

# **Town of Sunnyvale, TX**

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## **Storm Water Management Program**



## **Municipal Separate Stormwater Sewer System (MS4) Phase II Permit**

JULY 2019

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# DEFINITIONS AND ABBREVIATIONS

**Arid Areas** - Areas with an average annual rainfall of less than ten (10) inches.

**Benchmarks** - A benchmark pollutant value is a guidance level indicator that helps determine the effectiveness of chosen best management practices (BMPs). This type of monitoring differs from “compliance monitoring” in that exceedances of the indicator or benchmark level are not permit violations, but rather indicators that can help identify problems at the MS4 with exposed or unidentified pollutant sources; or control measures that are either not working correctly, whose effectiveness need to be re-considered, or that need to be supplemented with additional BMP(s).

**Best Management Practices (BMPs)** - 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 or leaks, waste disposal, or drainage from raw material storage areas.

**Catch Basins** - Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

**Classified Segment** - A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (TAC) § 307.10.

**Clean Water Act (CWA)** - 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.

**Common Plan of Development or Sale** - A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

**Construction Activity** - Soil disturbance, including clearing, grading, excavating, and other construction related activities (e.g., stockpiling of fill material and demolition); and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

**Small Construction Activity** is construction activity that results in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land.

**Large Construction Activity** is construction activity that results in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the

disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land.

**Construction Site Operator** - The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

(a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or

(b) The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

**Control Measure** - Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

**Conveyance** - Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

**Discharge** - When used without a qualifier, refers to the discharge of stormwater runoff or certain non-stormwater discharges as allowed under the authorization of this general permit.

**Edwards Aquifer** - As defined in 30 TAC §213.3 (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

**Edwards Aquifer Recharge Zone** - Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the TCEQ or the TCEQ website.

**Final Stabilization** - A construction site where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70

percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(b) For individual lots in a residential construction site by either:

(1) The homebuilder completing final stabilization as specified in condition (a) above;

or

(2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.

(c) For construction activities on land used for agricultural purposes (for example pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.

**General Permit** - A permit issued to authorize the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) §26.040.

**Groundwater Infiltration** - For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

**High Priority Facilities** - High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that

must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to waterbodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

**Hyperchlorinated Water** - Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

**Illicit Connection** - Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

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

**Impaired Water** - 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 for CWA Sections 305(b) and 303(d)* which lists the category 4 and 5 water bodies.

**Implementation Plan (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).

**Indian Country** - Defined in 18 USC § 1151 as: (a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and (c) All Indian allotments, the Indian titles to which have not been extinguished, including right-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

**Indicator Pollutant** - An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

**Industrial Activity** - Any of the ten (10) categories of industrial activities included in the definition of “stormwater discharges associated with industrial activity” as defined in 40 Code of Federal Regulations (CFR) §122.26(b)(14)(i)-(ix) and (xi).

**Infeasible** - For the purpose of this permit, infeasible means not technologically possible, or not economically practicable and achievable in light of best industry practices. The TCEQ notes that it does not intend for any small MS4 permit requirement to conflict with state water right laws.

**Maximum Extent Practicable (MEP)** - The technology-based discharge standard for municipal separate storm sewer systems (MS4s) to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

**MS4 Operator** - For the purpose of this permit, the public entity or the 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.

**Municipal Separate Storm Sewer System (MS4)** - 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, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the 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 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.

**Non-traditional Small MS4** - 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 MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

**Notice of Change (NOC)** - A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a notice of intent.

**Notice of Intent (NOI)** - A written submission to the executive director from an applicant requesting coverage under this general permit.

**Notice of Termination (NOT)** - A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

**Outfall** - 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 sewers, 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.

**Permittee** - The MS4 operator authorized under this general permit.

**Point Source** - (from 40 CFR § 122.22) 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 return flows from irrigated agriculture or agricultural stormwater runoff.

**Pollutant(s) of Concern** - For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4. (Definition from 40 CFR § 122.32(e)(3)).

**Redevelopment** - Alterations of a property that changed the "footprint" of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

**Semiarid Areas** - Areas with an average annual rainfall of at least ten (10) inches, but less than 20 inches.

**Small Municipal Separate Storm Sewer System (MS4)** - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade 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, 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 CWA § 208;
- (b) Designed or used for collecting or conveying stormwater;
- (c) Which is not a combined sewer;
- (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 a Texas Pollutant Discharge Elimination System (TPDES)
- (e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant 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 hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices

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 a small MS4 that is also operated by that public entity.

**Stormwater and Stormwater Runoff** - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

**Stormwater Associated with Construction Activity** - Stormwater runoff from an area where there is either a large construction or a small construction activity.

**Stormwater Management Program (SWMP)** - A comprehensive program to manage the quality of discharges from the municipal separate storm sewer system.

**Structural Control (or Practice)** - A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

**Surface Water in the State** - 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 (MHW) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, 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.

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

**Traditional Small MS4** - A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

**Urbanized Area (UA)** - 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.

**Waters of the United States** - (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 the 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 the CWA jurisdiction remains with the EPA.

## Abbreviations

BMP	Best Management Practices
CFR	U.S. Code of Federal Regulations
CRZ	Critical Root Zone
CWA	Clean Water Act
EPA	Environmental Protection Agency
JTF	Joint Task Force
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
NEC	No Exposure Certificate
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
SWMP	Storm Water Management Program
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System



# 1. INTRODUCTION

## 1.1 Regulatory Background

In 1972, Congress amended the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act ["CWA"]) to prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System ("NPDES") permit. The NPDES program is designed to track point sources and requires the implementation of controls necessary to minimize the discharge of pollutants.

In 1987, Congress amended the CWA to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges. The first phase of the program, commonly referred to as "Phase I," was promulgated by the Environmental Protection Agency ("EPA") on November 16, 1990 (*Federal Register*, Volume 55, Page 47,990 [55 FR 47990]). Phase I requires NPDES permits for storm water discharge from a large number of priority sources, including municipal separate storm sewer systems ("MS4's") generally serving populations of 100,000 or more, and several categories of industrial activity, including construction sites that disturb 5 or more acres of land.

EPA promulgated the second phase of the storm water regulatory program, commonly referred to as "Phase II," on December 8, 1999 (64 FR 68722). Phase II regulations address storm water discharges from certain MS4's serving populations of less than 100,000 people (called "small MS4's"). In summary, the regulations, which may be found in Title 40, Part 122, of the Code of Federal Regulations ("CFR") (40 CFR 122), require that all small MS4 operators located in *Urbanized Areas* (as defined by the latest U.S. census) must "develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment."

EPA has delegated authority to issue MS4 storm water discharge permits to the State of Texas. Under the authority of the Texas Water Code and the CWA, the Texas Commission on Environmental Quality ("TCEQ") is the regulatory body responsible for issuing permits to discharge waste from small MS4 systems to waters of the state.

Since the Town of Sunnyvale (hereinafter, the "Town") is a regulated small MS4 operator, it must obtain a permit from the TCEQ for the discharge of storm water runoff.

In summary, the permit requires the Town to comply with a number of administrative and legal requirements and to develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable to protect water quality. The SWMP must address five areas (called "Minimum Control Measures") as follows:

1. Public Education and Outreach/ Public Involvement
2. Illicit Discharge Detection and Elimination
3. Construction Site Stormwater Runoff Control
4. Post-Construction Storm Water Management in New Development and Redevelopment
5. Pollution Prevention and Good Housekeeping for Municipal Operations

For each minimum control measure ("MCM") the town must:

1. Select appropriate Best Management Practices ("BMP's"), which are various methods of reducing pollutants in stormwater runoff
2. Define measurable goals for each BMP
3. Establish an implementation schedule

## 1.2 Purpose of this document

This document serves as the town's SWMP. It includes all selected BMP's for each of the five minimum control measures, measurable goals for each BMP, and an implementation schedule. This document provides a clear road map for implementing storm water quality management activities to improve runoff quality and to maintain permit compliance.

## 1.3 Entities assisting with the development of this document

The Town of Sunnyvale assigned Schaumburg and Polk, Inc., a private consulting firm, for the development of this SWMP.

## 1.4 Organization of this document

This document is organized into various sections as follows:

Section 1 – Introduction: This section provides background information on the storm water regulatory program, outlines the purpose of this document, defines the entities involved in assisting with the development of this document and describes document organization.

Section 2 – Town Background: This section provides general information about the town, including setting and character, form of government and legal authority. This section also identifies the receiving waterbodies, and outlines the town's existing stormwater management programs. At the end of this section, a rational statement for the renewal of the Town's Stormwater Management Program is presented.

Section 3 – Public Education and Outreach/Involvement: This section describes the regulatory requirements, permit requirements, selected BMP's, measurable goals, and implementation schedule pertaining to **MCM 1**.

