## City of McKinney



## Phase II Stormwater Management Program Plan

October 2008 Revised December 2013 This page left intentionally blank

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### **Acronyms**

BMP Best Management Practice

CMOM Capacity, Management, Operations and Maintenance

CWA Clean Water Act

EPA Environmental Protection Agency

GIS Geographic Information System

IDDE Illicit Discharge Detection and Elimination

I/I Inflow/Infiltration

MCM Minimum Control Measure

MEP Maximum Extent Practicable

MS4 Municipal Separate Storm Sewer System

NCTCOG North Central Texas Council of Governments

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System

O&M Operations and Maintenance

SOP Standard Operating Procedure

SWMP Stormwater Management Program

SWPPP Stormwater Pollution Prevention Plan

SSES Sewer System Evaluation Survey

TCEQ Texas Commission on Environmental Quality

TMDL Total Maximum Daily Load

TPDES Texas Pollutant Discharge Elimination Program

#### **Overview and Community Profile**

#### 1.1 Overview

The 1972 Clean Water Act (CWA) is a law enacted by Congress and signed by the President that provides a statutory basis for the National Pollutant Discharge Elimination System (NPDES) program and the basic structure for regulating the discharge of pollutants from point sources to waters of the United States. Section 402 of the CWA specifically required the U.S. Environmental Protection Agency (EPA) to develop and implement the NPDES program to protect the Nation's waters from pollution. It further allows the EPA to authorize the NPDES Permit Program to state governments, enabling states to perform many of the permitting, administrative, and enforcement aspects of the NPDES Program. Under the NPDES program, a municipal stormwater program was developed in two phases.

Phase I of the NPDES municipal stormwater program was issued in 1990 and required medium and large cities and certain counties with populations of 100,000 or more as based on the 1990 census, to obtain NPDES permit coverage for stormwater discharges. Generally, Phase I MS4s are covered by individual permits. On September 14, 1998, the Texas Commission on Environmental Quality (TCEQ) received from EPA, the authority to administer the NPDES permit program in Texas for those discharges under the regulatory authority of the agency. This program has been named the Texas Pollutant Discharge Elimination Program (TPDES). Under a memorandum of agreement between the two agencies, the TCEQ agreed to adopt any new rules or permits to comply with the Phase II stormwater regulations by the deadlines mandated in federal rules.

Phase II of the NPDES was issued in 1999 and requires regulated small municipal separate storm sewer systems (MS4s) in designated urbanized areas (UA), as well as small MS4s outside the UA that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. The 1990 U.S. Census defines an "urban area" as an area with a population density of at least 1,000 people per square mile. Phase II MS4s are covered by a general permit. Each regulated MS4 is required to develop and implement a stormwater management program (SWMP) to reduce the contamination of stormwater runoff and prohibit illicit discharges.

On August 13, 2007, the TCEQ issued the TPDES General Permit TXR040000 (General Permit) authorizing the discharge of stormwater to surface water in the state from small MS4s. McKinney stated their intention to implement a Stormwater Management Program (SWMP) in accordance with the requirements of the General Permit and submitted a Notice of Intent (NOI) in January 2008. TCEQ issued approval of McKinney's SWMP under TPDES permit No. TXR040108 on December 19, 2008. Under the General Permit, McKinney was required to fully develop and implement its Phase II SWMP by August 12, 2012.

On December 13, 2013, TCEQ issued the new 5-year General Permit. As a result, McKinney has developed a revised SWMP in accordance with updated requirements and guidelines of the December 2013 TCEQ TPDES General Permit. The SWMP has been developed to:

- reduce the discharge of pollutants from the City's MS4 to the maximum extent practicable (MEP);
- to protect water quality; and
- to satisfy the appropriate water quality requirements of the CWA and the Texas Water Code.

The SWMP describes specific actions that will be taken over the next five-year period to reduce pollutants and protect the City's stormwater quality. These specific actions are listed as Best Management Practices (BMPs) that will be implemented by the City in support of each of the six Minimum Control Measures (MCMs), as required by the TCEQ General Permit and listed below.

