City of Hunters Creek Village
Stormwater Management Program
For Compliance with TXR040000
TXR040206
Prepared for:
The City of Hunters Creek Village

June 2019

Prepared by:

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Construction Management ▪ Geographic Information Systems ▪ Hydraulics and Hydrology ▪ Land Development
Public Works ▪ Right-of-Way Acquisition ▪ Site Development ▪ Subsurface Utility Engineering
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EXECUTIVE SUMMARY

On August 13, 2007, the Texas Commission on Environmental Quality (TCEQ) issued Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR040000 for stormwater discharges from Phase II cities in Texas. At the time of the 2000 Census, the City of Hunters Creek Village qualified for permit coverage. The general permit expired on August 13, 2012.

On December 13, 2013, the TCEQ reissued TPDES General Permit No. TXR040000 with new requirements and measures for issuing permits based on the 2010 U.S. Census Urbanized Areas (UA). Under the general permit, the City is required to obtain permit coverage and will be required to reduce the discharge of pollutants to Waters of the United States to the "maximum extent practicable" in order to protect water quality. The general permit expired in December 2018.

On January 24, 2019 the TCEQ reissued TPDES General Permit No. TXR040000 with new requirements and measures for issuing permits based on the 2010 U.S. Census Urbanized Areas (UA). Under the general permit, the City is required to renew permit coverage and will be required to reduce the discharge of pollutants to Waters of the United States to the "maximum extent practicable" in order to protect water quality.

At a minimum, the permit will require a SWMP that addresses the following issues:

- Identify and implement Best Management Practices (BMPs) required for all appropriate minimum control measures (MCMs) as deemed by the City's population within the Census defined UA;
- Identify measurable goals for the control measures;
- Develop an implementation schedule for the control measures; and
- Define the responsible entity to implement the control measures.

To obtain permit coverage, the City must develop and submit a Stormwater Management Program (SWMP), Notice of Intent and an application fee within 180 days of the issuance of the Small Municipal Separate Storm Sewer System (MS4) General Permit to TCEQ. June 30, 2019 is the due date for this submission requirement.

This SWMP describes in detail the BMPs Hunters Creek Village has developed to address each of the required MCMs. An implementation schedule has been included for each measurable goal and will show SWMP implementation over the course of the five-year permitting term. The City is dedicated to leading this effort and is supported by Cobb, Fendley & Associates who is their contracted City Engineer.

1.0 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 initially targeted easily detectable sources of water pollution such as municipal sewage and industrial process wastewater and was successful in improving water quality. However, the success was partial since NPDES was not addressing other significant sources of water quality contamination from nonpoint sources.

In 1987, Congress amended the CWA to require implementation of a comprehensive national program for addressing stormwater discharges in two phases. The first phase of the program, commonly referred to as "Phase I," was prompted by the U.S. Environmental Protection Agency (EPA) on November 16, 1990. This Phase required permit coverage for stormwater discharges from medium and large municipal separate storm sewer systems (MS4s) with populations of 100,000 or more and several categories of industrial activities. Phase I of the NPDES program addressed sources of stormwater runoff with high potential to impact water quality.

On December 8, 1999 the EPA published Phase II of the NPDES program requiring that small MS4s with populations less than 100,000 residents served with the U.S. Census Bureau's defined Urbanized Area (UA) and construction activities disturbing between one and five acres of land obtain permit coverage. 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 UAs (as defined in the latest U.S. census) must "develop, implement and enforce a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants from the Ms4 to the maximum extent practicable, to protect water quality…"

EPA has delegated authority to issue MS4 stormwater 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 regulating discharges from small MS4 systems to waters of the state. On August 13, 2007 the TCEQ issued the first general permit for small MS4s, Permit No. TXR040000, which expired on August 12, 2012. The City of Hunters Creek Village secured coverage under TXR040000 prior to February 13, 2008.

On December 13, 2013, the TCEQ reissued TPDES General Permit No. TXR040000. The reissued permit requires that the City of Hunters Creek Village (for brevity, the City) comply with.

On January 24, 2019, the TCEQ reissued TPDES General Permit No. TXR040000. A copy of the new permit is provided in Appendix A. The reissued permit requires that the City of Hunters Creek Village (for brevity, the City) comply with administrative and legal requirements and seek coverage on a tiered basis according to the population of residents served under the UA. The four levels, based on populations in the UA, are as follows:

- Level 1: Up to 10,000;
- Level 2: 10,000 to 40,000 (including non-traditional MS4s);
- Level 3: 40,000 to 100,000;
- Level 4: More than 100,000.