Section 4 – Illicit Discharge Detection and Elimination (IDDE): This section describes the regulatory requirements, permit requirements, selected BMP's, measurable goals, and implementation schedule pertaining to **MCM 2**.

Section 5 – Construction Site Stormwater Runoff Control: This section describes the regulatory requirements, permit requirements, selected BMP's, measurable goals, and implementation schedule pertaining to **MCM 3**.

Section 6 – Post Construction Stormwater Management in New Development and Redevelopment: This section describes the regulatory requirements, permit requirements, selected BMP's, measurable goals, and implementation schedule pertaining to **MCM 4**.

Section 7 – Pollution Prevention and Good Housekeeping for Municipal Operations: This section describes the regulatory requirements, permit requirements, selected BMP's, measurable goals, and implementation schedule pertaining to **MCM 5**.

Section 8 – Record-Keeping and Reporting: This section describes the annual reporting requirements of the permit.

## 2. TOWN BACKGROUND

### 2.1 Setting and Character

The Town of Sunnyvale is located about 15 miles east of downtown Dallas. Historically, the Town of Sunnyvale is a young Dallas County community. However, this active and growing town has its roots in the settlement days of Texas. Four rural hamlets, Long Creek, New Hope, Hattersville, and Tripp merged in 1953 to form Sunnyvale. Homesteaders settled the Long Creek hamlet in about 1845. This historic hamlet was located along Long Creek. New Hope became a center of rural commerce when Mr. Tinsley purchased land for a store building in 1885.

This hamlet was organized at today's intersection of Belt Line Road and Town East Boulevard. East of New Hope, Mr. Boyd Hatter settled on land near the Trinity East Fork River and started a school. The Tripp Community was at the intersection of Tripp and Collins Roads.

The 2010 U.S. Census identifies a total population of 5,130 individuals for the Town of Sunnyvale.

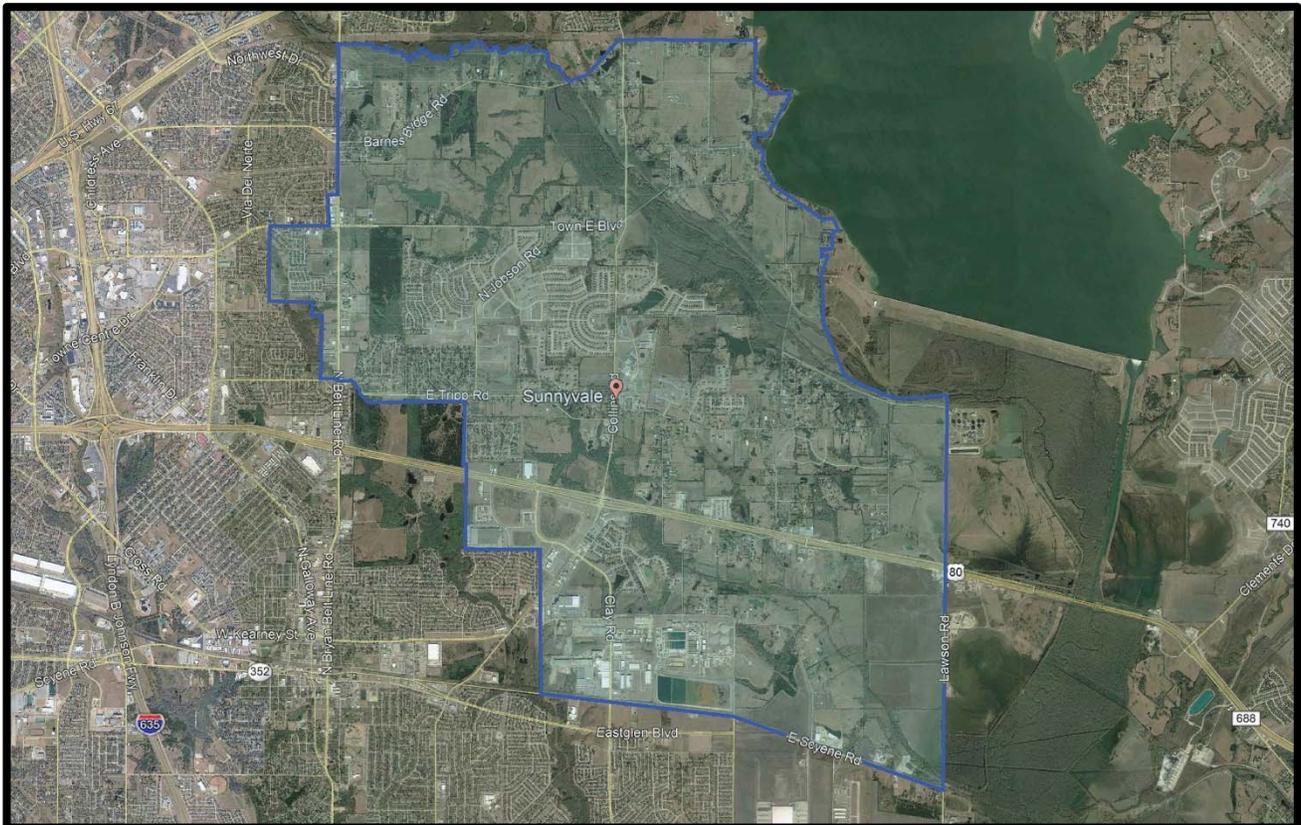


Figure 1: Town of Sunnyvale Vicinity Map

## 2.2 Form of Government

The town government consists of Boards and Commissions, a Mayor, six Council Members, a Town Manager and a Town Secretary.

## 2.3 Legal Authority

Sunnyvale is a General Law town with an aldermanic form of government as recognized by Texas statutes. Municipalities which operate under the “General Law” are governed by Title 2, Subtitle B of the Local Government Code.

## 2.4 Receiving Waterbodies

Being situated on the southwest corner of Lake Ray Hubbard, the major body receiving stormwater runoff in Sunnyvale is the Duck Creek, Long Creek, and portions of North Mesquite Creek and other nameless tributaries that ultimately flow into the East Fork Trinity River.

The State of Texas routinely monitors receiving water quality and assesses receiving water conditions. This information is summarized by TCEQ in two reports required under the CWA. Section 305(b) of the CWA requires each state to provide the following information: a description of the water quality of all navigable waters in the state; an assessment of the status of waters of the state with regard to their support of recreational activities and fish and wildlife propagation; an assessment of the state's water pollution control activities toward achieving the CWA goal of having water bodies which support recreational activities and fish and wildlife propagation; an estimate of the costs and benefits of implementing the CWA; and a description of the nature and extent of non-point sources of pollution and recommendations for programs to address non-point source pollution. Section 303(d) directs states to identify and prioritize waters for which point source effluent limits required by the CWA and the state are not stringent enough to allow those waters to meet water quality standards.

Segment Name	Segment ID	Drains to	Listed in		303(d) Impairment Parameter
			305 (d)	303 (d)	
<b>Duck Creek</b>	0819A	East Fork Trinity River	N	N	None
<b>Long Creek</b>	None	East Fork Trinity River	N	N	None
<b>North Mesquite Creek</b>	None	East Fork Trinity River	N	N	None

*Table 1: List of Waters within the Town of Sunnyvale*

Watershed Maps of Waters within Sunnyvale (EPA Watershed Report Database):



Figure 2: Duck Creek Watershed

Duck Creek Watershed

Stream Order: 2  
Stream Level: 3  
Mean Annual Flow Volume (estimate): 54.49 cfs  
Mean Annual Flow Velocity: 1.08 fps  
Stream Length: 12.83 km  
Stream Travel Time: 0.45 days



Figure 3: Long Creek Watershed

Long Creek Watershed

Stream Order: 1  
Stream Level: 3  
Mean Annual Flow Volume (estimate): 9.52 cfs  
Mean Annual Flow Velocity: 0.88 fps  
Stream Length: 8.73 km  
Stream Travel Time: 0.38 days



Figure 4: North Mesquite Creek Watershed

North Mesquite Creek Watershed

Stream Order: 1  
Stream Level: 3  
Mean Annual Flow Volume (est.): 15.17 cfs  
Mean Annual Flow Velocity: 0.94 fps  
Stream Length: 17.03 km  
Stream Travel Time: 0.69 days

Need Stormwater Sewer Map from Town

*Figure 5: Stormwater Sewer Map*

## 2.5 Existing Programs

The town currently conducts the following activities.

