal Operations.

Dallas County will not incorporate MCM #6 as it is applicable to Level 3 & 4 Categories of Regulated small MS-4. In addition, Dallas County is not a Site Operator for Construction Activities as all the County facilities fall under cities that have either a Phase I or Phase 2 permit and therefore are covered under the respective city permit for optional MCM #7. Since MCM #7 is optional, and Dallas County has limited authority, Dallas County has elected not to incorporate that minimum control measure.

The Dallas County Planning and Development (DCP&D) staff focuses on County-wide programs for household hazardous waste and the collection of home chemicals thereby making a significant contribution on MCM # 1, 2, and 3, Public Education and Outreach, Public Involvement / Participation, and Illicit Discharge Detection and Elimination (IDDE), respectively. The Dallas County Fire Marshal's (DCFM) primary concerns are Life Safety specializing in the stabilization of Hazardous Materials, and is also in a supporting role on aforementioned related activities.

Environmental Health Division (EHD) contact or future replacement:

Rudy Phillips, R.S., Assistant Director Environmental Health Services Dallas County Health and Human Services 2377 N. Stemmons Freeway, Suite 609 Dallas, Texas 75207 Tele: 214-819-2113 Fax: 214-819-2868 Email: <u>Rudy.Phillips@dallascounty.org</u>

Dallas County Public Works (DCPW) contact or future replacement:

Alberta Blair, P.E., Public Works Director Dallas County Public Works Department 411 Elm Street, 4th Floor Dallas, Texas 75202 Tel: 214-653-7151 Fax: 214-653-6445 Email: <u>Alberta.Blair@dallascounty.org</u>

Legal Authority (Contrasts with Cities)

Unlike Cities, Counties are not authorized by the State of Texas Constitution or State Statutes to enact the ordinances and implement all of the regulatory requirements that Phase 2 (small MS4) requires. Dallas County implements BMP's "to the extent allowable under state and local law" in the appropriate MCM sections. Dallas County has incorporated TDPES requirements into the Dallas County Subdivision Regulations.

Ditch Drainage System (Contrast with Cities)

Unlike Cities, Dallas County's storm drainage / sewer system is not a traditional underground enclosed storm sewer system (i.e. curb inlets, underground pipes, and outfall discharges from pipes). Instead, Dallas County's storm drainage system is mostly comprised of roadway unlined (pervious) ditches.

Large Area and Long Distances between Non-Contiguous Urbanized Areas (Contrast with Cities)

Unlike Cities, Dallas County has approximately fifty eight (58) small non-contiguous Unincorporated Urbanized Areas (UUA's). They constitute approximately six (7.5) square miles of the seventy-eight (78) square miles of the County Unincorporated Areas (about 10% of the total area). Long travel distances, often exceeding those found in Large MS4 Cities will be required by Small MS4 County staff to implement daily activities associated with this program. This extra challenge is another element to consider when comparing the SWMP's of Counties to Cities in the area.

Annexation and De-annexation (Contrast with Cities)

Unlike Cities, Counties will be losing land areas when City annexation occurs. Dallas County will only add Urbanized Areas when population densities increase within the existing Unincorporated Areas, as designated by the U.S. Census Bureau on a ten (10) year cycle (i.e. next one is 2020), or when Cities de-annex land.

Participants in developing / implementing Dallas County's SWMP

Dallas County's SWMP was developed by County staff with extensive years of related storm water experience. Responsibilities for implementing the SWMP are primarily divided between the Environmental Health Division (EHD) of the Dallas County Health and Human Services (DCHHS), and the Dallas County Public Works Department (DCPW). Each MCM contains the respective County Department primarily responsible for that specific MCM.

Rationale Statement for Dallas County's SWMP

During the development of Dallas County's SWMP, County staff considered BMP's that would protect water quality, comply with General Permit TXR040000, meet the

Maximum Extent Practicable (MEP), and ensure program costs that would not create undue hardship on County residents and businesses. Established Phase 2 storm water programs from other MS4 operators were reviewed and evaluated.

Regionally Developed Initiatives (RDI's) regarding BMP's from the U.S. EPA NPDES National Menu of Stormwater Best Management Practices were also reviewed and evaluated. A variety of BMP's for each MCM were considered and compared. BMP's were ultimately selected based on an evaluation of overall effectiveness, affordability, and suitability of the MS4 system for the Dallas County Unincorporated Areas. The program will allow continual adjustment and refinement through County implementation, "hands on" experience, and feedback from various sectors of the Unincorporated Area population.

Dallas County has also benefited from maintaining an effective partnership with the NCTCOG, the local Metropolitan Planning Organization (MPO), and an established and recognized leader in creating Regional Developed Initiatives (RDI's) in storm water management.

Endangered Species

Dallas County acknowledges the presence of the below listed species in the Trinity River Basin and Dallas County:

Species	Waterbody and County species are in
Les tern (Sterna antillarum)	Upper Trinity River and Southside Wastewater Treatment Plant Pond and Dallas County

Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements

The original TXR40000 Permit had only 23 UUAs. That number has since increased to 58. Due to the ever-changing environmental landscape affected by municipal annexations and/or localized exercises of ETJ management, controls and responsibilities, the areas administered the County has changed accordingly. Today several impaired water bodies in Dallas County unincorporated urbanized areas are in the watershed of an approved TMDL drainage area. Dallas County staff will work to implement the region wide "Implementation Plan for the Seventeen Total Maximum Daily Loads for Bacteria in the Greater Trinity River Region" prepared by the Environment and Development Department of the North Central Texas Council of Governments in 2013.