Under the new permit, the City of Hunters Creek Village is considered a Level 1 entity. In accordance with the permit requirements, Phase II cities are required to seek permit coverage within 180 days of the permit issuance date (therefore June 30, 2019) and will be given five years to fully implement a Stormwater Management Program (SWMP). The City will also be required to submit annual reports to the TCEQ during this permit period.

A Level 1 SWMP must address five areas, called Minimum Control Measures (MCMs) as follows:

- Public Education, Outreach, and Involvement;
- Illicit Discharge Detention and Elimination
- Construction Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment; and
- Pollution Prevention/Good Housekeeping for Municipal Operations.

For each MCM the SWMP must:

- Define measurable goals that include the development of ordinances or other regulatory mechanisms, allowed by state, federal and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;
- Define a schedule including the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action;
- Include a summary of written procedures describing how the permittee will implement the SWMP; and,
- Include a description of a program or a plan of compliance to address discharges to impaired water bodies and Total Maximum Daily Load (TMDL) requirements.

The City has the following options for conducting its reporting to TCEQ.

- Calendar year (January 1 to December 31)
- Permit year (January 24 to January 23)
- Fiscal year October 1 to September 30 or the applicable starting and ending months?

The City selects calendar year as its reporting period for this permit and annual reports to TCEQ. The annual year end is December 31. Year 1 ends December 31, 2019 and Year 5 ends December 31,2023.

1.2 City of Hunters Creek Village

The City of Hunters Creek Village is located along Interstate Highway I-10 in Houston, Texas in Harris County. According to the U.S. Census period 2010, the population of the City is 4,367. The City has a total area of 2 square miles with no significant natural resources or agricultural developments in the area.

1.3 The Purpose of this Document

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

1.4 Entities Assisting with the Development of this Document

The City of Hunters Creek Village was assisted by Cobb, Fendley & Associates, a private consulting firm, in the development of this SWMP.

1.5 Organization of this Document

This Document is organized into various sections as follows:

Section 1 – Introduction: This section provides background information on the stormwater regulatory program, defines the purpose of this document, and describes document organization.

Section 2 – City Water Bodies: This section provides general information about the water bodies that receive stormwater runoff in the City.

Section 3 – Public Education, Outreach, and Involvement: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Public Education, Outreach, and Involvement MCM.

Section 4 – Illicit Discharge Detection and Elimination: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Illicit Discharge Detection and Elimination MCM.

Section 5 – Construction Site Stormwater Runoff Control: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Construction Site Stormwater Runoff Control MCM.

Section 6 – Post Construction Stormwater Management in New Development and Redevelopment: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Post Construction Stormwater Management in New Development and Redevelopment MCM.

Section 7 – Pollution Prevention/Good Housekeeping for Municipal Operations: This section describes the permit requirements, current BMPs, selected new BMP's, measurable goals, implementation schedule, legal authority, and written procedures pertaining to the Pollution Prevention/Good Housekeeping for Municipal Operations MCM.

Section 8 – Industrial Stormwater Sources: This section describes how the City is exempt from pursuing this MCM.

Section 9 – Municipal Construction Activities: This section describes how the City is choosing to not opt in to this MCM.

Section 10 – Record-Keeping and Reporting: This section describes the annual reporting requirements of the permit.

Section 11 – References: This section provides references used in writing this document.

2.0 WATER BODIES

2.1 Impaired Waters

The new TPDES TXR040000 general permit states that permit holders shall control the discharges of pollutant(s) of concern to impaired waters and waters with provided TMDLs shall assess the progress in controlling those pollutants. For discharges to water quality water bodies with an approved TMDL, the permittee's SWMP and annual reports must include the following information:

(a) Targeted controls;
(b) Measurable goals;
(c) Identification of benchmarks;
(d) Annual reporting of selected BMPs; and
(e) Monitoring/assessment of progress.

For MS4s that discharge directly to water quality impaired water bodies without an approved TMDL, the permittee shall perform the following activities:

(a) Discharging a pollutant of concern

(1) Determine with the first year of the following permit effective date if the small MS4 is the source of the pollutant;

(2) If the permittee determines that the small MS4 may discharge the pollutant(s) of concern to an impaired water body without an approved TMDL, the permit shall, no later than two years following the permit effective date, ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittee will implement, to reduce the discharge of pollutant(s) of concern that contribute to the impairment of the water body.

(3) No later than three years following the permit effective date, the permittee shall submit a notice of change (NOC) to amend the SWMP to include any additional BMPs to address the pollutant(s) of concern.