- Stormwater Pamphlets
- Stormwater Management Page of Town Website
- Storm Water Display
- Education Curriculum Through Lectures
- Public Awareness Messages
- Storm Drain Markers
- Bumper Stickers
- Texas Smartscape
- General Education of Town Employees
- General Education of Town Elected and Appointed Officials
- Town Inspector/ Public Works Inspector Education and Training
- General Education of Developer/ Builder/ Engineer(s)
- Stormwater Inlet Partnerships
- Keep Sunnyvale Beautiful
- Stormwater Hotline
- Comply with State and Local Public Notice Requirements
- Public Meetings
- Park Cleanup
- Dry Weather Screening
- Illicit Discharge Detection
- Elimination of Illicit Discharge Connections
- Non-Storm Water Discharge Program
- Stormwater Map
- Sanitary Sewer Line Maintenance and Inspection
- Construction Site Stormwater Runoff and Erosion Control Ordinance
- Stormwater Pollution Prevention Plan (SW3) Detail Page
- Review/ Implement Site Plan Review Procedures
- Review/ Implement Construction Plan Review and Inspection Procedures
- Pos-Construction Stormwater Runoff Control Ordinance
- Develop and Implement Post-Construction Structural and Non-Structural BMPs
- Land Use Plan
- Municipal Operations and Industrial Activity Operations and Maintenance Program
- Park and Open Space Maintenance
- Street and Road Maintenance
- Fleet Maintenance
- Storm Sewer System Maintenance
- New Construction and Land Disturbance Inspections
- Municipal Parking Lots
- Vehicle and Equipment Maintenance
- Salt/Sand Storage Location and Procedure
- Good Housekeeping and Pollution Prevention Training
- Chemical Applications and Materials Management
- Structural Control Maintenance
- Spill Response
- Disposal of Collected Storm Sewer System Waste

## 2.6 Rationale Statement for SWMP

During the development of this SWMP, the town considered BMP's that would protect water quality, comply with the Phase II storm water regulations, and ensure program costs that would not create undue hardship on town residents and businesses. Established Phase I storm water programs, as well as proposed Phase II programs for other MS4 operators, were reviewed and evaluated. A variety of BMP's for each minimum control measure were considered and compared. BMPs' were ultimately selected based on an evaluation of overall effectiveness, affordability, and suitability to the community. The program will allow continual adjustment and refinement through the town's implementation experience and feedback from all sectors of the residential and business community.

### 3. MCM-1 PUBLIC EDUCATION AND OUTREACH/ PUBLIC INVOLVEMENT

The following section describes regulatory requirements, permit application requirements, selected BMP's, measurable goals, and implementation schedule pertaining to MCM-1. **Table 2**, found at the end of this section, summarizes the measurable goals and implementation schedule for each BMP.

#### 3.1 Regulatory Requirements

40 CFR 122.34 (b)(1) – *The permit must identify the minimum elements and require implementation of a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.*

40 CFR 122.34 (b)(2) – *The permit must identify the minimum elements and require implementation of a public involvement/participation program that complies with State, Tribal, and local public notice requirements.*

#### 3.2 Permit Application Requirements

[From the General Permit to Discharge Under the Texas Pollutant Discharge Elimination System dated January 2019.]

##### (a) Public Education and Outreach

*(1) All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.*

*Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. The program must, at a minimum:*

*a. Define the goals and objectives of the program based on high priority community-wide issues (for example, reduction of nitrogen in discharges from the small MS4, promoting previous techniques used in the small MS4, or improving the quality of discharges to the Edwards Aquifer);*

*b. Identify the target audience(s);*

*c. Develop or utilize appropriate educational materials, such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, and websites;*

*d. Determine cost effective and practical methods and procedures for distribution of materials.*

*(2) Throughout the permit term, all permittees shall make the educational materials available to convey the program's message to the target audience(s) at least annually.*

*(3) If the permittee has a public website, the permittee shall post its SWMP and the annual reports required under Part IV.B.2. or a summary of the annual report on the permittee's website. The SWMP must be posted no later than 30 days after the approval date, and the annual report no later than 30 days after the due date.*

*(4) All permittees shall annually review and update the SWMP and MCM implementation procedures required by Part III.A.2., as necessary. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.*

*(5) MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.*

*(b) Public Involvement*

*All permittees shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP, except that correctional facilities are not required to implement this portion of the MCM. Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. At a minimum, all permittees shall:*

*(1) Consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program;*

*(2) Create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities;*

*(3) Ensure the public can easily find information about the SWMP.*

### **3.3 Discussion of BMP Programs**

#### **3.3.1 Storm Water Educational Pamphlets**

*Description:* The town will continue to produce and distribute pamphlets detailing the impacts of polluted stormwater runoff on water quality, hazards associated with illegal discharge and improper disposal of waste, and methods to minimize their impact on stormwater quality. Reasonable effort shall be made to distribute the information to all public employees, businesses and the general public within the town.

*Measurable Goals:* The measurable goals for the implementation of this BMP shall be to review existing material information and determine if the existing content requires updating. Pamphlets shall be distributed to public employees, businesses, construction sites and the general public within the town. Number of pamphlets and locations distributed shall be measured and reported annually.

### 3.3.2 SWMP Page of Town Website

*Description:* The Town of Sunnyvale maintains a dedicated section specifically addressing stormwater quality issues under the Public Works Section of the town's website. This webpage content shall be updated accordingly with new research findings from **Section 3.3.1**. Downloadable stormwater educational materials from **Section 3.3.1** shall be made available on the webpage.

The webpage shall contain the SWMP document and annual reports.

The webpage shall contain the contact information to be used by the members of the community seeking information regarding stormwater pollution as well as to report stormwater polluters. Further details for this contact page are found in **Section 3.3.5**.

The town shall investigate the possibility of adding a link to the website as a web base alternative for violations reporting. Further details for the implementation of this link is found in **Section 3.3.5**.

*Measurable Goals:* The measurable goal for implementation of this BMP is to incorporate the above updates and functionalities to the town's website.

### 3.3.3 Stormwater Display at Town Hall

*Description:* Refresh the display at the town hall with newfound content from **Section 3.3.1**. New display shall include general stormwater educational material per TCEQ general permit guidelines.

*Measurable Goals:* The measurable goal for implementation of this BMP shall be to update the stormwater display at town hall, and to periodically restock pamphlets and other relevant educational material as necessary.

### 3.3.4 Texas Smartscape

*Description:* In the past, the town has provided Smartscape CD's for purchase through NCTCOG to the public, but with advances in mobile friendly technology, the town now feels that utilizing physical disks for information that is easily attained through the Smartscape website is irresponsible. The town shall continue to offer the program through the town's website in place of CD copies.

*Measurable Goals:* The measurable goal for implementation of this BMP shall be to continue to support and maintain the document link on the town's website and to track the number of downloads for the annual report.

### 3.3.5 Stormwater Hotline

*Description:* The town encourages the public to be involved in the reporting of potential stormwater quality violations. To facilitate public reporting, the town shall continue to make available a dedicated public “hotline” for completing reports. The phone number shall be displayed on the town’s website along with instructions on how to report stormwater pollution activity. The town shall investigate the possibility of adding a link to the town’s website as a web-based alternative for reporting violations. Through the website, the community will be able to report on illicit activity, upload pictures, and check report status.

*Measurable Goals:* The measurable goal for implementation of this BMP shall be to continue to offer a dedicated hotline and to investigate the potential of adding a link to the website with report, content upload and feedback status.

### 3.3.6 Community Annual Trash Off and Park Cleanup

*Description:* The town encourages the public to be involved in picking up debris and illegally dumped items from the town’s parks and waterways. The goal is to continue to offer the annual trash off event in conjunction with a creek cleanup where trash and recyclables get removed from the park land, trails, creek beds, and residencies.

*Measurable Goals:* The measurable goal for this BMP shall be to hold at least one trash off and park cleanup day per year with the involvement of the community. Further, the town shall identify new areas in need of cleanup throughout the year.

### 3.3.7 Public Awareness Messages

*Description:* Sunnyvale has a vibrant social media presence and utilizes these platforms as a conduit for rapid and continuous communication directly to the community. The town shall implement stormwater quality educational and public awareness messages through the town’s social media accounts in an attempt to educate and inform the community about the importance of stormwater quality.

*Measurable Goals:* The measurable goal for the implementation of this BMP shall be to post at least quarterly educational material and public awareness messages about stormwater pollution prevention.

### 3.3.8 Bumper Stickers

*Description:* The town has placed “No Dumping in Storm Sewer” bumper stickers on all town fleet vehicles. As new vehicles are added to the fleet, additional bumper stickers will be required. The intent of this initiative is to leverage the number of town vehicles on public roads to raise awareness.

*Measurable Goals:* Review current fleet to ensure all vehicles contain a legible sticker. The number of new vehicles branded and number of stickers replaced will be reported annually.