An Implementation Plan ("IP"), which includes the action items necessary to identify and address a strategic path to address TMDLs has been established as follows:

 A Benchmark is established for aggregate WLAsw for TDML as follows: Segment ID 0841_01: 589.6 Billion MPN/day Segment ID 0841_02: 1.920 Billion MPN/day Segment ID 0805_04: 1,480 Billion MPN/day Segment ID 0805_03: 2,123 Billion MPN/day

- A target map using GIS data will show the impaired water bodies according to the latest Texas 303(d) list. The water bodies will be overlaid with drainage basins and UUA's to help users identify affected areas.
- County staff and/or consultants will embark on physical visits to the identified areas of concern (1) to determine the existing uses, i.e. developments relating to residential, agricultural and/or industrial uses, and (2) the impact of storm water run-off from such developments to impaired water bodies.
- County will collaborate, and engage in partnering opportunities, with other MS-4 stakeholders with the primary goal of establishing cooperative plans of action which determine benchmarks to address the adverse impacts on the impaired water body.

Section III. MCM 1 - Public Education, Outreach and Involvement

Dallas County will expand upon its current efforts to ensure that the public within the Unincorporated Urbanized Areas is informed about the impacts that storm water runoff can have on water quality, the hazards associated with illegal discharges, and improper disposal of waste. This will be accomplished by providing informational materials in multiple formats and media from various sources including Dallas County, the Dallas County branch of the Texas AgriLife Extension, North Central Texas Council of Governments (NCTCOG), and other resources may be used to further develop and distribute public education and outreach material. If practical, Dallas County will work with NCTCOG and other local governments to develop suitable community materials for social media posting and/or distribution at Dallas County facilities. The community to be addressed will consist of residents, Dallas County employees, businesses, commercial/industrial facilities, and construction site personnel in the Unincorporated Urbanized Areas of Dallas County.

1(a) – <u>Dallas County Websites</u>

Post storm water information on the County Environmental Health Departmental website,

www.dallascounty.org/department/hhservices/services/environmental/env_services.html

Household Hazard Waste collection information on the Planning and Development Departmental website,

http://www.dallascounty.org/department/plandev/hhw_intro.htm and other storm water information on the Public Works Departmental website,

https://www.dallascounty.org/departments/pubworks/ms4-swmp.php

Dallas County will also provide links to the TCEQ, EPA, and NCTCOG storm water websites.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Update links and educational literature which can be viewed at DCPW SWM website.	Post at least one new stormwater educational literature annually. Verify availability of information on website.	December 31, 2019
Two	Update links and educational literature which can be viewed at DCPW SWM website.	Post at least one new stormwater educational literature annually. Verify availability of information on website.	December 31, 2020
Three	Update links and educational literature which can be viewed at DCPW SWM website.	Post at least one new stormwater educational literature annually. Verify availability of information on website.	December 31, 2021
Four	Post links and educational literature which can be viewed at DCPW SWM website.	Post at least one new stormwater educational literature annually. Verify availability of information on website.	December 31, 2022
Five	Post links and educational literature which can be viewed at DCPW SWM website.	Post at least one new stormwater educational literature annually. Verify availability of information on website.	December 31, 2023

1(b) – <u>March is Texas SmartScape Month</u>

This is a coordinated annual activity of local governments jointly conducting public education and awareness events to promote less pesticide and fertilizer use associated with landscapes. Additionally, this NCTCOG RDI promotes water conservation which produces less runoff and thereby reduces pollution of waterways. Dallas County will participate in this annual event via the Dallas County website by providing a link to the Texas SmartScape website, <u>www.txsmartscape.com</u> that is currently maintained by the NCTCOG.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	At least one (1) website posting or newspaper article will be published to support "March is Texas SmartScape Month	Post at least 1 website posting or publish at least 1 newspaper article linked to stormwater annually.	February 20, 2019
Two	At least one (1) website posting or newspaper article will be published to support "March is Texas SmartScape Month	Post at least 1 website posting or publish at least 1 newspaper article linked to stormwater annually.	February 20, 2020
Three	At least one (1) website posting or newspaper	Post at least 1 website posting or publish at	February 20, 2021

	article will be published to support "March is Texas SmartScape Month	least 1 newspaper article linked to stormwater annually.	
Four	Publish one website posting or newspaper article to support "March is Texas SmartScape Month	Post at least 1 website posting or publish at least 1 newspaper article linked to stormwater annually.	February 20, 2022
Five	Publish one website posting or newspaper article to support "March is Texas SmartScape Month	Post at least 1 website posting or publish at least 1 newspaper article linked to stormwater annually.	February 20, 2023