(b) Impairment of bacteria. If bacteria are the impairment/pollutant of concern, the permittee shall identify significant sources and develop and implement focused BMPs for those sources. The permittee may implement the BMPs listed in Part II.D.4.a.5 of the permit.

(c) Annual reports must include compliance with this section along with any sampling conducted.

The City discharges indirectly into impaired Spring Branch Bayou (Segment1014O) and directly into impaired Buffalo Bayou (Segment 1014). Spring Branch and Buffalo Bayou are considered an impaired water body because of bacteria according to the most recent (reissued 2020 impaired water bodies list) updated list of impaired water bodies. A TMDL and Implementation Plan developed by the Bacteria Implementation Group (BIG) has been completed for bacteria in the Houston-Galveston region which includes stream Segment 1014. The Waste Load Allocation for this TMDL is 837.68 Billion MPN/day as stated in the Implementation Plan for the Houston-Galveston Region.

Segment 1014O is indirectly affected by the City's stormwater discharges. These Segments are impaired with Bacteria and have TMDL's and are part of the Houston-Galveston Region Implementation Plan. The Waste Load Allocation for Segment 1014O is 209.26 Billion MPN/day.

According to the I-Plan The City of Hunters Creek Village is a stakeholder in the development of the TMDL and I-Plan for bacteria in Buffalo Bayou and is participating in the Houston-Galveston Area Council Bacteria Implementation Group. Through these efforts, the city will evaluate the control measures for bacteria resulting from these efforts and the indicators of control measure success for incorporation into the city's SWMP. The table below represents the impaired water near the City of Hunters Creek Village mentioned.

Segment Number	Segment Name	Segment Name (Cont.)	Classified or Unclassified	Direct or Indirect Discharge	Impairment Category (2020 Integrated Report): pollutant	Waste Load Allocation (WLA)
1014	Buffalo Bayou Above Tidal	Buffalo Bayou Above Tidal in the San Jacinto River Basin	Classified	Direct	4: Bacteria	837.68 Billion MPN/day
1014O	Spring Branch	San Jacinto River Basin	Unclassified	Indirect	4: Bacteria	209.26 Billion MPN/day

The City of Hunter Creek Village will specifically address the impairment of bacteria to both its citizens and employees through various public outreach programs listed in the following section. This will be achieved through employee trainings, brochures distributed to citizens and business, CIPP programs, and various links found on the City of Hunters Creek Village website.

3.0 MCM1: PUBLIC EDUCATION, OUTREACH AND INVOLVEMENT

PLEASE SEE APPENDIX A FOR TABLE-FORMAT OF BMPS WITH TIME FRAMES AND MEASURABLE GOALS.

3.1 TPDES Phase II Permit Requirements and Overview

Public Education and Outreach

(a) All permit holders shall develop, implement and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards to associated with illegal discharges and improper disposal of waste and about the impacts that stormwater discharge may have on local waterways, as well as the steps the public may take to reduce pollutants in stormwater. The City shall assess current program elements, modify, develop and implement new elements as necessary to reduce discharge of pollutants from the MS4 to the maximum extent practical (MEP). The program must, at a minimum:

(1) Define goals and objectives of the program based on high priority community-wide issues;

(2) Identify targeted audiences;

(3) Develop and use appropriate educational materials, such as printed materials, billboards, mass transit advertisements, signage at select locations, radio or television advertisements and websites;

(4) Determine cost effective and practical methods and procedures for distribution of materials.

(b) 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.

(c) Review and update as necessary, the SWMP and MCM implementation procedures required by Part III.A.2 of the permit. All changes must be reflected in the annual report, maintained on site or in the SWMP, and made available for inspection by the TCEQ.

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

Public Involvement/Participation

(a) The MS4 operator must involve the public, and, at a minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP. Correctional facilities are not required to meet this MCM. The City shall assess current program elements, modify, develop and implement new elements as necessary to reduce the discharge pollutants from the MS4 to the MEP. The program must, at a minimum:

(1) If feasible, consider using public input in the implementation of the program;

(2) If feasible, consider 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.

3.2 Discussion of Stormwater Programs

The City of Hunters Creek Village is required to develop and implement a Public Education Program to distribute information to the community about the impacts of stormwater discharges on water quality, hazards related to illegal discharges and dumping, concerns of bacteria, the improper disposal of waste, and steps the public can take to reduce pollutants in stormwater runoff. The City must also implement a public involvement/participation program to include opportunities for the constituents residing with the City's permitted MS4 area to participate in the development and implementation of the SWMP.