BMP	Required Actions	Deadline/ Frequency
<b>Stormwater Educational Pamphlets</b>	- Determine if existing content requires updating. - Research existing pamphlets provided by TCEQ, NCTCOG, and other MS4s and evaluate if existing material needs updating.	Year 1
	Produce and distribute pamphlets.	Years 2-5
<b>SWMP Page of Town Website</b>	Rebuild town's SWMP page to reflect the updates defined under this section.	Year 1
	Update and maintain webpage	Years 2-5 / Quarterly
<b>Stormwater Display at Town Hall</b>	Refresh the display at the Town Hall with newfound content from section 3.3.1.	Year 1
	Update and restock display as necessary	Years 2-5 / Quarterly
<b>Texas Smartscape</b>	Incorporate Texas Smartscape link to the town's website with all other items from section 3.3.1.	Year 1
	Maintain link available on website and update as necessary.	Years 2-5
<b>Stormwater Hotline</b>	Investigate possibility of adding a link to the town's website for online public report submittals and feedback.	Year 1
	Maintain hotline active and available to the community.	Years 1-5
<b>Annual Trash Off and Park Cleanup</b>	Identify areas of community in need of cleanups.	Year 1
	Hold annual trash off and park cleanup and involve the community.	Years 2-5
<b>Public Awareness Messages</b>	Utilize town's social media accounts to post educational materials and public awareness messages.	Year 1
		Years 1-5/ Quarterly
<b>Bumper Stickers</b>	- Review current fleet to ensure all vehicles have a legible sticker. - Brand new vehicles.	Years 1-5

*Table 2: MCM 1 Public Education and Outreach/ Public Involvement BMP's*



## 4. MCM-2 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

The following section describes regulatory requirements, permit application requirements, selected BMP's, measurable goals, and implementation schedule pertaining to MCM-2. **Table 3**, found at the end of this section, summarizes the measurable goals and implementation schedule for each BMP.

### 4.1 Regulatory Requirements

40 CFR 122.34 (b)(3) – *The permit must identify the minimum elements and require the development, implementation, and enforcement of a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.*

*At a minimum, the permit must require the permittee to:*

- *Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the United States that receive discharges from those outfalls.*
- *To the extent allowable under state, Tribal, or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions.*
- *Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system.*
- *Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.*

*[The MS4 operator] needs to address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if [the MS4 operator] identifies them as significant contributors of pollutants to small MS4: Water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from firefighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).*

### 4.2 Permit Application Requirements

*[The General Permit to Discharge Under the Texas Pollutant Discharge Elimination System dated January 2019.]*

#### a) Program Development

- 1) *All permittees shall develop, implement, and enforce a program to detect, investigate, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non stormwater discharges, including illegal dumping to the MS4 system.*

*Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. (See also Part III.A.1(c).*

*The Illicit Discharge Detection and Elimination (IDDE) program must include the following:*

- a. An up-to-date MS4 map (see Part III.B.2.(c)(1));*
- b. Methods for informing and training MS4 field staff (see Part III.B.2.(c)(2));*
- c. Procedures for tracing the source of an illicit discharge (see Part III. B.2.(c)(5));*
- d. Procedures for removing the source of the illicit discharge (see Part III.B.2.(c)(5));*
- e. For Level 2, 3 and 4 small MS4s, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;*
- f. For Level 4 small MS4s, procedures for identifying priority areas within the small MS4 likely to have illicit discharges, and a list of all such areas identified in the small MS4 (see Part III.B.2.(e)(1));*
- g. For Level 4 small MS4s, field screening to detect illicit discharges (see Part III.B.2.(e)(2)); and*
- h. For Level 4 small MS4s, procedures to reduce the discharge of floatables in the MS4. (see Part III.B.2.(e)(3).)*

*(2) For non-traditional small MS4s, if illicit connections or illicit discharges are observed related to another operator's MS4, the permittee shall notify the other MS4 operator within 48 hours of discovery. If notification to the other MS4 operator is not practicable, then the permittee shall notify the appropriate TCEQ Regional Office of the possible illicit connection or illicit discharge.*

*(3) If another MS4 operator notifies the permittee of an illegal connection or illicit discharge to the small MS4, then the permittee shall follow the requirements specified in Part III.B.2.(c)(3).*

*(4) All permittees shall annually review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be reflected in the annual report. Such written procedures must be maintained, either on site or in the SWMP and made available for inspection by the TCEQ.*

*(b) Allowable Non-Stormwater Discharges*

*Non-stormwater flows listed in Part II.C do not need to be considered by the permittee as an illicit discharge requiring elimination unless the permittee or the TCEQ identifies the flow as a significant source of pollutants to the small MS4.*

*(c) Requirements for all Permittees*

*All permittees shall include the requirements described below in Parts III.B.2(c)(1)-(6)*

*(1) MS4 mapping*

*All permittees shall maintain an up-to-date MS4 map, which must be located on site and available for review by the TCEQ. The MS4 map must show at a minimum the following information:*

- a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S;*
- b. The location and name of all surface waters receiving discharges from the small MS4 outfalls; and*
- c. Priority areas identified under Part III.B.2.(e)(1), if applicable.*

*(2) Education and Training*

*All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.*

*(3) Public Reporting of Illicit Discharges and Spills*

*All permittees shall publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from the small MS4. The permittee shall provide a central contact point to receive reports; for example, by including a phone number for complaints and spill reporting.*

*(4) All permittees shall develop and maintain on-site procedures for responding to illicit discharges and spills.*

*(5) Source Investigation and Elimination*

*a. Minimum Investigation Requirements – Upon becoming aware of an illicit discharge, all permittees shall conduct an investigation to identify and locate the source of such illicit discharge as soon as practicable.*

*(i) All permittees shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge.*

*(ii) All permittees shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.*

*(iii) All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.*

*b. Identification and Investigation of the Source of the Illicit Discharge – All permittees shall investigate and document the source of illicit discharges where the permittees have jurisdiction to complete such an investigation. If the source of illicit discharge extends outside the permittee’s boundary, all permittees shall notify the adjacent permitted MS4 operator or the appropriate TCEQ Regional Office according to Part III.A.3.b.*

*c. Corrective Action to Eliminate Illicit Discharge If and when the source of the illicit discharge has been determined, all permittees shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.*

*(6) Inspections –The permittee shall conduct inspections, in response to complaints, and shall conduct follow-up inspections to ensure that corrective measures have been implemented by the responsible party. The permittee shall develop written procedures describing the basis for conducting inspections in response to complaints and conducting follow-up inspections.*

*(d) Additional Requirements for Level 3 and 4 small MS4s*

*In addition to the requirements described in Parts III.B.2(c)(1)-(6) above, permittees who operate Level 3 and 4 small MS4s shall meet the following requirements:*

*Source Investigation and Elimination*

*Permittees who operate Level 3 and 4 small MS4 shall upon being notified that the discharge has been eliminated, conduct a follow-up investigation or field screening, consistent with Part III.B.2.(e)(2), to verify that the discharge has been eliminated. The and remediation costs from responsible parties consistent with Part III.A.3., and require compensation related costs. Resulting enforcement actions must follow the procedures for enforcement action in Part III.A.3. If the suspected source of the illicit discharge is authorized under an NPDES/TPDES permit or the discharge is listed as an authorized non-stormwater discharge, as described in Part III.C, no further action is required.*

*(e) Additional Requirements for Level 4 small MS4s*

*In addition to the requirements described in Parts III.B.2(c)-(d) above, permittees who operate Level 4 small MS4s shall meet the following requirements:*

*(1) Identification of Priority Areas*

*Permittees who operate Level 4 small MS4s shall identify priority areas likely to have illicit discharges and shall document the basis for the selection of each priority area and shall create a list of all priority areas identified. This priority area list must be available for review by the TCEQ.*

*(2) Dry Weather Field Screening*

*By the end of the permit term, permittees who operate Level 4 small MS4s shall develop and implement a written dry weather field screening program to assist in detecting and eliminating illicit discharges to the small MS4. Dry weather field screening must consist of (1) field observations; and (2) field screening according to item (2)c. below.*

*If dry weather field screening is necessary, at a minimum, the permittee shall:*

*a. Conduct dry weather field screening in priority areas as identified by the permittee in Part III.B.2(e)(1). By the end of the permit term, all of those priority areas, although not necessarily all individual outfalls must be screened.*

*b. Field observation requirements – The permittee shall develop written procedures for observing flows from outfalls when there has been at least 72 hours of dry weather. The written procedures must include the basis used to determine which outfalls will be observed. The permittee shall record visual observations such as odor, color, clarity, floatables, deposits, or stains.*

*c. Field screening requirements – The permittee shall develop written procedures to determine which dry weather flows will be screened, based on results of field observations or complaint from the public or the permittee’s trained field staff. At a minimum, when visual observations indicate a potential problem such as discolored flows, foam, surface sheen, and other similar indicators of contamination, the permittee shall conduct a field screening analysis for selected indicator pollutants. The basis for selecting the indicator pollutants must be described in the written procedures. Screening methodology may be modified based on experience gained during the actual field screening activities. The permittee shall document the method used.*

*(3) Reduction of Floatables*

*The permittee shall implement a program to reduce the discharge of floatables (for example, litter and other human-generated solid refuse) in the MS4. The MS4 shall include source controls at a minimum and structural controls and other appropriate controls where necessary. The permittee shall maintain two locations where floatable material can be removed before the stormwater is discharged to or from the MS4. Floatable material shall be collected at the frequency necessary for maintenance of the removal devices, but not less than twice per year. The amount of material collected shall be estimated by weight, volume, or by other practical means. Results shall be included in the annual report.*

## 4.3 Discussion of BMP Programs

### 4.3.1 Dry Weather Screening

*Description:* The town has an Illicit Discharge Ordinance (Sect 13.1200 of the City Code). Staff shall inspect dry weather outfalls to identify potential illicit discharge issues. The town shall continue to train current and new field staff on the Illicit Discharge Ordinance and stormwater management.