1(c) – Water Wise Earth KindTM Demonstration Garden

With assistance from the Dallas County AgriLife Extension, a parking lot at the Dallas County District 1 Offices was transformed into a Water Wise Earth KindTM demonstration garden in Dallas County. The garden features drought resistant vegetation that rarely needs any fertilizer or pesticides. Public tours of this garden are arranged by the Master Gardener office of the Dallas County AgriLife Extension.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Support development of	Participate in one	December 31, 2019
	Demonstration Gardens	Demonstration Garden	
		Tour and update website	
Two	Support development of	Participate in one	December 31, 2020
	Demonstration Gardens	Demonstration Garden	
		Tour and update website	
Three	Support development of	Participate in one	December 31, 2021
	Demonstration Gardens	Demonstration Garden	
		Tour and update website	
Four	Support development of	Organize one	December 31, 2022
	Demonstration Gardens	Demonstration Garden	
		Tour and publish related	
		educational material	
Five	Support development of	Organize one	December 31, 2023
	Demonstration Gardens	Demonstration Garden	
		Tour and publish related	
		educational material	

1(d) – <u>Texas AgriLife Extension</u>

The Texas AgriLife Extension conducts a variety of environmental educational activities (speeches, TV shows, radio programs and newspaper stories, training, etc.) in Dallas County. Storm water staff will coordinate with the Dallas County AgriLife Extension staff (which will include the volunteer group Dallas County Master Gardeners and Dallas County Master Naturalists) to report any annual educational activities that are storm water related in Dallas County. The AgriLife Extension staff coordinates with many other volunteer groups (i.e. 4-H groups) and will be a good resource to reach the community.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Coordinate with AgriLife	Meet annually with	December 31, 2019
	Director Annually	AgriLife Director and post	
		annual report on the Dallas	
		County website	
Two	Coordinate with AgriLife	Meet annually with	December 31, 2020
	Director Annually	AgriLife Director and post	
		annual report on the Dallas	
		County website	
Three	Coordinate with AgriLife	Meet annually with	December 31, 2021
	Director Annually	AgriLife Director and post	
		annual report on the Dallas	
		County website	
Four	Coordinate with AgriLife	Meet annually with	December 31, 2022
	Director Annually	AgriLife Director and post	
		annual report on the Dallas	
		County website	
Five	Coordinate with AgriLife	Meet annually with	December 31, 2023
	Director Annually	AgriLife Director and post	
		annual report on the Dallas	
		County website	

1(e) – <u>NCTCOG Participation</u>

Participate in the NCTCOG's Storm Water Education Task Force and the Regional Storm Water Management Coordinating Council, in order to develop storm water educational materials which can be used by MS4s in the North Central Texas region. Any materials developed by the Taskforce or Council will be reviewed by Dallas County staff and may be selected for use during appropriate times during the permit term. See (a) Educational Materials and Distribution.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Participate in NCTCOG	Pay Annual Dues and	December 31, 2019
	Storm Water groups.	Attend at least one	
		NCTCOG Storm Water	
		group meeting.	
Two	Participate in NCTCOG	Pay Annual Dues and	December 31, 2020
	Storm Water groups.	Attend at least one	
		NCTCOG Storm Water	
		group meeting.	
Three	Participate in NCTCOG	Pay Annual Dues and	December 31, 2021
	Storm Water groups.	Attend at least one	
		NCTCOG Storm Water	
		group meeting.	
Four	Participate in NCTCOG	Pay Annual Dues and	December 31, 2022
	Storm Water groups.	Attend at least one	
		NCTCOG Storm Water	
		group meeting.	
Five	Participate in NCTCOG	Pay Annual Dues and	December 31, 2023
	Storm Water groups.	Attend at least one	
		NCTCOG Storm Water	
		group meeting.	

1(f) – <u>Trinity River Common Vision Program</u>

Since 1990 Dallas County has participated regionally on the "Trinity River Common Vision" Program which includes continued work on the Upper Trinity River Feasibility Study (UTRFS) and Common Vision activities. Program elements include integration of the digital ortho-photography and topography, partnership with the U.S. Army Corps of Engineers (USACE), and sponsorship of Federal Emergency Management Agency's (FEMA) National Flood Insurance Program (NFIP) training. Public education and outreach are achieved regionally by utilizing the NCTCOG website for informational support and access to detailed maps. Coordination meetings with Program updates including roundtable discussions for the multiple municipalities, counties, and governmental agencies are facilitated by the NCTCOG quarterly. Dallas County's annual participation costs are approximately \$5,000.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Participate in Trinity River	Attend 75% of Trinity	December 31, 2019
	Common Vision Program	River Common Vision	
	_	meetings and pay annual	
		dues.	
Two	Participate in Trinity River	Attend 75% of Trinity	December 31, 2020
	Common Vision Program	River Common Vision	
		meetings and pay annual	
		dues.	
Three	Participate in Trinity River	Attend 75% of Trinity	December 31, 2021
	Common Vision Program	River Common Vision	
		meetings and pay annual	
		dues.	
Four	Participate in Trinity River	Attend 75% of Trinity	December 31, 2022
	Common Vision Program	River Common Vision	
		meetings and pay annual	
		dues.	
Five	Participate in Trinity River	Attend 75% of Trinity	December 31, 2023
	Common Vision Program	River Common Vision	
		meetings and pay annual	
		dues.	