The following are the specific BMPs, implementation activities, measurable goals and schedule of completion. It should be noted that some BMPs are new programs, while some BMPS are existing programs that the City will continue in support of the MS4 program.

BMP 1.A Stormwater Outreach Materials

The City will renew their educational flyers contract with Harris County, annually. Educational flyers about public discharging, fats, oils, and grease clogging sanitary sewer lines are distributed to the public through this contract. These specific flyers correlate directly to the bacteria impairment of the nearby streams.

Measurable Goals

*Renew stormwater runoff educational flyers contract with Harris County every year.

BMP 1.B Public Service Announcements

The City will utilize public service announcements (PSAs). In the past, this has been a successful outreach approach by connecting with audiences through radio, webpage information (http://cityofhunterscreek.com/), and television outlets. Audiences can respond to questionnaires about the most pertinent stormwater pollution related issues via City staff email contacts.

Measurable Goals

* The City will utilize at least one public service announcement (PSA) annually through radio or television outlets.

BMP 1.C Storm Inlet Stenciling

The City will continue to implement "DO NOT DUMP" stenciling on new stormwater inlets.

Measurable Goals

*Stencil "DO NOT DUMP" on 100% of new storm inlets constructed throughout the City.

BMP 1.D List Server

Create a List Server that will improve communication with City residents.

Measurable Goals

*Create a List Server with 100% of residential addresses within the MS4

BMP 1.E Initiate Public Participation and Involvement Program

The City will educate and utilize local volunteer groups for stormwater runoff projects throughout the City.

Measurable Goals

* Conduct at least 1 volunteer stormwater runoff project a year.

4.0 MCM2: ILLICIT DISCHARGE DETECTION AND ELIMINATION

4.1 TPDES Phase II Permit Requirements and Overview

The illicit discharge detection and elimination (IDDE) MCM is intended to detect and eliminate discharges to the MS4 system that are not entirely composed of stormwater. As identified in the Phase II TPDES permit, MS4 permittees are required to develop a strategy to detect and eliminate illicit discharges to the storm drain system. The EPA has defined an illicit discharge as "any discharge into a separate storm sewer system that is not composed entirely of stormwater."

The following are program requirements for MCM 2: Illicit Discharge Detection and Elimination, according to Part III.B.2 of the general permit.

(a) Permit Requirements

(1) MS4 Mapping:

An updated map of the storm sewer system must be developed and must include the following:

i. The location of all outfalls operated by the permittee and the discharge in Waters of the U.S.;

ii. The names and locations of all surface waters receiving discharges from MS4's outfalls; and

iii. Priority areas identified under Part III.B.2(e)(1) any additional information needed by the permittee to implement its SWMP.

(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.

(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 MS4.

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

(5) Source Investigation and Elimination

i. 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 discharges as soon as practicable.

ii. 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 the 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.

iii. Corrective action to eliminate illicit discharges.

(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.

(b) Allowable Non-Storm Water Discharges

Non-storm water flows listed in Part II.C do not need to be considered by the MS4 operator as an illicit discharge requiring elimination unless the operator of the small MS4 or the executive director identifies the flow as a significant source of pollutants to the small Ms4. In lieu of considering non-storm water sources on a case-by-case basis, the MS4 operator may develop a list of common and incidental non-storm water discharges that will not be addressed as illicit discharges requiring elimination. If developed, the listed sources must not be reasonably expected to be significant sources of pollutants either because of the nature of the discharge or the conditions that are established by the MS4 operator prior to accepting the discharge to the small MS4. If this list is developed, then all local controls and conditions established for these listed discharges must be described in the SWMP and any changes to the SWMP must be included in the annual report described in PART IV.B.2 of this general permit and must meet the requirements of Part II.D.3 of the general permit.

4.2 Allowable Non-Stormwater Discharges

The following non-storm water sources may be discharged from the small MS4 and are not required to be addressed in the small MS4's Illicit Discharge and Detection or other minimum control measures, unless they are determined by the permittee or the TCEQ to be significant contributors of pollutants to the small MS4:

- water line flushing;
- runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
- discharges from potable water sources that do not violate Texas Surface Water Quality Standards;
- diverted stream flows;
- rising ground waters and springs;
- uncontaminated ground water infiltration;
- uncontaminated pumped ground water;
- foundation and footing drains;
- air conditioning condensation;
- water from crawl space pumps;
- individual residential vehicle washing;
- flows from wetlands and riparian habitats;
- dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
- street wash water;
- discharges or flows from fire-fighting activities (fire-fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
- other allowable non-storm water discharges listed in 40 CFR 122.26(d)(2)(iv)(B)(1);
- non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) TXR050000 or the TPDES Construction General permit (CGP) TXR150000;
- discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
- Other similar occasional incidental non-storm water discharges, unless the TCEQ develops permits or regulations addressing these discharges.