*Measurable Goals:* The measurable goal for the implementation of this BMP shall be to track the number of weather inspections conducted per quarter and include in the annual report.

### 4.3.2 Illicit Discharge and Illicit Connection Detection and Elimination

*Description:* The town has an Illicit Discharge and Connection to the Stormwater System Ordinance (Sect 13.1200 of the City Code) that deals with illicit connections. The town shall continue to detect and address non-stormwater discharges, including illegal dumping to MS4. The Town shall continue to respond to community complaints, locate problem areas, identify sources contributing to problem areas, and correct the sources. All actions under this program shall be documented and included in the annual report.

*Measurable Goals:* The measurable goal for this BMP shall be to maintain the existing program during the permit period and implement new procedures as necessary. The annual report shall contain all findings.

### 4.3.3 Stormwater Sewer Map

*Description:* The town shall maintain a Stormwater Sewer Map detailing the location of major stormwater conveyances within the town. The location of all major outfalls and receiving streams shall be shown and updated as necessarily. Maps showing existing watersheds within the town and surrounding areas are included in **Section 2.4**.

*Measurable Goals:* The measurable goal for the implementation of this BMP shall be to assess the existing stormwater system map and update it as needed. Annual updates of the stormwater map shall be published on the town's website.

### 4.3.4 Sanitary Sewer Line Maintenance and Inspection

*Description:* The town will review existing procedures for the inspection of sanitary sewer lines, including related facilities such as manholes, lift stations and treatment plants, and continue to put in place plans to limit sanitary sewer overflows by providing appropriate maintenance. In locations where regular operations may result in occasional overflows, strategies will be considered to limit and contain overflows, especially in low areas located along drainage ways.

*Measurable Goals:* The measurable goal for the implementation of this BMP shall be to evaluate the existing program, make changes as necessary, train/update current and new staff on the Illicit Discharge Ordinance, and implement it during the permit period.

BMP	Required Actions	Deadline/ Frequency
<b>Dry Weather Screening</b>	Train/update staff on existing Illicit Discharge Ordinance and dry weather inspections procedures.	Year 1
	Conduct dry weather inspections and report findings.	Years 2-5
<b>Illicit Discharge and Illicit Connection Detection and Elimination</b>	Continue to train personnel in illicit discharge and illicit connection detection and elimination and conduct inspections for town's outfalls.	Years 1-5
<b>Stormwater Sewer Map</b>	Evaluate the existing stormwater sewer map and update it as needed.	Year 1
	Perform map update and post on town's website annually.	Years 2-5
<b>Sanitary Sewer Line Maintenance and Inspection</b>	Evaluate the existing procedures for the inspection of sanitary sewer lines and make changes as necessary according to current permit guidelines.	Year 1
	Use updated procedures and implement sanitary sewer inspections during permit period.	Years 2-5

*Table 3: MCM 2 Illicit Discharge Detection and Elimination (IDDE) BMP's*



## 5. MCM-3 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The following section describes regulatory requirements, permit application requirements, selected BMP's, measurable goals, and implementation schedule pertaining to MCM-3. **Table 4**, found at the end of this section, summarizes the measurable goals and implementation schedule for each BMP.

### 5.1 Regulatory Requirements

*40 CFR 122.34 (b)(4) – The permit must identify the minimum elements and require the development, implementation, and enforcement of a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the Director waives requirements for storm water discharges associated with small construction activity in accordance with §122.26(b)(15)(i), the permittee is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.*

*At a minimum, the permit must require the permittee to develop and implement:*

- An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law.*
- Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.*
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.*
- Procedures for site plan review that incorporate consideration of potential water quality impacts.*
- Procedures for receipt and consideration of information submitted by the public.*
- Procedures for site inspection and enforcement of control measures.*

### 5.2 Permit Application Requirements

[From The General Permit to Discharge Under the Texas Pollutant Discharge Elimination System dated January 2019.]

#### (a) Requirements and Control Measures

*(1) All permittees shall develop, implement, and enforce a program requiring operators of small and large construction activities, as defined in Part I of this general permit, to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.*

*Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term.*

*If TCEQ waives requirements for stormwater discharges associated with small construction from a specific site(s), the permittee is not required to enforce the program to reduce pollutant discharges from such site(s).*

*(b) Requirements for all Permittees*

*All permittees shall include the requirements described below in Parts III.B.3(b)(1)-(7)*

*(1) All permittees shall annually review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained on site or in the SWMP and made available for inspection by the TCEQ.*

*(2) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure the following minimum requirements are effectively implemented for all small and large construction activities discharging to its small MS4.*

*a. Erosion and Sediment Controls - Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.*

*b. Soil Stabilization - Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed as soon as practicable, but no more than 14 calendar days after the initiation of soil stabilization measures. In arid, semiarid, and drought-stricken areas, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed.*

*The permittee shall develop written procedures that describes initiating and completing stabilization measures for construction sites.*

*c. BMPs – Design, install, implement, and maintain effective BMPs to minimize the discharge of pollutants to the small MS4. At a minimum, such BMPs must be designed, installed, implemented and maintained to:*

*(i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters;*

*(ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and*

*(iii) Minimize the discharge of pollutants from spills and leaks.*

*d. As an alternative to (a) through (c) above, all permittees shall ensure that all small and large construction activities discharging to the small MS4 have developed and implemented a stormwater pollution prevention plan (SWP3) in accordance with the TPDES CGP TXR150000. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed and described in the written procedure required in item (2)b. above. As an alternative, vegetative stabilization measures may be implemented as soon as practicable.*

*(3) Prohibited Discharges - The following discharges are prohibited:*

*a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;*

*b. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;*

*c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;*

*d. Soaps or solvents used in vehicle and equipment washing; and*

*e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.*

*(4) Construction Plan Review Procedures*

*To the extent allowable by state, federal, and local law, all permittees shall maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:*

*a. The site plan review procedures must incorporate consideration of potential water quality impacts.*

*b. The permittee may not approve any plans unless the plans contain appropriate site specific construction site control measures that, at a minimum, meet the requirements described in Part III.B.3.(a) or in the TPDES CGP, TXR150000.*

*The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the TPDES CGP, TXR150000.*

*(5) Construction Site Inspections and Enforcement*

*To the extent allowable by state, federal, and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall at a minimum conduct inspection of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.*

*a. The permittee shall conduct inspections based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site.*

*b. Inspections must occur during the active construction phase.*

*(i) All permittees shall develop and implement updated written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on-site or in the SWMP and be made available to TCEQ.*

*(ii) Inspections of construction sites must, at a minimum:*

*1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage;*

*2. Conduct a site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the small MS4's requirements;*

*3. Assess compliance with the permittee's ordinances and other regulations; and*

*4. Provide a written or electronic inspection report.*

*c. Based on site inspection findings, all permittees shall take all necessary follow-up actions (for example, follow-up-inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and maintained for review by the TCEQ. For non-traditional small MS4s with no enforcement powers, the permittee shall notify the adjacent MS4 operator with enforcement authority or the appropriate TCEQ Regional Office according to Part III.A.3(b).*

*(6) Information submitted by the Public*

*All permittees shall develop, implement, and maintain procedures for receipt and consideration of information submitted by the public.*

*(7) MS4 Staff Training*

*All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers.*

*(c) Additional Requirements for Level 3 and 4 small MS4s*

*In addition to the requirements described in Parts III.B.3(b)(1)-(7) above, permittees who operate Level 3 and 4 small MS4s shall meet the following requirements:*

*Construction Site Inventory*

*Permittees who operate Level 3 and 4 small MS4s shall maintain an inventory of all permitted active public and private construction sites, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale.*

*Notification to the small MS4 must be made by submittal of a copy of an NOI or a small construction site notice, as applicable. The permittee shall make this inventory available to the TCEQ upon request.*

### 5.3 Discussion of BMP Programs

#### 5.3.1 Erosion and Sediment Control Ordinance

*Description:* The Town of Sunnyvale currently has an Erosion and Sediment Control Ordinance (Sect. 13.1300 of the City Code) that deals with erosion and sediment control issues during the construction process. The purpose of this regulation is to safeguard persons, protect property, and prevent damage to the environment within the town and surrounding areas. This ordinance regulates and controls the design, construction, use, and maintenance of any development activity that disturbs top soil or results in the movement of earth on land within the town.