1(g) – <u>Education for Homeowners / Proper Disposal of Household Hazardous</u> Wastes: Home Chemical Collection Center (HC3)

The Dallas County Home Chemical Collection Center (HC3) has been in full operation in its present facility since 2002. The property was initially provided by Dallas County and is funded by various municipalities, programs, and grants. This County facility is available year round for residents of the Unincorporated Urbanized Areas (UUA's) for disposal and collection of hazardous household chemicals, fluids, supplies, products, fluorescent light tubes, batteries, computers, cellular phones, etc. Additionally, there is a mobile collection event in the City of Dallas / South Dallas County at least once a year.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Maintain HC3 Collection	Report 100% of collected	December 31, 2019
	Centers	materials in Annual Report	
Two	Maintain HC3 Collection	Report 100% of collected	December 31, 2020
	Centers	materials in Annual Report	
Three	Maintain HC3 Collection	Host 1 annual HC3 mobile	December 31, 2021
	Centers	collection event.	
Four	Maintain HC3 Collection	Host 1 annual HC3 mobile	December 31, 2022
	Centers	collection event.	
Five	Maintain HC3 Collection	Host 1 annual HC3 mobile	December 31, 2023
	Centers	collection event.	

1(h) – <u>Pet Waste (TMDL)</u>

Dallas County Environmental Health Department website and the Dallas County Public Works Website will include information on proper methods of Pet Waste Disposal.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Post Pet Waste info on	Post Pet Waste info at	December 31, 2019
	County Website	least once per year on	
		County Website annually	
		Verify availability online	
Two	Post Pet Waste info on	Post Pet Waste info at	December 31, 2020
	County Website	least once per year on	
		County Website annually	
		Verify availability online	
Three	Post Pet Waste info on	Post Pet Waste info at	December 31, 2021
	County Website	least once per year on	
		County Website annually	
		Verify availability online	
Four	Post Pet Waste info on	Post link to NCTCOG Pet	December 31, 2022
	County Website	Calendar information on	
		County website	
Five	Post Pet Waste info on	Post link to NCTCOG Pet	December 31, 2023
	County Website	Calendar information on	
		County website	

1(i) – <u>Targeted Bacteria Pollutant Reduction(TMDL)</u>

Dallas County Environmental Health Department conducts an educational campaign to educate employees and citizens in the reduction and abatement of targeted bacteria, E-coli, in the major rivers and tributaries within the urbanized unincorporated area of Dallas County. Staff provides online educational materials explaining the negative effects of E-coli in the waterways.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Include E-coli info in online materials	Post E-coli facts online materials Annually. Verify online availability	December 31, 2019
Two	Include E-coli info in online materials	Post E-coli facts online materials Annually. Verify online availability	December 31, 2020
Three	Include E-coli info in Post materials	Post E-coli facts online materials Annually. Verify online availability	December 31, 2021
Four	Post E-coli info in online materials	Provide one link to E-coli information on County website	December 31, 2022
Five	Post E-coli info in online materials	Provide one link to E-coli information on County website	December 31, 2023

1(j) – <u>Public Notice for Meetings</u>

Both Dallas County Commissioner's Court and NCTCOG meetings are subject to state/local public notice requirements, which meet TCEQ minimum requirements for public involvement/participation. A briefing and court order will be officially published by the County regarding the Dallas County TXR040000.

BMP	Measurable Goals	Deadline/Frequency
Comply with public notice requirements (pending TCEQ approval of SWMP)	Advertise and hold public meeting for citizens wishing to participate	December 31, 2023

1(k) – <u>Posting SWMP on Website</u>

After internal review by Dallas County Officials and approval by the Commissioners Court, staff will post the SWMP and annual report that gives the details of TXR040000 on the County's website. The general public can ask questions or post comments via email through the link provided on website.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Provide SWMP to the	Publish Storm Water	December 31, 2019
	Public	Management Plan and	
		annual report online	
Two	Provide SWMP to the	Publish Storm Water	December 31, 2020
	Public	Management Plan and	
		annual report online	
Three	Provide SWMP to the	Publish Storm Water	December 31, 2021
	Public	Management Plan and	
		annual report online	
Four	Provide SWMP to the	Publish Storm Water	December 31, 2022
	Public	Management Plan and	
		annual report online	

Permit Year	BMP	Measurable Goals	Deadline/Frequency
Five	Provide SWMP to the	Publish Storm Water	December 31, 2023
	Public	Management Plan and	
		annual report online	

Section III. MCM 2 - Illicit Discharge Detection and Elimination (IDDE)

The Environmental Health Division (EHD) of the Dallas County Health and Human Services (DCHHS) will implement surveillance and enforcement activities to develop an illicit discharge program, in accordance to State law, in the Unincorporated Areas of Dallas County. Illicit discharges that Dallas County cannot enforce will be referred to the TCEQ Region 4 Office in Fort Worth, Texas. Improper disposal of sewage from malfunctioning On-Site Sewage Facilities (i.e. OSSF's, septic systems, aerobic systems, etc.) are subject to County corrective actions and enforcement, as necessary.