The City has not identified any of these discharges as significant contributors of pollution to the City's MS4. Therefore, these discharges will not be specifically addressed in the City's SWMP. However, in order to manage the release of potential pollutants from these discharges, the City will review current policies and procedures to minimize water quality impacts throughout the community. If in the future the above-referenced discharges prove to be a significant contributor of pollution to the MS4, the SWMP will be revised to include BMPs for those discharges.

Since the City does discharge to an impaired water body, bacteria generating sources will be a consideration for this program.

4.3 Discussion of Stormwater Programs

The City must develop, implement, and enforce a program to detect and eliminate illicit discharges. As part of this program, the City must:

- Develop a storm sewer system map with locations of all known outfalls.
- Establish an ordinance (or other regulatory mechanism) prohibiting illicit discharges
- Establish enforcement procedures and actions.
- Develop procedures to detect, track down, and eliminate illicit discharges.
- Establish corrective actions.
- Inform employees, businesses, and the general public of the program.

The following are the specific BMPs, implementation activities, measureable goals and schedule of completion.

BMP 2.A Illicit Discharge Detection and Elimination Legal Authority

City staff will conduct a review of existing legal authority and submit proposals to the city council for ensuring the legal authority exists to effectively prohibit non-storm water discharges into the city's stormsewer system. The city will set minimum investigation requirements for illicit discharges as deemed necessary.

Measurable Goals

*Review 100% of the existing ordinance for legal authority for the controls identified in the general permit by December 31, 2021.

BMP 2.B Stormwater System Mapping Verification and Update

The map of the City's stormsewer system will list the location of all outfalls operated by the MS4, and that it will list the names and locations of all surface waters receiving discharges from the MS4.

Measurable Goals

* Create a stormwater system map by December 31, 2021.

*The City will update 50% of the stormwater system map annually for years 4-5

BMP 2.C Employee Illicit Discharge Training

The City will effectively train field staff that may encounter sources of illicit discharge. This training will also include a stormwater quality management program, procedures for tracing the source of an illicit discharge and removing the source of the illicit discharge, how to identify illicit discharges, the discharge program regulations and operating procedures, the construction runoff control program, and the good housekeeping program. The City will maintain training program materials and attendance lists on site.

Measurable Goals

* Conduct a training meeting on illicit discharges and record an employee attendance log annually for years 1-5.

BMP 2.D Public Disposal of Hazardous Waste and Oil

Hazardous waste and oil recycling notification to residents.

Measurable Goals

*Add waste oil collection information to City website and send one reminder in the City newsletter, annually.

BMP 2.E Public Reporting of Illicit Discharge

A hotline number for the Public to report illicit discharges within the MS4 will help notify the City so they can handle the situation efficiently

Measurable Goals

*100% of illicit discharges will recorded and documented, annually.

5.0 MCM3: CONSTRUCTION SITE STORMWATER CONTROL

5.1 TPDES Phase II Permit Requirements and Overview

The MS4 operator, to the extent allowable under State and local law, must develop, implement, and enforce 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 or if that construction activity is part of a larger common plan of develop or sale that would disturb one acre or more of land. 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.

The City will assess their current program elements and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP. The following are the requirements as per Part III.B.3 of the general permit.

(a) Requirements for construction site contractors to, at a minimum:

(1) Implement appropriate erosion and sediment control BMPs;

(2) Stabilize soils of disturbed areas immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site;

(3) Design, install, implement and maintain effective BMPs to minimize the discharge of pollutants to the small MS4.

(b) Control waste such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality

(c) The MS4 operator must develop procedures for:

(1) Site plan review which incorporate consideration of potential water quality impacts;

(2) Receipt and consideration submitted by the public; and

(3) Site inspection and enforcement of control measures to the extent allowable under state and local law.

(d) The MS4 operator must develop and implement procedures for inspecting large and small construction projects.

(e) All permittees shall implement a method for informing or training all the permittee's field staff that may perform construction site inspections or respond to stormwater construction related water quality complaints.

(f) Additional Requirements for Level 3 and 4 Small MS4s

(1) Construction Site Inventory. Permittees who operate Level 3 and 4 Small MS4s shall maintain an inventory of all permitted active public and private constructions 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.