- 1. Public Education, Outreach and Involvement
- 2. Illicit Discharge Detection and Elimination (IDDE)
- 3. Construction Site Stormwater Runoff Control
- 4. Post-Construction Stormwater Management in New Development and Redevelopment
- 5. Pollution Prevention and Good Housekeeping for Municipal Operations, and
- 6. Industrial Stormwater Sources.

These measures will be addressed by implementing BMPs appropriate for McKinney's community. The BMPs will commence according to the schedules provided in this report. The SWMP also sets measurable goals and provides a schedule for the implementation of each of the BMPs. Implementation of the BMPs is expected to result in reductions of pollutants discharged into McKinney's streams, ponds, and lakes.

#### 1.2 Community Profile

#### Geography

McKinney is located in north central Texas, approximately 30 miles northeast of Dallas as shown in Figure 1. McKinney is bordered by the towns of Melissa to the north, Prosper to the northwest, New Hope to the northeast, Princeton to the east, Fairview to the southeast, and the cities of Allen to the south, and Frisco to the west. McKinney has approximately 63.8 square miles of land area, 0.8 square miles of water bodies and 241.3 linear miles of creeks and streams.



Figure 1 City of McKinney location map

#### **Demographics**

The 2010 Census yielded a McKinney population of 131,117. This represents an increase of approximately 141.2% from the 2000 Census value of 54,369. Although McKinney did not meet the 1990 conditions for a medium or large MS4, it was designated as an urban area having a population density of 2,468 people per square mile, and therefore determined to be a small or Phase II MS4.

Demographics are an important consideration of a stormwater management program. Since education programs must focus on all citizens, including disadvantaged and minority citizens, it is critical to know population statistics. Table 1 illustrates McKinney's demographics. McKinney currently strives to provide multilingual informational literature, specifically Spanish, to inform residents about local programs. McKinney will continue to focus on providing multilingual literature.

**Table 1 City of McKinney Demographics** 

Race	Population	Percent
Population of one race only	127,042	-
White alone	98,090	77.21%
Black/African American alone	13,751	10.82%
Asian alone	5,325	4.19%
Some Other Race alone*	9,876	7.77%
Hispanic or Latino (ethnic group)**	24,406	18.61%

Source: U.S. Census Bureau, 2010 Census

<sup>\*</sup>Includes American Indian and Alaska Native alone, Native Hawaiian and Other Pacific Islander, and some other race alone.

\*\* Hispanic or Latino is listed separately as an ethnic group category.

#### Climate

McKinney is considered to be part of the humid subtropical region.

On average, the warmest month is August. On average, the coolest month is January. The maximum average precipitation occurs in May.

- Normal January Temperature = 41° F
- Normal August Temperature = 81° F
- Normal Annual Precipitation = 42.32"

Source: The National Weather Service

#### Government

McKinney's local government consists of a City Manager appointed by a seven member City Council. Four Council members are elected to single-member districts. Two Council members and the Mayor are elected at-large.

The Mayor is recognized as head of the City Government for all ceremonial purposes and by the Governor for purposes of military law, but shall have no administrative duties. The person elected Mayor presides over all meetings of the City Council. Each Council member has an equal vote on all action taken by the Council. There are seven positions (6 council members and 1 mayor) to ensure that every issue that is taken before Council is granted a decision, there are no tie votes.

The City Manager serves as the chief administrative officer under the direction of the City Council and is responsible for making recommendations to the Council concerning programs and policies and developing methods to ensure the effective and efficient operation of City services. The City Manager's Office coordinates and administers the implementation of policies, procedures and ordinances that will provides day-to-day operations and the sustainable, managed growth of the City.

#### 1.3 McKinney's Stormwater Management Program

Effective program management and continued assessment is essential to guide Stormwater Management Program (SWMP) development, implementation and administration. The City has a management process that facilitates coordination between its departments and between the permittee, and other organizations and agencies interested in stormwater quality.

The City Stormwater Management Administrator is responsible for the development and delegating the responsibilities of implementation and enforcement of the SWMP. Typically, the supervisor of a City facility or operation will be responsible for implementing and monitoring the applicable elements of the SWMP relative to the particular activities associated with the facility or operation. The SWMP Organization Chart is included as Figure 2. The **Bold** face type indicates the department(s) with primary responsibility for each MCM.