*Measurable Goals:* The measurable goals for the implementation of this BMP shall be to maintain and enforce the existing program during the permit period. The town shall train public works staff on the ordinance and shall implement new procedures, if necessary, and report all findings in the annual report.

#### 5.3.2 Site/Construction Plan Review Procedures

*Description:* The town shall continue to address potential water quality impacts through the site/construction plan review process and improve it, if necessary, based on the permit guidelines and state and local laws. This shall include the control of erosion, sediment and waste on-site.

*Measurable Goals:* The measurable goals for the implementation of this BMP shall be to evaluate the existing procedures for site/construction plan review and ensure compliance with current permit requirements.

### 5.3.3 Construction Site Inspection Procedures

*Description:* The town shall evaluate existing procedures for construction inspection of new development so that potential water quality impacts are addressed and that construction activities comply with current permit guidelines. This shall include the control of erosion, sediment and waste at the site.

*Measurable Goals:* The measurable goal for this BMP shall be to evaluate the existing procedures for construction site inspection and ensure that potential water quality impacts are addressed and that construction activities comply with current permit guidelines. Once updated procedures are defined, the town shall perform periodic site inspections during the construction phase to ensure that the erosion and waste control measures applied on site follow those enforced by the town through the site/construction plan review process and reflect the requirements of this permit.

### 5.3.4 Construction Activity Community Impute

*Description:* The town shall respond in a timely manner to community reports of ongoing construction site erosion and waste disposal irregularities. The town shall investigate the possibility of making this process available through the town's website as described on **Sections 3.3.2 and 3.3.5.**

*Measurable Goals:* The measurable goal for this BMP shall be to continue to follow up to the community complaints of ongoing construction erosion/sediment control and waste disposal irregularities and to evaluate the possibility of making this process available online.

BMP	Required Actions	Deadline/ Frequency
<b>Erosion and Sediment Control Ordinance</b>	Maintain and enforce the existing program. Train personnel as needed, implement new procedures if necessary, and include all findings in the annual report.	Years 1-5
<b>Site Construction Plan Review</b>	Evaluate existing procedures for site plan review, ensure procedures follow current permit requirements, and make changes as necessary.	Year 1
	Using the updated guidelines for plan review, continue to conduct plan review.	Years 2-5
<b>Construction Site Inspection Procedures</b>	Evaluate existing procedures for construction site inspection, ensure procedures follow current permit requirements, and make changes as necessary.	Year 1
	Perform periodic inspections during the construction phase. Ensure site erosion/sediment and waste control measures reflect those approved by the town through the site/construction plans review and reflect the permit requirements.	Years 2-5
<b>Construction Activity Community Input</b>	Evaluate the possibility of community input of ongoing construction through the town's website.	Year 1
	Continue to follow up on community reports for erosion and waste disposal irregularities. Document public submittals/findings in annual report.	Years 2-5

*Table 4: MCM 3 Construction Site Stormwater Runoff Control BMP's*



## 6. MCM-4 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

The following section describes regulatory requirements, permit application requirements, selected BMP's, measurable goals and implementation schedule pertaining to MCM-4. **Table 5**, found at the end of this section, summarizes the measurable goals and implementation schedule for each BMP.

### 6.1 Regulatory Requirements

*T40 CFR 122.34 (b)(5) – The permit must identify the minimum elements and require the development, implementation, and enforcement of a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The permit must ensure that controls are in place that would prevent or minimize water quality impacts.*

*At a minimum, the permit must require the permittee to:*

- *Develop and implement strategies that include a combination of structural and/or non-structural BMPs appropriate for your community.*
- *Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal, or local law.*
- *Ensure adequate long-term operation and maintenance of BMP's.*
- *Develop and implement strategies that include a combination of structural and/or non-structural BMP's appropriate for your community.*
- *Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state and local law.*
- *Ensure adequate long-term operation and maintenance of BMP's.*

### 6.2 Permit Application Requirements

[From The General Permit to Discharge Under the Texas Pollutant Discharge Elimination System dated January 2019.]

#### (a) Post-Construction Stormwater Management Program

*(1) All permittees shall develop, implement, and enforce a program, to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.*

*Existing permittees shall assess program elements that were described in the previous permit and modify as necessary to continue reducing the discharge of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of the permit term.*

*(2) All permittees shall use, to the extent allowable under state, federal, and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ. Newly regulated permittees shall have the program element fully implemented by the end of the permit term.*

*(b) Requirements for all Permittees*

*All permittees shall include the requirements described below in Parts III.B.4.(b)(1)-(3)*

*(1) All permittees shall annually review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2. Any changes must be included in the annual report. Such written procedures must be maintained either on site or in the SWMP and made available for inspection by TCEQ.*

*(2) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.*

*(3) Long-Term Maintenance of Post-Construction Stormwater Control Measures*

*All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:*

*a. Maintenance performed by the permittee. (See Part III.B.5)*

*b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.*

*(c) Additional Requirements for Level 4 small MS4s*

*In addition to the requirements described in Parts III.B.5(b)(1)-(3), permittees who operate Level 4 small MS4s shall meet the following requirements: Inspections - Permittees who operate Level 4 small MS4s shall develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance plan. For small MS4s with limited enforcement authority, this requirement applies to the structural controls owned and operated by the small MS4 or its contractors that perform these activities within the small MS4's regulated area.*

*Inspection Reports - The permittee shall document its inspection findings in an inspection report and make them available for review by the TCEQ.*

### 6.3 Discussion of BMP Programs

#### 6.3.1 Post-Development Stormwater Management Ordinance

*Description:* Under the Illicit Discharge Ordinance (Sect 13.1200 of the City Code) the Town of Sunnyvale has adopted a series of requirements to ensure that post-development stormwater management is regulated and enforced. The following are the sections under the Illicit Discharge Ordinance containing these requirements:

*Section 13.1210 - Monitoring of Discharges.*

*Section 13.1211 - Requirements to prevent, control, and reduce stormwater pollutants by the use of BMPs.*

*Section 13.1212 - Watercourse Protection.*

*Section 13.1214 - Enforcement; Notice of Violation.*

*Description:* The measurable goal for this BMP shall be to maintain and enforce the programs under the town's Illicit Discharge Ordinance and report findings in the annual report.

#### 6.3.2 Plan Review and Approval Procedures for Post-Construction BMPs

*Description:* The town provides review of plans to ensure that suitable water quality BMP's are included for post-construction. During this permit period, standard structural and non-structural BMPs developed during the previous permit period shall be applied during the review process. The town shall, for this permit period, maintain a log of plans reviewed and associated follow-up correspondence.

*Measurable Goals:* The measurable goals for the implementation of this BMP shall be to continue to apply post-construction BMP plan review procedures. The town shall maintain a log of plans reviewed and associated follow-up correspondence.

#### 6.3.3 Land Use Plan

*Description:* The town shall continue to take into account stormwater quality during zoning change requests that come before the Planning and Zoning Commission.

*Measurable Goals:* The measurable goals for the implementation of this BMP will be to incorporate stormwater considerations into the zoning cases for the next 5 years.

### 6.3.4 Inspections and Long-term O&M Provisions

*Description:* The town has an Owner Liability Ordinance (Sec 3.1003 of the City Code) that deals with private drainage facility maintenance and upkeeping obligations on property owners. As an effort to enforce this ordinance, the town shall continue to perform post-development inspections to ensure that post-construction BMP's are implemented or installed, operated and maintained properly. The town shall conduct inspections on BMPs to ensure that they have been implemented or installed in accordance with the design criteria approved by the town.

*Measurable Goals:* The measurable goals for this BMP shall be to continue the post-development inspection program ensure that post-construction BMP's are implemented or installed, operated and maintained properly. All findings must be reported annually.

BMP	Required Actions	Deadline/ Frequency
<b>Post-Development Stormwater Management Ordinance</b>	Maintain and enforce the post-development stormwater management programs under the Illicit Discharge Ordinance (Sect 13.1200 of the City Code) and report findings annually.	Years 1-5
<b>Plan review and Approval Procedures for Post-Construction BMPs</b>	Develop a log system to document plan review and follow up correspondence pertaining to post-development stormwater management.	Year 1
	Apply post-construction BMPs consideration during plan review.	Years 2-5
<b>Land Use Plan</b>	Incorporate stormwater quality consideration into the zoning cases for the next permit period.	Years 1-5
<b>Inspections and Long-Term O&amp;M Provisions</b>	Perform post-development inspections to ensure post-construction BMP's are implemented or installed, operated and maintained properly. Inspect 100% of all major town outfalls annually.	Years 1-5

*Table 5: MCM 4 Post-Construction Stormwater Runoff Control BMP's*

## 7. MCM-5 POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The following section describes regulatory requirements, permit application requirements, selected BMP's, measurable goals, and implementation schedule pertaining to MCM 5. **Table 6**, found at the end of this section, summarizes the measurable goals, and implementation schedule for each BMP.