5.2 Discussion of Stormwater Programs

The City is required to develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the small MS4 related to construction activities that disturb greater than or equal to one acre of land (including smaller sites that are part of a larger common plan of development). The City will develop an ordinance to require erosion and sediment controls, as well as sanctions to ensure compliance, and procedures for site plan and public comment review. The City must also require construction site operators to implement erosion and sediment control BMPs and to control waste.

The following are specific BMPs, implementation activities, measurable goals and schedule of completion.

BMP 3.A Construction Site Stormwater Runoff Control Legal Authority

The City will review and update existing ordinances requiring erosion, sediment, and on-site waste controls to ensure compliance with TPDEX TXR040000. The regulations include enforcement procedures and actions for failing to comply.

Measurable Goals

* Continue to enforce and review 100% of the existing ordinance and confirm that it provides legal authority for the controls identified in the general permit and continue to enforce those controls. Add clause to the City's ordinance to prohibited discharges.

BMP 3.B Construction Plan Review

The City developed plan review and approval procedures for construction projects that incorporate considerations of potential water quality impacts and are consistent with TPDES Permit No. TXR040000. The City will continue to review plans for compliance with required water quality protection measures and SWPPP. The City requires corrective action for observed violations and pursues enforcement when necessary.

Measurable Goals

* Review 100% of new construction plans annually for years 1-5.

BMP 3.C Continue Site Inspection

The City will continue to inspect construction sites in accordance with finalized site inspection protocols and procedures that outline city inspection and enforcement requirements. These procedures will be maintained onsite or in the SWMP and made available to the TCEQ upon request. The City will continue to require corrective action for observed violations and to pursue enforcement when necessary. All follow-up and enforcement actions will be tracked and made available to the TCEQ.

Measurable Goals

* Inspect 100% of new construction sites within the MS4 annually for years 1-5.

BMP 3.D Receive Public Input on Construction Projects

The city has selected receiving public input for implementation as part of this SWMP. This BMP coordinates with MCM #1 and can be integrated into existing activities through receipt of information from the public at the existing Planning and Zoning hearings and City Council meetings.

Measurable Goals

* Conduct 1 construction project survey annually for years 1-5. Public inputs can also be received through the City website and at the designated phone number and mailing address.

BMP 3.E Construction Staff Training

The city has selected construction staff training as part of this SWMP. This BMP is to fulfill MS4 Staff Training according to the new TXR40000 permit. 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.

Measurable Goals

* The City will host at least one construction staff training per year.

6.0 MCM 4: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

General Permit Requirement: **Part III.B.4**

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.

BMP 4.A Post-Construction Stormwater Management Legal Authority

The City will review and update existing ordinances requiring erosion, sediment, and on-site waste controls to ensure compliance with TPDEX TXR040000. The regulations include enforcement procedures and actions for failing to comply.

Measurable Goals

* Review, document, maintain, and update 100% city's current development code for requirements for post- construction maintenance of BMPs by December 31, 2023

BMP 4.B Site Plan Review and Approval Process

By ordinance, the city requires a final inspection of landscaping and stabilization of disturbed soils after construction. The city will continue to require a plan for site stabilization after construction is complete as well as designation of the parties responsible for maintenance of vegetation at the site and what practices will be employed to ensure that adequate vegetative cover is preserved.

Measurable Goals

- * Review 100% of final inspections for post-construction runoff control measures conducted annually for years 1-5.

BMP 4.C Long Term Inspection Process

Both commercial and residential sites will continue to be inspected on a monthly basis for storm water violations.

Measurable Goals

- Inspect 20% of commercial and residential construction sites annually for years 1-5

7.0 MCM5: POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

7.1 TPDES Phase II Permit Requirements and Overview

Municipalities conduct variety of activities throughout their daily operations, which have the potential to affect water quality throughout the community. With the adoption and implementation of stormwater management policies and procedures, the City will protect stormwater quality and continue to deliver public services at the present service levels. A variety of municipal operations are affected by stormwater management policies and procedures. These municipal operations include, but are not limited to, parks maintenance, open space management, road and rights-of-way maintenance, waste/wastewater utilities, fleet and building maintenance, city construction projects, and stormwater system maintenance. The following are the requirements as per Part III.B.5 of the general permit.

A section, within the SWMP must be developed to establish an operation and maintenance program, including an employee-training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

(a) Permittee-owned Facilities and Control Inventory

(1) 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.

(b) Training

A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing stormwater pollution from municipal operations. Materials may be developed, or obtained from the EPA, states, or other organizations and sources. Examples or descriptions of training materials being used must be included in the SWMP.

(c) Disposal of Waste

Waste materials removed from the small Ms4 and waste that is collected as a result of maintenance of storm water structural controls must be properly disposed.