# The City of McKinney Phase II Stormwater Management Program Organization Chart

#### **Stormwater Management Program Coordinators**

Engineering: Environmental Manager Engineering: Stormwater Specialist

Engineering: Environmental Engineering	Engineering: Environmental Engineering	Engineering: Environmental Engineering
Communications & Marketing	Communications & Marketing	Information Technology: GIS
DPW: Environmental & Fleet Services	DPW: Streets & Traffic Control	DPW: Water/Wastewater
DPW: Streets & Traffic Control	DPW: Environmental & Fleet Services	Fire Services
Information Technology: GIS	Housing & Community Development	DPW: Environmental & Fleet Services
	*City Council	DPW: Streets & Traffic Control
Construction Site Runoff	Post-Construction Stormwater Management in	Pollution Prevention/Good Housekeeping
Construction Site Runon	New Development/Redevelopment	Municipal Operations
Engineering: Environmental Engineering	Engineering: Environmental Engineering	DPW: Streets & Traffic Control
Building Inspections	Building Inspections	DPW: Environmental & Fleet Services
Planning	Planning	DPW: Water/Wastewater
Engineering: Development Engineering	Engineering: Development Engineering	DPW: Building Operations
DPW: Streets & Traffic Control	DPW: Streets & Traffic Control	Engineering: Environmental Engineering
*City Council	*City Council	Information Technology: GIS
		Parks, Recreation & Open Space
		Code Compliance
Industrial Stormwater Sources		McKinney National Airport
Engineering: Environmental Engineering		
Information Technology: GIS DPW: Building Operations		

Other entities that contribute stormwater runoff to McKinney's MS4, include the Texas Department of Transportation, North Texas Tollway Authority and Dallas Area Rapid Transit.

The City is currently utilizing a variety of EPA identified BMPs in order to minimize pollutant loads into the local waterways and water bodies. The City intends to continue current practices for each MCM, and supplement additional measures as necessary to adhere to the permit requirements.

Many of the BMPs included in McKinney's SWMP are enforced by the Engineering Department. The operation, management and maintenance of the municipal drainage system are the responsibility of the Water Utilities and Infrastructure Department. Inspections and monitoring of the municipal stormwater collection system are also conducted by the Water Utilities and Infrastructure Department.

#### **Resource Protection**

#### 2.1 East Fork Trinity River (12030106) Watershed

McKinney contributes to the East Fork Trinity River Watershed (Figure 3). The East Fork Trinity River Watershed drains approximately 1300 square miles. Seven counties, including Collin County, contribute to the watershed. Major tributaries of the East Fork Trinity Watershed that flow through McKinney include East Fork Trinity River, Wilson Creek and Rowlett Creek.



Figure 3 East Fork Trinity River Watershed

#### 2.2 Impaired Water Bodies

TCEQ describes the status of the state's waters, as required by Sections 305(b) and 303(d) of the federal CWA, through the *Texas Integrated Report of Surface Water Quality*. The report summarizes the status of the state's surface waters, including concerns for public health, fitness for use by aquatic species and other wildlife, and specific pollutants and their possible sources. The TCEQ produces a new report every two years in even-numbered years, as required by law. Appendix A lists those stream segments in Texas that are 303(d) listed water bodies. 303(d) listed water bodies are those that do not meet the Water Quality Standards with existing technology-based pollution controls alone. These water bodies require the establishment of total maximum daily loads (TMDLs). The goal of the TMDLs is to develop and implement plans

aimed at restoring impaired water bodies to an acceptable condition that meets the Water Quality Standards and supports their designated uses.

Water in McKinney flows to the TCEQ classified water bodies segments of Lake Lavon (TX0821) and Lake Ray Hubbard (TX0820). Wilson Creek, Franklin Branch, Stover Creek, Honey Creek, Rowlett Creek, Cottonwood Creek and the East Fork Trinity River are considered as McKinney's major streams. With the exception of Wilson Creek and East Fork Trinity River, McKinney major streams do not discharge to any of the TCEQ 303(d) listed water bodies, nor listed as impaired water bodies and have no TMDLs established. The following is a summary of the impairment for Wilson Creek and East Fork Trinity River in McKinney and includes the pollutant or stressor causing the impairment.