### 7.1 Regulatory Requirements

40 CFR 122.34 (b)(6) – *The permit must identify the minimum elements and require the development and implementation of an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA,[ TCEQ,] Tribe, or other organizations, the program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.*

### 7.2 Permit Application Requirements

[From The General Permit to Discharge Under the Texas Pollutant Discharge Elimination System dated January 2019.]

#### (a) Program development

*All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations. Existing permittees shall assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharges of pollutants from the MS4 to the MEP. New elements must be fully implemented by the end of this permit term and newly regulated permittees shall have the program fully implemented by the end of this permit term. (See also Part III.A.1.(c))*

#### (b) Requirements for all Permittees

*All permittees shall include the requirements described below in Parts III.B.5.(1)-(6) in the program:*

##### (1) Permittee-owned Facilities and Control Inventory

*All permittees shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. The inventory must include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited, to the following, as applicable:*

##### a. Composting facilities;

- b. Equipment storage and maintenance facilities;*
- c. Fuel storage facilities;*
- d. Hazardous waste disposal facilities;*
- e. Hazardous waste handling and transfer facilities;*
- f. Incinerators;*
- g. Landfills;*
- h. Materials storage yards;*
- i. Pesticide storage facilities;*
- j. Buildings, including schools, libraries, police stations, fire stations, and office buildings;*
- k. Parking lots;*
- l. Golf courses;*
- m. Swimming pools;*
- n. Public works yards;*
- o. Recycling facilities;*
- p. Salt storage facilities;*
- q. Solid waste handling and transfer facilities;*
- r. Street repair and maintenance sites;*
- s. Vehicle storage and maintenance yards; and*
- t. Structural stormwater controls.*

*(2) Training and Education*

*All permittees shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for inspection by TCEQ when requested.*

*(3) Disposal of Waste Material -Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.*

*(4) Contractor Requirements and Oversight*

*a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility specific stormwater management operating procedures described in Parts III B.5.(b)(2)-(6).*

*b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be maintained on-site and made available for inspection by TCEQ.*

*(5) Municipal Operation and Maintenance Activities*

*a. Assessment of permittee-owned operations*

*All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:*

*(i) Road and parking lot maintenance, including such areas as pothole repair, pavement marking, sealing, and re-paving;*

*(ii) Bridge maintenance, including such areas as re-chipping, grinding, and saw cutting;*

*(iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and*

*(iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.*

*b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).*

*c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures may include the following examples:*

*(i) Replacing materials and chemicals with more environmentally benign materials or methods;*

*(ii) Changing operations to minimize the exposure or mobilization of pollutants to prevent them from entering surface waters; and*

*(iii) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.*

*d. Inspection of pollution prevention measures - All pollution prevention measures implemented at permittee-owned facilities must be visually inspected to ensure they are working properly. The permittee shall develop written procedures that describes frequency of inspections and how they will be conducted. A log of inspections must be maintained and made available for review by the TCEQ upon request.*

*(6) Structural Control Maintenance*

*If BMPs include structural controls, maintenance of the controls must be performed by the permittee and consistent with maintaining the effectiveness of the BMP. The permittee shall develop written procedures that define the frequency of inspections and how they will be conducted.*

*(c) Additional Requirements for Level 3 and 4 small MS4s:*

*In addition to the requirements described in Parts.B.5.(b)(1)-(6) above, permittees who operate Level 3 or 4 small MS4s shall meet the following requirements:*

*(1) Storm Sewer System Operation and Maintenance*

*a. Permittees who operate Level 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the maximum extent practicable the collection of pollutants in catch basins and other surface drainage structures.*

*b. Permittees who operate Level 3 or 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping).*

*(2) Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads*  
*Permittees who operate Level 3 or 4 small MS4s shall implement an O&M program that includes at least one of the following: a street sweeping and cleaning program, or an equivalent BMP such as an inlet protection program, which must include an implementation schedule and a waste disposal procedure. The basis for the decision must be included in the SWMP. If a street sweeping and cleaning program is implemented, the permittee shall evaluate the following permittee-owned and operated areas for the program: streets, road segments, and public parking lots including, but not limited to, high traffic zones, commercial and industrial districts, sport and event venues, and plazas, as well as areas that consistently accumulate high volumes of trash, debris, and other stormwater pollutants.*

*a. Implementation schedules – If a sweeping program is implemented, the permittee shall sweep the areas in the program (for example, the streets, roads, and public parking lots) in accordance with a frequency and schedule determined in the permittee’s O&M program.*

*b. For areas where street sweeping is technically infeasible (for example, streets without curbs), the permittee shall focus implementation of other trash and litter control procedures, or provide inlet protection measures to minimize pollutant discharges to storm drains and creeks.*

*c. Sweeper Waste Material Disposal – If utilizing street sweepers, the permittee shall develop a procedure to dewater and dispose of street sweeper waste material and shall ensure that water and material will not reenter the small MS4.*

*(3) Mapping of Facilities*

*Permittees who operate Level 3 or 4 small MS4s shall, on a map of the area regulated under this general permit, identify where the permittee-owned and operated facilities and stormwater controls are located.*

*(4) Facility Assessment*

*Permittees who operate Level 3 or 4 small MS4s shall perform the following facility assessment in the regulated portion of the small MS4 operated by the permittee:*

*a. Assessment of Facilities' Pollutant Discharge Potential - The permittee shall review the facilities identified in Part III.B.5.(b) once per permit term for their potential to discharge pollutants into stormwater.*

*b. Identification of high priority facilities - Based on the Part III.B.5.(c)(4)a. assessment, the permittee shall identify as high priority those facilities that have a high potential to generate stormwater pollutants and shall document this in a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to waterbodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.*

*c. Documentation of Assessment Results - The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.*

*(5) Development of Facility Specific SOPs*

*Permittees who operate Level 3 or 4 small MS4s shall develop facility specific stormwater management SOPs. The permittee may utilize existing plans or documents that may contain the following required information:*

*a. For each high priority facility identified in Part III.B.5.(c)(4)b., the permittee shall develop a SOP that identifies BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility.*

*b. A hard or electronic copy of the facility-specific stormwater management SOP (or equivalent existing plan or document) must be maintained and be available for review by the TCEQ. The SOP must be kept on site when possible and must be kept up to date.*

*(6) Stormwater Controls for High Priority Facilities*

*Permittees who operate Level 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part III.B.5.(c)(4)b. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:*

*a. General good housekeeping – Material with a potential to contribute to stormwater pollution must be sheltered from exposure to stormwater.*

*b. De-icing and anti-icing material storage - The permittee shall ensure, to the MEP, that stormwater runoff from storage piles of salt and other de-icing and anti-icing materials is not discharged; or shall ensure that any discharges from the piles are authorized under a separate discharge permit.*

*c. Fueling operations and vehicle maintenance - The permittee shall develop SOPs (or equivalent existing plans or documents) that address spill prevention and spill control at permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities.*

*d. Equipment and vehicle washing - The permittee shall develop SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. The discharge of equipment and vehicle wash water to the small MS4 or directly to receiving waters from permittee-owned facilities is not authorized under this general permit. To ensure that wastewater is not discharged under this general permit, the permittee's SOP may include installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the washing activity, or applying for and obtaining a separate TPDES permit.*

*(7) Inspections*

*Permittees who operate Level 3 or 4 small Ms4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.*

*(d) Additional Requirements for Level 4 small MS4s:*

*In addition to all the requirements described in Parts III.B.5(b) and III.B.5.(c) above, permittees who operate Level 4 small MS4s shall meet the following requirements:*

*(1) Pesticide, Herbicide, and Fertilizer Application and Management*

*a. Landscape maintenance - The permittee shall evaluate the materials used and activities performed on public spaces owned and operated by the permittee such as*

*parks, schools, golf courses, easements, public rights of way, and other open spaces for pollution prevention opportunities. Maintenance activities for the turf landscaped portions of these areas may include mowing, fertilization, pesticide application, and irrigation. Typical pollutants include sediment, nutrients, hydrocarbons, pesticides, herbicides, and organic debris.*

*b. The permittee shall implement the following practices to minimize landscaping-related pollutant generation with regard to public spaces owned and operated by the permittee:*

*(i) Educational activities, permits, certifications, and other measures for the permittee's applicators and distributors.*

*(ii) Pest management measures that encourage non-chemical solutions where feasible. Examples may include:*

*(a) Use of native plants or xeriscaping;*

*(b) Keeping clippings and leaves out the small MS4 and the street by encouraging mulching, composting, or landfilling;*

*(c) Limiting application of pesticides and fertilizers if precipitation is forecasted within 24 hours, or as specified in label instructions;*

*(d) Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing motorist safety.*

*c. The permittee shall develop schedules for chemical application in public spaces owned and operated by the permittee that minimize the discharge of pollutants from the application due to irrigation and expected precipitation.*

*d. The permittee shall ensure collection and proper disposal of the permittee's unused pesticides, herbicides, and fertilizers.*

## *(2) Evaluation of Flood Control Projects*

*The permittee shall assess the impacts of the receiving water(s) for all flood control projects. New flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater. The retrofitting of existing structural flood control devices to provide additional pollutant removal from stormwater shall be implemented to the maximum extent practicable.*

## 7.3 Discussion of BMP Programs

### 7.3.1 Street and Road Maintenance

*Description:* The town shall continue to conduct regular street sweeping to remove debris from roadways before it washes into the storm sewer system including bridge maintenance, could weather operations, and right-of-way maintenance. The streets shall also be cleaned as needed in response to community complaints or reported problems.