2(a) – <u>Detection: Monitoring Drainage System</u>

Outfalls and/or other locations within drainage ditch systems in the Unincorporated Areas of Dallas County are visually monitored for indications of illicit discharges or water pollution. To confirm the presence of an illicit discharge, chemical and toxicity tests are performed if deemed necessary by the appropriate staff.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Visually monitor County roads on a quarterly basis	Document quarterly reports and investigate 100% of observed illicit discharges	December 31, 2019
Two	Visually monitor County roads on a quarterly basis	Document quarterly reports and investigate 100% of observed illicit discharges	December 31, 2020
Three	Visually monitor County roads on a quarterly basis	Document quarterly reports and investigate 100% of observed illicit discharges	December 31, 2021
Four	Visually monitor County roads on a quarterly basis in District 1, 2, and 4	Document observations and investigate 100% of observed illicit discharges	December 31, 2022
Five	Visually monitor County roads on a quarterly basis in District 3	Document observations and investigate 100% of observed illicit discharges	December 31, 2023

2(b) – Detection & Correction: Citizen Reports and County Staff Surveillance

Citizen reporting of apparent illicit discharges in the Unincorporated Areas of Dallas County is another reasonable means of detection. Illicit discharges are also identified by County staff performing various duties, such as Dallas County Road & Bridge District road maintenance crews, Sheriff's Department, and vector control staff. In the Unincorporated Urbanized Areas of Dallas County, County staff will investigate citizen reports and County staff discovered illicit discharges within two (2) weeks, excluding any repeated, unsubstantiated illicit discharge reports at a specific site. County storm water staff contact phone numbers will be published on the County website. Voluntary compliance, as well as civil and criminal enforcement will be provided. TCEQ's Regional Field Office shall be notified if Dallas County is unable to enforce under State law.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Investigate reported IDDE	Respond to 100% of discharge complaints	December 31, 2019
Two	Investigate reported IDDE	Respond to 100% of discharge complaints	December 31, 2020
Three	Investigate reported IDDE	Respond to 100% of discharge complaints	December 31, 2021
Four	Investigate reported IDDE	Respond to 100% of discharge complaints	December 31, 2022
Five	Investigate reported IDDE	Respond to 100% of discharge complaints	December 31, 2023

2(c) – <u>Correction: On Site Sewage Facilities: (OSSF, TMDL)</u>

The Environmental Health Division staff of Dallas County Health and Human Services will maintain records of actions taken regarding malfunctioning On-Site Sewage Facilities in the Unincorporated Areas of Dallas County. Dallas County is an Authorized Agent of the State (TCEQ) to enforce rules regarding the installation and operation of On Site Sewage Facilities (OSSF).

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Monitor installation and operation OSSF's	Track installations and malfunctioning OSSF's.	December 31, 2019
Two	Monitor installation and operation OSSF's	Track installations and malfunctioning OSSF's.	December 31, 2020
Three	Monitor installation and operation OSSF's	Track installations and malfunctioning OSSF's.	December 31, 2021
Four	Monitor installation and operation OSSF's	Require 90% of malfunctioning OSSF's to be repaired within 1 month of reporting.	December 31, 2022
Five	Monitor installation and operation OSSF's	Require 90% of malfunctioning OSSF's to be repaired within 1 month of reporting.	December 31, 2023

2(d) – <u>Detection & Correction: Illegal Dumping Team</u>

A combination of Officers from the Dallas County Department of Unincorporated Area Services Abatement Division and the Fire Marshal's office investigate illegal dumping in the Unincorporated Areas of Dallas County. These officers are part of the storm water staff and report annual activities (number of illegal dumping cases, cases investigated, violations identified or not, cleanups, and enforcement actions, etc.) that occur in the County storm water drainage systems.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Investigate discovered	50% of instances of illegal	December 31, 2019
	instances of illegal	dumping shall be removed	
	dumping	within 1 month, after	

		investigations have been implemented.	
Two	Investigate discovered instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2020
Three	Investigate discovered instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2021
Four	Investigate and remove discovered instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2022
Five	Investigate and remove discovered instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2023

2(e) – <u>Detection and Correction: NCTCOG Illegal Dumping Hotline</u>

Dallas County will continue current activities with the North Central Texas Council of Governments to provide the residents of the Unincorporated Areas of Dallas County the opportunity to report illegal dumping to the regional Stop Illegal Dumping Hotline, 1-888-335-DUMP. Dallas County will continue to publicize the number on the website and follow-up on reports from this hotline. An alternate means of reporting will be developed and implemented by Dallas County if the existing hotline is discontinued.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Investigate reported instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2019
Two	Investigate reported instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2020
Three	Investigate reported instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2021
Four	Investigate and remove reported instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2022

Five	Investigate and remove reported instances of illegal dumping	50% of instances of illegal dumping shall be removed within 1 month, after investigations have been implemented.	December 31, 2023
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2(f) – <u>Detection: Storm Drainage Map</u>