#### McKinney Impaired Water Bodies

SegID: 0821C	Wilson Creek (unclassified water body)			
	From the confluence with Lake Lavon (segment 0821) in Collin County up to			
	West FM 455 (NHD RC 12030106000086), just east of Celina, Collin Co.,			
	Texas.			
Parameter(s)		Category	Year Segment First Listed	
bacteria		5b	2010	
0821C_01	Entire water body			

0821D_01	Entire water body			
bacteria		5b	2010	
Parameter(s)		Category	Year Segment First Listed	
	12030106000074) in Collin County, Texas.			
	A portion of the East Fork Trinity river extending from the confluence with Lake Lavon (segment 0821) to the upper end of the water body (NHD RC			
SegID: 0821D	East Fork Trinity River above Lake Lavon (unclassified water body)			

**5b**: a review of the water quality standards for this water body will be conducted before a TMDL is scheduled. (TMDL may be required)

Once a water body is labeled as impaired TCEQ may require a Total Maximum Daily Load (TMDL) or other water quality management action in order to meet water quality standards. Further review of the water quality standards or additional data is required before a TMDL or other water quality management action is scheduled for Wilson Creek and the East Fork Trinity River. Until a TMDL or other water quality management action is established the SWMP shall identify potential significant sources for E. coli and develop and implement targeted BMPs for those sources. Targeted BMPs shall, as appropriate, address the following areas;

- a. Sanitary Sewer Systems,
- b. On-site sewage facilities,
- c. Illicit Discharges and Dumping,
- d. Animal Sources and
- e. Residential Education.

If any other water body or watershed into which McKinney discharges is considered impaired or a TMDL is approved in the future, McKinney will review the applicable *Texas Water Quality Integrated Report* to see if it includes requirements for control of stormwater discharges. McKinney will then modify the SWMP to ensure that the reduction of the pollutant of concern specified in the *Texas Water Quality Integrated Report* is achieved.

#### 2.3 Endangered Species and Critical Habitat

Table 2 lists Rare, Threatened and Endangered Species associated with Collin County. The information was obtained from the Texas Parks and Wildlife Department, Wildlife Division, Diversity and Habitat Assessment Programs. County Lists of Texas' Special Species. [Collin County, 2/28/2011]. These lists and maps were developed as an aid to assist land managers, resource personnel and individuals in the conservation of rare species.



Table 2 Texas Parks and Wildlife Rare, Threatened and Endangered Species of Texas for Collin County

Taxon	Common Name	Scientific Name	Federal Status	State Status
Birds	Henslow's Sparrow	Ammodramus henslowii		
Birds	Sprague's Pipit	Anthus spragueii	С	
Birds	Western Burrowing Owl	Athene cunicularia hypugaea		
Birds	Piping Plover	Charadrius melodus	LT	Т
Birds	Peregrine Falcon	Falco peregrinus	DL	Т
Birds	American Peregrine Falcon	Falco peregrinus anatum	DL	Т
Birds	Arctic Peregrine Falcon	Falco peregrinus tundrius	DL	
Birds	Whooping Crane	Grus americana	LE	E
Birds	Bald Eagle	Haliaeetus leucocephalus	DL	Т
Birds	Wood Stork	Mycteria americana		Т
Birds	White-faced Ibis	Plegadis chihi		Т
Birds	Interior Least Tern	Sterna antillarum athalassos	LE	E
Crustaceans	A crayfish	Procambarus steigmani		
Mammals	Red wolf	Canis rufus	LE	E

Mammals	Plains spotted skunk	Spilogale putorius interrupta		
Mollusks	Wabash pigtoe	Fusconaia flava		
Mollusks	Louisiana pigtoe	Pleurobema riddellii		Т
Mollusks	Texas heelsplitter	Potamilus amphichaenus		Т
Mollusks	Fawnsfoot	Truncilla donaciformis		
Mollusks	Little spectaclecase	Villosa lienosa		
Reptiles	Timber/Canebrake rattlesnake	Crotalus horridus		Т
Reptiles	Alligator snapping turtle	Macrochelys temminckii		Т
Reptiles	Texas horned lizard	Phrynosoma cornutum		Т
Reptiles	Texas garter snake	Thamnophis sirtalis annectens		
Status Key: C: Candidate for Listing, LT/T: Listed Threatened, DL: Delisted, E/LE: Listed Endangered, "blank": Pare, but with no regulatory listing status.				