(d) Contractor Requirements and Oversight

Contractors hired by the permittee to perform maintenance activities on permittee-own facilities must be contractually required to comply with all of the storm water control measures, good housekeeping practices, and facility-specific stormwater management operating procedures. All permittees shall provide oversight of contractor activities to

ensure that contractors are using appropriate control measures and standard operating procedures (SOPs).

(e) Municipal Operations and Municipal Activities

(1) The MS4 operator must evaluate the operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater from their own operations.

(2) Identify pollutants of concern that could be discharged from above O&M activities

(3) Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from OM activities.

(4) Inspect pollution prevention measures.

(f) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP.

Additional Requirements for Level 3 and 4 Small MS4s:

(g) Storm Sewer System Operation and Maintenance

(1) Permittees who operate Level 3 or 4 Small MS4s shall develop and implement an O&M program to reduce to the MEP the collection of pollutants in catch basins and other surface drainage structures

(2) 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.

(h) 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 includes, if feasible and practicable, a street sweeping and cleaning program, or an equivalent BMP such as an inlet protection program, which will include an implementation schedule and waste disposal procedure.

(i) Mapping of Facilities

Permittees shall identify on a map in the regulated area under this permit, where the permittee-owned and operated facilities and stormwater controls are located

(j) 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:

(1) Assessment of Facilities Pollutant Discharge Potential;

(2) Identification of high priority facilities;

(3) Documentation of Assessment Results

(k) Development of Facility Specific SOPs

Permittees who operate Level 3 or 4 Small MS4s shall develop facility specific stormwater management SOPs.

(l) Stormwater Controls for High Priority Facilities

(1) Performing general good housekeeping;

(2) Storing, de-icing and anti-icing materials to the MEP that discharges from these materials are not discharged in stormwater runoff;

(3) Developing SOPs for fueling operations and vehicle maintenance to address spill prevention and spill controls at permittee-owned facilities; and

(4) Developing SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. Discharges of equipment and vehicle wash water to the Small MS4 or directly to receiving waters from permittee-owned facilities is not authorized under the general permit.

(m) 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.

7.2 Discussions of Stormwater Programs

The City is required to develop and implement an operation and maintenance program that has the goal of preventing or reducing pollutant runoff specifically bacteria from municipal operations. The City will do this through the adoption and implementation of stormwater management policies and procedures that protect stormwater quality yet continuing to deliver public services at the current level.

The following are the specific BMPs, implementation activities, measurable goals and schedule of completion.

BMP 5.A City-Owned Facilities and Stormwater Control inventory

The city will inventory city-owned and operated facilities and stormwater controls listed in Part III.B.5.(b)(1) and Part III.B.5.(b)(6) of the general permit. The pollutant discharge potential of each facility will be assessed as a part of this inventory. Standard operating procedures (SOPs) for good housekeeping, equipment washing and fueling operations, vehicle maintenance, and chemical and fertilizer application will be drafted and used to establish guidelines and standards for municipal facilities and operations.

Measurable Goal

*Inventory/record 100% of municipal facilities and storm water controls by December 31, 2022 through visual and operational inspection.

*Assess and record the pollutant discharge potential of 100% of all municipal facilities by December 31, 2022.

*Develop/Review 100% of the maintenance procedures for the City's structural facilities by December 31, 2022.

BMP 5.B Good-Housekeeping Training

Information on preventing and reducing stormwater pollution from all municipal operations will be provided to city employees. Training will address topics such as the proper procedures for good housekeeping practices.

Measurable Goal

* Conduct 1 training per year and record an employee attendance log

BMP 5.C Municipal Operation and Maintenance Activity Assessment

The city will evaluate the operations and maintenance (O&M) activities in street and parking lot maintenance, bridge maintenance, and rights-of-way maintenance, and MS4 facilities for potential discharge of pollutants to stormwater. Some pollutants of concern that could discharge from MS4 facilities are sediment, construction debris, trash, and animal feces.

Measurable Goal

* Identify all additional pollutants of concerns by December 31, 2023 at 100% for all O&M activities.

*Evaluate and assess 20% of the O&M activities for potential stormwater pollutant discharge annually for years 1-5.

*Visually inspect 20% of City owned facilities to ensure they are working properly annually for year 1-5. Keep a log of inspections.

BMP 5.D Pet Waste management in City Parks

The city will maintain existing pet waste receptacles in city parks.

Measurable Goal

*Supply 100% of the pet waste bag stations at 100% of the City parks annually for years 1-5.