Dallas County will prepare a storm sewer map of the Unincorporated Urbanized Areas locating outfalls contained in those areas that discharge directly into waters of the State. The County will use the best available resources such as EPA Urbanized Areas maps, NCTCOG developed land maps, TCEQ website, 7.5 minute USGS Quadrant topographic maps, private vendor maps, Atlas of Texas Surface Waters, or other resources in map preparation. This Storm Drainage Map will also contain existing street names, outfall locations, culverts, bridges, and other features that will be useful in identifying illicit discharges. Dallas County will update this map as land development occurs and during permit renewal.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	N/A	N/A	N/A
Two	Find outfalls in District 3	Complete Storm Drainage Map for District 3	December 31, 2020
Three	Find outfalls in District 2	Complete Storm Drainage Map for District 2	December 31, 2021
Four	Find outfalls in District 4	Complete Storm Drainage Map for District 4	December 31, 2022
Five	Find outfalls in District 1	Complete Storm Drainage Map for District 1	December 31, 2023

Section III. MCM 3 - Construction Site Storm Water Runoff Control

Dallas County's Systems-In-Place consisting of adopted Commissioners Court Orders, state regulations, County policy, and engineering / construction plan requirements presently provides Storm Water Phase 2 and MS4 compliance in the County Unincorporated Urbanized Areas (UUA's). Construction BMP's are utilized in the UUA's when at least one (1) acre or more of land is disturbed during construction. Said Systems-In-Place include the proper implementation of Erosion (and sediment) Control Plan, Storm Water Pollution Prevention Plan (SW3P), controlling construction site waste, and procedures for receiving and considering information submitted by the public.

Dallas County participates regionally in and coordinates with the NCTCOG on municipal storm water issues through the Regional Storm Water Management Program. Program includes cooperative initiatives that are regional and development of the annual regional storm water work program. Construction Site Storm Water Runoff Control is achieved regionally by utilizing the NCTCOG website for informational support and access to Best Management Practices (BMP's). Coordination meetings with Program updates including

watershed roundtable discussions for the multiple municipalities, counties, and governmental agencies are facilitated by the NCTCOG quarterly.

3(a) – <u>Regional Participation: iSWM Design Manual for Construction</u>

Dallas County participates regionally in and coordinates with the NCTCOG, in creating the integrated Storm Water Management (iSWM) regional resource guides for the development of comprehensive storm water management systems. The integrated Storm Water Management program is based on addressing the quality of storm water runoff in conjunction with traditional storm water quantity methods while minimizing and mitigating the downstream impacts from increased flows due to land development upstream. Construction Site Storm Water Runoff Control is achieved regionally by utilizing the NCTCOG website for informational support and access to the key elements which include drafting the iSWM Resource Guides, Design Manual for Site Development, and Design Manual for Construction. Coordination meetings with Program updates including iSWM training for multiple municipalities, counties, and governmental agencies are facilitated by the NCTCOG.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Support the Regional	Annually Inspect 80% of	December 31, 2019
	Participation Program	the new developments	
		where iSWM principles	
		have been implemented	
Two	Support the Regional	Annually Inspect 80% of	December 31, 2020
	Participation Program	the new developments	
		where iSWM principles	
		have been implemented	
Three	Support the Regional	Annually Inspect 80% of	December 31, 2021
	Participation Program	the new developments	
		where iSWM principles	
		have been implemented	
Four	Document new	Annually Inspect 80% of	December 31, 2022
	developments where	the new developments	
	iSWM principles have	where iSWM principles	
	been implemented.	have been implemented	
Five	Document new	Annually Inspect 80% of	December 31, 2023
	developments where	the new developments	
	iSWM principles have	where iSWM principles	
	been implemented.	have been implemented	

3(b) – <u>Tracking: NOI / CSN File for Construction</u>

Since the TCEQ requires NOI's and CSN's from the construction site operators to be submitted directly to the MS4's, Dallas County will establish a NOI / CSN File for compliance reference prior to commencing construction MCM activities. Said file will be separated into two (2) subsections: Urbanized Area NOI's / CSN's and Non-Urbanized Area NOI's / CSN's for the County Unincorporated Areas. Urbanized Areas will be determined utilizing the TCEQ website link to EPA described in Section II.2 for Urbanized Areas. Small construction sites are not required to submit NOI's to the

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Maintain records for	Include Records for UUA	December 31, 2019
	NOI'S and CSN's	sites for Annual Report	
Two	Maintain records for	Include Records for UUA	December 31, 2020
	NOI'S and CSN's	sites for Annual Report	
Three	Maintain records for	Include Records for UUA	December 31, 2021
	NOI'S and CSN's	sites for Annual Report	
Four	Maintain records for	Inspect 80% of permitted	December 31, 2022
	NOI'S and CSN's	construction sites	
Five	Maintain records for	Inspect 80% of permitted	December 31, 2023
	NOI'S and CSN's	construction sites	

TCEQ; however, they are required to submit CSN's to their respective MS4.

3(c) – <u>**Training for New Employees</u>**</u>

The training program will consist of videos and educational materials developed by NCTCOG, County Staff, or other private providers. Staff will train employees about pollution prevention techniques, illicit discharges, illicit connection, and good housekeeping practices.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	N/A	N/A	N/A
Two	Train New Employees	Perform at least one Training Class	December 31, 2020
Three	Train New Employees	Perform at least one Training Class	December 31, 2021
Four	Train New Employees	All new Public Works employees must complete one Stormwater training class within the first calendar year of employment.	December 31, 2022
Five	Train New Employees	All new Public Works employees must complete one Stormwater training class within the first calendar year of employment.	December 31, 2023

3(d) – <u>Construction Inspection</u>

The training program will consist of videos and educational materials developed by NCTCOG, County Staff, or other private providers. Staff will train employees about pollution prevention techniques, illicit discharges, illicit connection, and good housekeeping practices.