"blank": Rare, but with no regulatory listing status

There is no reason to believe that the stormwater discharges, allowable non-stormwater discharges and discharge related activities will jeopardize the continued existence of any species or result in adverse modification or destruction of critical habitat.

#### 2.4 Specific Watersheds and Water Quality Areas

The City recognizes that coverage under this General Permit does not allow the City to have stormwater and non-stormwater discharges into areas already protected by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watershed.

#### 2.5 Discharges to the Edwards Aquifer-Recharge Zone

No discharges from the City affect water quality within the Edwards Aquifer.

### 2.6 Indian Country Lands

The City has no discharges entering in to Indian Country Lands.



#### **Minimum Control Measures**

#### 3.1 Program Development process

McKinney is currently implementing a stormwater management program to reduce the discharge of pollutants to all resource areas including the water bodies listed in Section 2. Therefore, McKinney, has already established many of the BMPs that will be applied to the SWMP. Additional measures are being developed in order to achieve compliance with the Phase II renewal regulations.

Additional measures were evaluated for each of the six MCM's. The evaluation process involved developing general assessments of various alternative BMPs. Some of the alternative BMPs were developed and tailored to the specific needs of McKinney, while other alternative BMPs were developed from general BMP "menus" published by the North Central Texas Council of Governments (NCTCOG) and the EPA. As applicable, McKinney will refer to the TCEQ-endorsed guidance document published by the EPA entitled *MS4 Improvement Guide* (April 14, 2010).

Alternative BMPs were generally assessed in relation to the following criteria:

- fulfillment of General Permit requirements,
- effectiveness,
- appropriateness for McKinney, and
- estimated cost of implementation.

The goal of this plan is to reduce the overall effects of stormwater pollutants to McKinney water bodies to the "maximum extent practicable". Proposed BMPs and measurable goals are provided herein to fully adhere to the regulations.

#### 3.2 Revised Stormwater Management Program Requirements

Revisions to TXR040000, include additions and clarifications for the SWMP, including the updates contained within this SWMP in addition to annual reporting requirements, SWMP evaluation requirements, third party certifications, and impaired water bodies requirements. TXR040000 also contains additions, clarifications and reporting requirements for each of the six MCMs listed above, which are further discussed in Sections 3.6.1 through 3.6.6 of this SWMP.

#### 3.3 Annual Reporting

The Annual Report is a summary of the stormwater related activities performed throughout the reporting period within McKinney's jurisdiction. The annual reporting period for the SWMP will continue to run from December 13th through December 12th of each year. Beginning with the Annual Report due in 2014, McKinney will submit, as necessary, the following information:

- Compliance with permit conditions
- Results of information collected and analyzed

- Evaluation of SWMP effectiveness
- Planned stormwater activities
- Coordinated efforts
- Summary of the public comments received on the SWMP and intended responses
- Information specified for each MCM
- Any changes made to the SWMP

McKinney will submit the Annual Report to TCEQ no later than March 12 of each reporting year, as a failure to submit the Annual Report will constitute a permit violation.

#### 3.4 Stormwater Management Program Evaluation

TCEQ requires McKinney to conduct an annual effectiveness evaluation of its program compliance, the appropriateness of its identified BMPs, and progress towards achieving its identified measurable goals, which will include reducing the discharge of pollutants to the MEP. McKinney will collect and report on the specific information on each of the six MCMs discussed in Sections 3.6.1 through 3.6.6. McKinney will revise the SWMP if the annual evaluation shows that the SWMP is not reducing discharges to the MEP.