*Measurable Goals:* The measurable goals for implementation of this BMP shall be to compute the number of streets swept and the frequency in which they are swept annually.

### 7.3.2 Fleet Inspection and Maintenance

*Description:* The town shall continue to conduct regular fleet inspection to minimize fluid leaks. Fleet vehicles include all plated, registered vehicles that are street legal and typically include police cruisers, work trucks, and other standard cars and trucks.

*Measurable Goals:* The measurable goal for implementation of this BMP shall be to document the number of inspections conducted by staff quarterly.

### 7.3.3 Equipment Maintenance

*Description:* The town shall continue to conduct regular equipment inspection to minimize fluid leaks. Equipment includes all non-plated, non-registered vehicles and equipment including riding mowers, heavy equipment, and the like.

*Measurable Goals:* The measurable goal for implementation of this BMP shall be to document the number of inspections conducted by staff quarterly.

### 7.3.4 Municipal Parking Lots

*Description:* The town shall continue to conduct regular municipal parking lot sweeping and cleanup to minimize pollutants and debris entering the storm sewer system. The town shall reevaluate current schedule and increase the number of appointments, if necessary.

*Measurable Goals:* The measurable goals for implementation of this BMP shall be to first reevaluate the current parking lot sweeping schedule and determine if a change is necessary. Once a new schedule is put forth, the town shall document the number of times municipal parking lots are going to be swept and follow the new schedule. A record must be kept for the annual report.

## 7.4 Disposal of Waste

As the town begins implementation of the SWMP, the town will characterize all wastes removed from the MS4 or collected as a result of municipal operation and maintenance activities. Based on waste characterization, the town will determine how to properly dispose of the waste materials in order to comply with all applicable federal, state, and local regulations. The town shall develop and document standard operating procedures for collecting, managing, and disposing of waste materials. The standard operating procedures will be incorporated into the town's O&M training program.

## 7.5 Municipally Owned or Operated Industrial Activities Subject to TPDES Stormwater Regulations

The Town of Sunnyvale does not own or operate any facilities subject to stormwater regulations.

BMP	Required Actions	Deadline/ Frequency
<b>Street and Road Maintenance</b>	Continue to conduct regular street sweeping to remove debris from roadways. The number of streets swept and frequency in which they are swept shall be included in an annual report.	Years 1-5
<b>Fleet Inspection and Maintenance</b>	Document the number of fleet inspections conducted by staff quarterly.	Years 1-5/ quarterly
<b>Equipment Maintenance</b>	Document the number of equipment inspections conducted by staff quarterly.	Years 1-5/ quarterly
<b>Municipal Parking Lots</b>	Reevaluate the current parking lot sweeping schedule and make changes as necessary.	Year 1
	Follow updated schedule for parking lot sweeping and report annually.	Years 1-5

*Table 6: MCM 5 Pollution Prevention and Good Housekeeping for Municipal Operations BMP's*



## 8. RECORD-KEEPING AND REPORTING

### 8.1 Regulatory Requirements

*40 CFR 122.34 (d)(1) – The permit must require the permittee to evaluate program compliance with the terms and conditions of the permit, including the effectiveness of the components of its storm water management program, and the status of achieving the measurable requirements in the permit.*

*40 CFR 122.34 (d)(2) – The permit must require that the permittee keep records required by the NPDES permit for at least 3 years and submit such records to the NPDES permitting authority when specifically asked to do so. The permit must require the permittee to make records, including a written description of the storm water management program, available to the public at reasonable times during regular business hours (see § 122.7 for confidentiality provision). (The permittee may assess a reasonable charge for copying. The permit may allow the permittee to require a member of the public to provide advance notice.)*

*40 CFR 122.34 (d)(3) – Unless the permittee is relying on another entity to satisfy NPDES permit obligations under § 122.35(a), the permittee must submit annual reports to the [TCEQ] for the first permit term. For subsequent permit terms, [the MS4 operator] must submit reports in years two and four unless the [TCEQ] requires more frequent reports. As of December 21, 2020 all reports submitted in compliance with this section must be submitted electronically by the owner, operator, or the duly authorized representative of the small MS4 to the NPDES permitting authority or initial recipient, as defined in 40 CFR 127.2(b), in compliance with this section and 40 CFR part 3 (including, in all cases, subpart D to part 3), § 122.22, and 40 CFR part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of part 127, the owner, operator, or the duly authorized representative of the small MS4 may be required to report electronically if specified by a particular permit or if required to do so by state law. The report must include:*

*(i) The status of compliance with permit terms and conditions*

*(ii) Results of information collected and analyzed, including monitoring data, if any, during the reporting period*

*(iii) A summary of the storm water activities the permittee proposes to undertake to comply with the permit during the next reporting cycle*

*(iv) Any changes made during the reporting period to the permittee's storm water management program*

*(v) Notice that the permittee is relying on another governmental entity to satisfy some of the permit obligations (if applicable), consistent with § 122.34a*

## 8.2 Record Keeping

The town shall maintain the following records at a location accessible to the TCEQ for a period of at least three years, or for the term of the permit, whichever is longer:

1. Required Annual Reports as well as supporting documents and data used to generate the reports
2. Current Storm Water Management Program Document
3. Audit Logs and other SWMP supporting materials

The town will make the records available to the public during regular business hours if requested to do so in writing. The SWMP will be made available within two working days following the request from the public. Other records will be provided within 10 working days unless the request requires an unusual amount of time or effort to assemble, in which case Texas law regarding the Public Information Act will be followed. Reasonable charges, in accordance with Texas law, may be levied by the town for researching and preparing any requested materials.

## 8.3 Reporting

The Town will submit an annual report to TCEQ by December 31 (of the following year) for each year of the permit term. The annual report will contain the following:

1. The status of compliance with permit conditions, an assessment of the appropriateness of the identified BMP's, progress toward achieving the statutory goal of reducing the discharge of pollutants, the measurable goals for each of the minimum control measures, and an evaluation of the success of the implementation of the goals.
2. Status of any additional control measures implemented by the town (if applicable).
3. Any minimum control measure activities initiated prior to permit issuance (up to three years) as part of the first year's annual report.
4. A summary of the results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants.
5. A summary of the stormwater activities the town plans to undertake during the next reporting cycle (including implementation schedule).
6. Proposed changes to the storm water management program, including changes to any BMP's or any identified measurable goals that apply to the program elements.
7. Notice that the town is relying on another government entity to satisfy some of the Permit obligations (not currently applicable).
8. A signed, certification page.

## 9. REFERENCES

TCEQ. 2014a. Finalized 2014 Texas 303(d) List (PDF).

[https://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/14txir/2014\\_303d.pdf](https://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/14txir/2014_303d.pdf)

TCEQ. 2014b. Finalized 2014 Texas Water Quality Integrated Report (PDF).

<https://www.tceq.texas.gov/waterquality/assessment/14twqi/14txir>

TCEQ. “General Permit TXR040000 for Phase II (Small) MS4s”. *Texas Commission on Environmental Quality*, 2018

[https://www.tceq.texas.gov/permitting/stormwater/ms4/WQ\\_ms4\\_small.html](https://www.tceq.texas.gov/permitting/stormwater/ms4/WQ_ms4_small.html)

TCEQ. “General Permit to Discharge Under the Texas Pollutant Discharge Elimination System Under Provisions of 402 of the Clean Water Act and Chapter 26 of the Texas Water Code”. *Texas Commission on Environmental Quality*, 2019.

<https://www.tceq.texas.gov/assets/public/permitting/stormwater/txr040000-2019-issued-permit.pdf>

United States, Congress, Office of the Federal Register. “Title 40 Protection of Environment.” *Title 40 Protection of Environment*, Office of the Federal Register National Archives and Records Administration as a Special Edition of the Federal Register, 2018.

<https://www.govinfo.gov/content/pkg/CFR-2018-title40-vol24/pdf/CFR-2018-title40-vol24.pdf>

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<https://z2codes.franklinlegal.net/franklin/Z2Browser2.html?showset=sunnyvaleset>