<u>Section III. MCM 4 – Post-Construction Storm Water Management in New Development</u> <u>and Redevelopment</u>

The intent of this MCM is to lessen storm water quality impacts after construction has been completed on new and redeveloped sites of one (1) acre or greater of disturbed earth. Dallas County's Systems-In-Place consisting of adopted Commissioners Court Orders, state regulations, County policy, and engineering / construction plan requirements presently provides Storm Water Phase 2 and MS4 compliance in the County Unincorporated Urbanized Areas (UUA's).

"To the extent allowable under state and local law", Dallas County will develop and implement a Post-Construction MCM for the County Unincorporated Urbanized Areas. Like most Texas Counties, under this MCM Dallas County presently allows the use of unlined or pervious drainage ditches in lieu of impervious concrete curb and gutter pavement sections in combination with underground storm sewer / drain pipe systems and / or concrete lined channels which Cities typically require and / or allow.

Compared to standard impervious underground storm sewer / drain pipe systems, at grade open / unlined grassy ditch systems allow more storm water runoff to soak or filtrate into the ground. This type of drainage system thereby reduces downstream runoff velocities and erosion, and provides a means of detaining and treating, to some degree, pollutants such as sediments, fertilizers, nutrients, detergents, etc.. It also allows illicit discharges to pond and collect making them easier to detect, locate, and consequently to investigate the probable source to expedite the IDDE's elimination.

Such grassy drainage ditch systems are the least expensive to construct, are compatible with larger lots that are required for maintaining OSSF's (greater that ½ acre in land area when supplied with an underground potable water supply, or greater that 1 acre land when supplied with a private potable water well). This type of rural land development is popular among residents of the County Unincorporated Areas providing an incentive for their continued installation beyond this permit period. Like most Texas Counties, Dallas County presently maintains these at grade open / unlined grassy drainage ditch systems located within the County Road Right-Of-Way (R.O.W.), easement, or prescriptive rights easement, and shall continue to do so throughout the permit period.

Dallas County regionally participates in and coordinates with the NCTCOG on municipal storm water issues through the Regional Storm Water Management Program, which includes regional cooperative initiatives and development of the annual regional storm water work program. Construction Site Storm Water Runoff Control is achieved by utilizing the NCTCOG website for informational support and access to Best Management Practices (BMP's). Coordination meetings with Program updates including watershed roundtable discussions for the multiple municipalities, counties, and governmental agencies are facilitated by the NCTCOG quarterly.

In lieu of requiring impervious concrete curb and gutter pavement sections in combination with underground storm sewer / drain pipe systems and / or concrete lined channels, Dallas County will generally allow developers, home builders, and residents in the County Unincorporated Areas to use at grade open / unlined grassy drainage ditches adjacent to the privately or County owned and maintained roads. This is both cost

effective to the construction community and environmentally based for the County's compliance with the State storm water permit. Specific legal agreements with some adjacent municipalities may supersede this County policy, but overall this strategy and policy will continue for the duration of the permit period.

4(a) – <u>Tracking: Additional Pervious Drainage Systems</u>

Dallas County Road and Bridge forces will maintain the open / unlined grassy drainage ditches located within the County Road Right-Of-Way (R.O.W.), easement, or prescriptive rights easement in the Unincorporated Areas. This will allow the drainage system to operate properly and produce storm water quality benefits as stated previously. Dallas County in its annual report will list additional pervious drainage systems as a result of recent land development in the Unincorporated Areas.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Maintain unlined drainage ditches and channels	Conduct Operation and maintenance annually. Track additional pervious drainage systems	December 31, 2019
Two	Maintain unlined drainage ditches and channels	Conduct Operation and maintenance annually Track additional pervious drainage systems	December 31, 2020
Three	Maintain unlined drainage ditches and channels	Conduct Operation and maintenance annually Track additional pervious drainage systems	December 31, 2021
Four	Maintain unlined drainage ditches and channels	Conduct Operation and maintenance annually Add all additional pervious drainage systems for developments received in 2022 to County Road list.	December 31, 2022
Five	Maintain unlined drainage ditches and channels	Conduct Operation and maintenance annually Add all additional pervious drainage systems for developments received in 2023 to County Road list.	December 31, 2023

4(b) – <u>Tracking: Map Additional Pervious Drainage Systems</u>

Dallas County Public Works will map with GIS the ditches and outfalls as development occurs. As part of the Post Construction Stormwater Management in New Development and Redevelopment.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Map additional pervious	Review online map	December 31, 2019
	drainage systems	accuracy annually	
Two	Map additional pervious	Review online map	December 31, 2020
	drainage systems	accuracy annually	
Three	Map additional pervious	Review online map	December 31, 2021
	drainage systems	accuracy annually	
Four	Map additional pervious	Add all additional	December 31, 2022
	drainage systems	pervious drainage systems	
		for developments received	
		in 2022 to County	
		drainage map.	
Five	Map additional pervious	Add all additional	December 31, 2023
	drainage systems	pervious drainage systems	
		for developments received	
		in 2023 to County	
		drainage map.	