BMP 5.E Street Sweeping

The city presently operates a program of street sweeping for city streets. The city will continue the street sweeping program to reduce accumulations of sediment and litter on city streets.

Measurable Goal

* Sweep 20% of the total lane miles throughout the MS4 annually for years 1-5.

BMP 5.F Sanitary Sewer Rehabilitation

Sewer main replacement projects designed to improve collection system capacity and prevent sanitary sewer overflows has been made part of the city's 10-Year Capital Improvement Program. These projects are programmed for funding and construction through 2030. This BMP is planned to significantly help the bacteria impaired streams.

Measurable Goal

*Complete 20% of current Grade 4-5 (Grade 4 = 1-3-year attention, Grade 5 = immediate attention) sanitary sewer main replacements annually for years 1-5.

BMP 5.G Municipal Landscaping

The City will continue its municipal landscaping program to prevent contamination of stormwater from pesticides, soil and fertilizer runoff. Proper landscape management can effectively reduce water use and contaminant runoff and enhance a property's aesthetics.

Measurable Goal

* Review the operations and maintenance procedures for 100% of municipal landscaping during year 4 of the permit term.

BMP 5.H Spill Prevention Plans

The City will continue its spill prevention plans that clearly state how to stop the source of a spill, how to contain and clean up a spill, how to dispose of contaminated materials, and how to train personnel to prevent and control future spills.

Measurable Goal

* Evaluated 100% of identified facilities and determine if SPCC plans are required. Create SPCC Plans for 25% of Permittee owned facilities a year.

8.0 MCM6: INDUSTRIAL STORMWATER SOURCES

The City does not meet the population requirements to opt in to this MCM

9.0 MCM7: MUNICIPAL CONSTRUCTION ACTIVITIES

The City may apply under the TPDES Small MS4 General Permit for authorization to discharge stormwater runoff from each construction activity performed by the City that results in the disturbance of one or more acres of land as an alternative to applying for coverage under the TPDES Construction General Permit. The City has decided not to develop the optional seventh minimum control measure for municipal construction activities. The optional 7th minimum control measure may be developed after submittal of the initial NOI and would require a Notice of Change (NOC) to be submitted to notify the executive director of this change and identify the geographical area or boundary where the activities will be conducted under the provisions of this permit.

10.0 RECORDKEEPING AND REPORTING

10.1 Recordkeeping

The City will maintain, store and make available all records, a copy of the TPDES general permit and all information used to complete ht Notice of Intent (NOI) for the term of this permit period. The SWMP will be maintained at City Hall and/or at additional locations identified in the NOI. The City will make all records, including the NOI and SWMP, available for public viewing at City Hall and/or at additional locations identified in the NOI. The SWMP will be available for viewing during normal operating hours and can be viewed pursuant to the Public Information Act. Reasonable charges and reasonable time, in accordance with Texas law, may be levied and taken, respectively, by the City for researching availability and preparing requested materials.

10.2 Annual Report

The City will submit an annual report to the TCEQ pursuant to the TPDES regulations. The City will incorporate the reports into the SWMP and maintain copies of the annual report for public viewing as aforementioned. The annual report, typically will document the City's SWMP-related activities and events for the target year, assess and evaluate the success and effectiveness of each BMP undertaken during the target year, compare the success of the BMP to the measurable goals of the SWMP, and provide conclusions and recommendations, including modifications to the SWMP. Modifications may include replacement of existing BMPs, adjustment of the SWMP implementation schedule for specific BMPs, or other changes allowed by the TPDES regulations.

10.3 Notice of Change (NOC) Updates

The plan may be updated by the City at any time for any reason pursuant to and within the limits of the TPDES regulations. As part of the NOC process, when the City contemplates eliminating a BMP from the SWMP without replacement, the City will review the SWMP Cover Sheet and the SWMP to assure that elimination of the specific BMP will not violate compliance requirements. If the City becomes non-compliant if a BMP is removed, a replacement BMP must be suggested and included in the NOC.

11.0 REFERENCES

TCEQ, 2019a. *General Permit for Small Municipal Separate Storm Sewer Systems to Discharge Under the Texas Pollutant Discharge Elimination System Permit No. TXR040000*. TCEQ, Austin, TX, *January 24.*

TCEQ, 2018b. *2018 Texas Integrated Report – Texas 303(d) List (Category 5).* TCEQ, Austin, TX, May 9.

TCEQ, 2014. *Segments with Total Maximum Daily Loads (Website).* TCEQ, Austin, TX, http://www.tceq.texas.gov/waterquality/tmdl/nav/tmdlsegments. Accessed March 4, 2014.