#### 3.5 Third Party Certifications

TCEQ requires McKinney to obtain a third party certification statement if it relies upon any third party entity to develop or implement any portion of its SWMP. Third party entities would include a non-government, commercial entity that receives payment from McKinney for services provided. The following is a list of example services that McKinney may contract that would require a third party certification statement:

- Creation of SWMP policies or procedures,
- Illicit discharge identification and trace,
- Road maintenance,
- Snow removal.
- Storm sewer system cleaning, and
- Street sweeping.

McKinney will, through a signed certification statement, contract or agreement, provide adequate assurance that the third parties comply with the stormwater permit requirements applicable to the work performed by the third party. The certification statement, contract or other agreement will include:

- Adequate assurance that the third party will comply with the permit requirements,
- Identification of the activities that the third party entity will be responsible for,
- Name and title of the person providing the signature,
- Name, address and telephone number of the third party entity,
- Description of the location of the work performed, and
- Date the certification statement, contract or other agreement is signed.

The following is the example language for the third party certification statement:

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the City of McKinney stormwater management program and agree to implement any corrective actions identified by the City of McKinney or a representative. I also understand that the City of McKinney must comply with the terms and conditions of the Texas Pollutant Discharge Elimination System general permit for stormwater discharges from the municipal separate storm sewer systems and that it is unlawful for any person to directly or indirectly cause or contribute to a violation of water quality standards. Further, I understand that any noncompliance by the City of McKinney will not diminish, eliminate, or lessen my own liability."

#### 3.6 List of BMPS, Measurable Goals, and Implementation Schedule

In accordance with TCEQ's General Permit requirements, McKinney's SWMP includes an implementation plan for BMPs in each of six Minimum Control Measures. The six minimum control measures are:

- 1. Public Education, Outreach and Involvement
- 2. Illicit Discharge Detection and Elimination (IDDE)
- 3. Construction Site Stormwater Runoff Control
- 4. Post-Construction Stormwater Management in New Development and Redevelopment
- 5. Pollution Prevention and Good Housekeeping for Municipal Operations, and
- 6. Industrial Stormwater Sources.

Specific requirements of each MCM are provided below. Following each listing of MCM requirements, a table is provided that demonstrates BMPs selected for that MCM, along with BMP descriptions, implementation schedules and measurable goals. Appendix B references each specific BMP listed within the table and those City department(s) having responsibility for the BMP. The **Bold** face type indicates the department(s) with primary responsibility for each BMP.

#### 3.6.1 Public Education, Outreach and Involvement

#### Specific requirements:

- (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) All permittees shall 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.
- (4) 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) If feasible, consider using public input (for example, the opportunity for public comment, or public meetings) in the implementation of the program;
- (2) If feasible, 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.

#### 3.6.2 Illicit Discharge Detection and Elimination (IDDE)

#### Specific Requirements:

#### (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.(g)(1));
- g. For Level 4 small MS4s, field screening to detect illicit discharges (See Part III.B.2.(g)(2)).
- (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.
- (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 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:
- 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

To the extent feasible, 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 TCEQ's Field Operation Support Division according to Part III.A.3.b.
- c. Corrective Action to Eliminate Illicit Discharge
  - (i) 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, as determined appropriate, in response to complaints, and shall conduct follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party.
- (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:

(1) 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 permittee shall document its follow-up investigation. The permittee may seek recovery 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 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) as needed, field screening.

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 should include the basis used to determine which outfalls would 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 as determined by the permittee. Screening methodology may be modified based on experience gained during the actual field screening activities. The permittee shall document the method used.

#### 3.6.3 Construction Site Stormwater Runoff Control

#### Specific Requirements:

#### (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 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 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 within a period of time determined by the permittee. In arid, semiarid, and drought-stricken areas, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee.

- 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, as determined by the permittee, where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permittee. 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; and,
  - d. Soaps or solvents used in vehicle and equipment washing;
  - 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 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 inspections of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.