Section III. MCM 5 - Pollution Prevention/Good Housekeeping - Municipal Operations

Dallas County roads and bridges in the Unincorporated Urbanized Areas (UUA's) are the ownership and maintenance responsibility of the respective Dallas County Road & Bridge District's forces. Dallas County will establish a program to conduct its general operations in a manner that prevents or reduces pollution in storm water runoff to the maximum extent practicable. This MCM requires a local government to examine multiple internal operations to see if they can be maintained or modified to prevent or minimize storm water pollution or illicit discharges. As stated by the TCEQ, examples of local government operations include, but are not limited to: park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; storm water system maintenance and storage yards; waste transfer stations; and salt / sand storage locations.

Roads in these areas are typically rural in section with asphalt pavement (20-ft. +/- width with 2-ft. +/- wide shoulders) overlaid on a flex rock base, with unlined grassy drainage ditches. These highly pervious drainage ditches collect the minor storm water runoff flows from the adjacent land, undeveloped or developed, and convey them downstream to an underground crossing culvert. The smaller culverts consist of a Corrugated Metal Pipe (CMP), Reinforced Concrete Pipe (RCP), or a Reinforced Box Culvert. The larger culverts consist of same in multiple sets, or as a reinforced concrete or steel bridge. Dallas County Road and Bridge District's building facilities, construction equipment and fuel storage, and maintenance yards, and the Household Chemical Collection Center are all located within the Incorporated Areas of various Cities in Dallas County. Said items shall be within those Cities jurisdiction, and their respective MS4 permits.

5(a) –<u>Maintenance of Pervious Drainage Systems</u>

Dallas County Road and Bridge Districts forces (DCR&B's) inspect County roads and bridges of their respective districts after significant rainfall events, and periodically during dry weather periods. Said inspections may include the removal of debris blocking the roadway's travel lanes, pavement section condition and safety status, shoulder and ditch slope stability, and the removal of debris blocking the unlined grassy drainage ditch and / or the underground crossing drainage culvert which could ultimately impede proper conveyance to the Waters of the U.S.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Maintain County road open grassy drainage ditches and channels	Track Road and Bridge Maintenance	December 31, 2019
Two	Maintain County road open grassy drainage ditches and channels	Track Road and Bridge Maintenance	December 31, 2020
Three	Maintain County road open grassy drainage ditches and channels	Track Road and Bridge Maintenance	December 31, 2021
Four	Maintain County road open grassy drainage ditches and channels	Identify and maintain 80% of the public drainage systems in UUA areas in Districts 1, 2 & 4	December 31, 2022
Five	Maintain County road open grassy drainage ditches and channels	Identify and maintain 80% of the public drainage systems in UUA areas in District 3	December 31, 2023

5(b) – <u>Strategy: Municipal Activities / Roadway and Bridge Maintenance for Proper</u> <u>Waste Disposal</u>

Waste generated from Dallas County roadway and bridge maintenance shall be properly disposed of by:

- 1. collecting, examining (for accumulated sediments to be re-used), and delivering the non-usable dredge spoil to the nearest jurisdictional landfill,
- 2. collecting, stockpiling, and re-using materials as needed for maintenance of County roads, or
- 3. collecting and disposing of floatables (i.e. trash and debris in storm drainage ditches and culverts) to the nearest jurisdictional landfill.

Permit Year	BMP	Measurable Goals	Deadline/Frequency
One	Minimize waste from DCR&B activity	Properly dispose of 100% of wastes associated with Roadway and Bridge Maintenance	December 31, 2019
Two	Minimize waste from DCR&B activity	Properly dispose of 100% of wastes associated with Roadway and Bridge Maintenance	December 31, 2020

Three	Minimize waste from DCR&B activity	Properly dispose of 100% of wastes associated with Roadway and Bridge Maintenance	December 31, 2021
Four	Minimize waste from DCR&B activity	Properly dispose of 100% of wastes associated with Roadway and Bridge Maintenance	December 31, 2022
Five	Minimize waste from DCR&B activity	Properly dispose of 100% of wastes associated with Roadway and Bridge Maintenance	December 31, 2023

Section IV – Recordkeeping and Reporting

Section IV.1 - Recordkeeping

Dallas County shall maintain all records, a copy of the TPDES general permit, and all data used to complete the application (NOI) for the term of this permit. A current / updated copy of the SWMP, NOI, and a copy of the permit language / requirements shall be maintained at both the Environmental Health Division (EHD) of the Dallas County Health and Human Services (DCHHS), and Dallas County Public Works (DCPW). Dallas County shall make the records, including the SWMP and NOI, available to the public on its website.

Section IV.2 - Annual Report

Dallas County shall submit a concise annual report to the Executive Director of the TCEQ within ninety (90) days of the end of the calendar year. The annual report shall address the requirements listed in the TPDES Phase 2 MS4 general permit rules. The County shall also maintain copies of annual reports at both the Environmental Health Division (EHD) of the Dallas County Health and Human Services (DCHHS), and Dallas County Public Works (DCPW).

Section V – Adoption by Dallas County Commissioners Court (Court Order No. 2019-0703 dated July 2, 2019)