- a. Inspections must occur at a frequency determined by the permittee, 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, implement, and revise as necessary, 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.
    - 4. Provide a written or electronic inspection report.
- c. Based on site inspection findings, all permittees shall take all necessary followup 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 TCEQ's Field Operations Support Division 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:

#### (1) 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 should be made by submittal of a copy of an NOI or a small construction site notice. The permittee shall make this inventory available to the TCEQ upon request.

## 3.6.4 Post-Construction Stormwater Management in New Development and Redevelopment

#### Specific Requirements:

- (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, 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 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) above, permittees who operate level 4 small MS4s shall meet the following requirements:

- (1) 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.
  - a. Inspection Reports The permittee shall document its inspection findings in an inspection report and make them available for review by the TCEQ.

# 3.6.5 Pollution Prevention and Good Housekeeping Measures for Municipal Operations Specific Requirements:

#### (a) Program development

(1) 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 permitees 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. If feasible, the inventory may 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;
- I. Golf courses:
- m. Swimming pools;
- n. Water Utilities and Infrastructure 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.(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 developed before the end of the permit term and 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 may include such areas as pothole repair, pavement marking, sealing, and re-paving;
- (ii) Bridge maintenance may include 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 at a frequency determined by the permittee to ensure they are working properly. 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 at a frequency determined by the permittee and consistent with maintaining the effectiveness of the BMP.

(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, if feasible and practicable, 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 updated as necessary.

#### (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 should be sheltered from exposure to stormwater when feasible.
- 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) which 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 landscapingrelated 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.

#### 3.6.6 Industrial Stormwater Sources

#### Specific Requirements:

- (a) Permittees operating a level 4 small MS4 shall include the requirements described below in Part III. B.6.(1) this requirement is only applicable to level 4 MS4s
  - (1) Permittees who operate level 4 small MS4s shall identify and control pollutants in stormwater discharges to the small MS4 from permittee's landfills; other treatment, storage, or disposal facilities for municipal waste (for example, transfer stations and incinerators); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the small MS4. The program must include priorities and procedures for inspections and for implementing control measures for such discharges.



#### **Measurable Goal Evaluation Process**

Selected measurable goals for each BMP will be evaluated on an annual basis. Implementation of each BMP will be tracked as appropriate during each permit year in order to provide documentation of the BMP activities. Relative success in achieving the measurable goals, as well as an assessment of the effectiveness of each BMP, will also be evaluated on an annual basis.

Multiple City departments will be responsible for implementing portions of the SWMP and for tracking and evaluating the City's success in meeting the program's measurable goals. It is anticipated that the following City departments will be involved in the implementation and verification process:

- Water Utilities and Infrastructure
  - Streets
  - Water / Wastewater
  - Building Operations
  - Environmental Waste
    - Fleet Services
    - Environmental Education
- Engineering
- Planning
- Building Inspections
- Communications and Marketing
- Housing and Community Development
- Parks, Recreation and Open Space
  - o Park Maintenance
- Information Technology
  - GIS
- Fire
- Main Street
- Airport

Appendix B references each specific BMP listed within the table and those City department(s) having responsibility for the BMP. The **Bold** face type indicates the department(s) with primary responsibility for each BMP.

#### **Participating Entities**

Whereas the City of McKinney is the sole participant of this SWMP, and McKinney is not a participant of any other SWMPs, implementation of portions of this SWMP relies upon activities to be facilitated by NCTCOG. A copy of the annual agreement between the City of McKinney and NCTCOG for performance of the activities described within the SWMP will be provided in each annual report. NCTCOG activities that the City is relying upon include:

- participation in the Regional Public Works Program as applicable for the Post-Construction MCM;
- continued access to the *Texas SmartScape™* material on the internet; and
- development of educational materials / modules for various BMPs.

McKinney will continue to participate in the development of a regional stormwater management program as facilitated by NCTCOG.



#### **Assessment Of Non-Stormwater Discharges**

In accordance with the requirements of the General Permit, non-stormwater flows listed in Part II.C and Part VI.B.3 will not be considered as an illicit discharge requiring elimination unless the flow is identified as a significant source of pollutants to McKinney's MS4 or violation of the provisions of the Clean Water Act. There is no knowledge of adverse impacts to the City's water quality from any of the listed discharges.

