The City of Alamo Heights

Storm Water Management Plan

TPDES General Permit Number TXR040000 for Small MS4

Table of Contents

1.0 Overview 3
1.1 Stormwater Management Program MS4 Levels 3
1.2 Receiving Water Quality 4
1.3 Form of Government 9
1.4 Legal Authority 10
2.0 Storm Water Management Program Overview 10
2.1 Development of the SWMP 10
2.2 Organization of the SWMP 11
3.0 Minimum Control Measure No. 1: Public Education and Outreach 13
3.1 Regulatory Requirements 13
3.2 Selected Best Management Practices 13
4.0 Minimum Control Measure No. 2: Public Involvement and Participation 17
4.1 Regulatory Requirements 17
4.2 Selected Best Management Practices 17
5.0 Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination 20
5.1 Regulatory Requirements 20
5.2 Selected Best Management Practices 21
6.0 Minimum Control Measure No. 4: Construction Site Storm Water Runoff Control 24
6.1 Regulatory Requirements 24
6.2 Selected Best Management Practices 24
7.0 Minimum Control Measure No. 5: Post-Construction Storm Water Management in New Development and Redevelopment 27
7.1 Regulatory Requirements 27
7.2 Selected Best Management Practices 27
8.0 Minimum Control Measure No. 6: Pollution Prevention/Good Housekeeping for Municipal Operations 30
8.1 Regulatory Requirements 30
8.2 Selected Best Management Practices 30
9.0 Minimum Control Measure No. 7: Industrial Storm Water Sources 36
10.0 Minimum Control Measure No. 8: Authorization for Construction Activities Where MS4 is Site Operator 36
11.0 Record Keeping and Reporting 37
11.1 Record Keeping 37
11.2 Reporting 37
11.2.1 General Reporting Requirements 37
11.2.2 Annual Report 38
12.0 References 39
Attachments 40

1.0 Overview

The Federal Water Pollution Control Act was passed in 1972. After the law was amended in 1977, it became commonly known as the Clean Water Act. The Act established the structure for federal regulation of pollutant discharges into the waters of the United States, authorized the Environmental Protection Agency (EPA) to implement pollution control programs, extended the requirement to establish standards for surface water contaminants, and made it unlawful to discharge unpermitted point source pollutants into navigable waters. The Act also established funding for construction of sewage treatment plants and promoted planning to address non-point source pollution. In order to reduce storm water pollution, amendments were made to the Clean Water Act in 1987, requiring storm water discharges to be permitted in two phases.

Phase 1 applied, among other things, to larger cities with separate stormwater sewer systems. The regulations required these cities to obtain National Pollutant Discharge Elimination System (NPDES) permits. The permit process imposed controls on the cities to reduce pollution in storm water discharges.

The Stormwater Phase II rule, promulgated December 8, 1999 to the Texas Commission on Environmental Quality (TCEQ), was the next step in the EPA's efforts to preserve, protect, and improve the nation's water resources from polluted stormwater runoff. TCEQ reissued the Texas Pollution Discharge Elimination System General Permit TXR040000 on December 13, 2013. The reissued permit categorizes MS4 operators by levels based on the population served within the 2010 Urbanized Area (UA). The City of Alamo Heights is defined as a level 1 MS4. Level 1 operators serve a population less than 10,000 within an urbanized area (UA). The intent of the MS4 permit is to implement programs and practices to control polluted stormwater runoff. This program requires that the City of Alamo Heights:

- Reduce the discharge of pollutants to the maximum extent practicable (MEP);
- Protect water quality;
- Satisfy the appropriate water quality requirements of the Clean Water Act; and
- Manage stormwater quality activities through the Stormwater Management Program (SWMP).

1.1 Stormwater Management Program MS4 Levels

The August 15, 2024 permit imposes compliance obligations on small MS4s based on the population inside the 2010 urbanized area and served by the small MS4. A four-level system is defined in Part II.B.5 of the permit, which states:

- Level I: Operators of traditional small MS4s that serve a population of less than 10,000 within an urbanized area;
- Level 2: Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within an urbanized area. This category also includes all non-traditional small MS4s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the urbanized area, unless the nontraditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served;
- Level 3: Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,00 within an urbanized area;

- Level 4: Operators of traditional small MS4s that serve a population of 100,000 or more within an urbanized area.

1.2 Receiving Water Quality

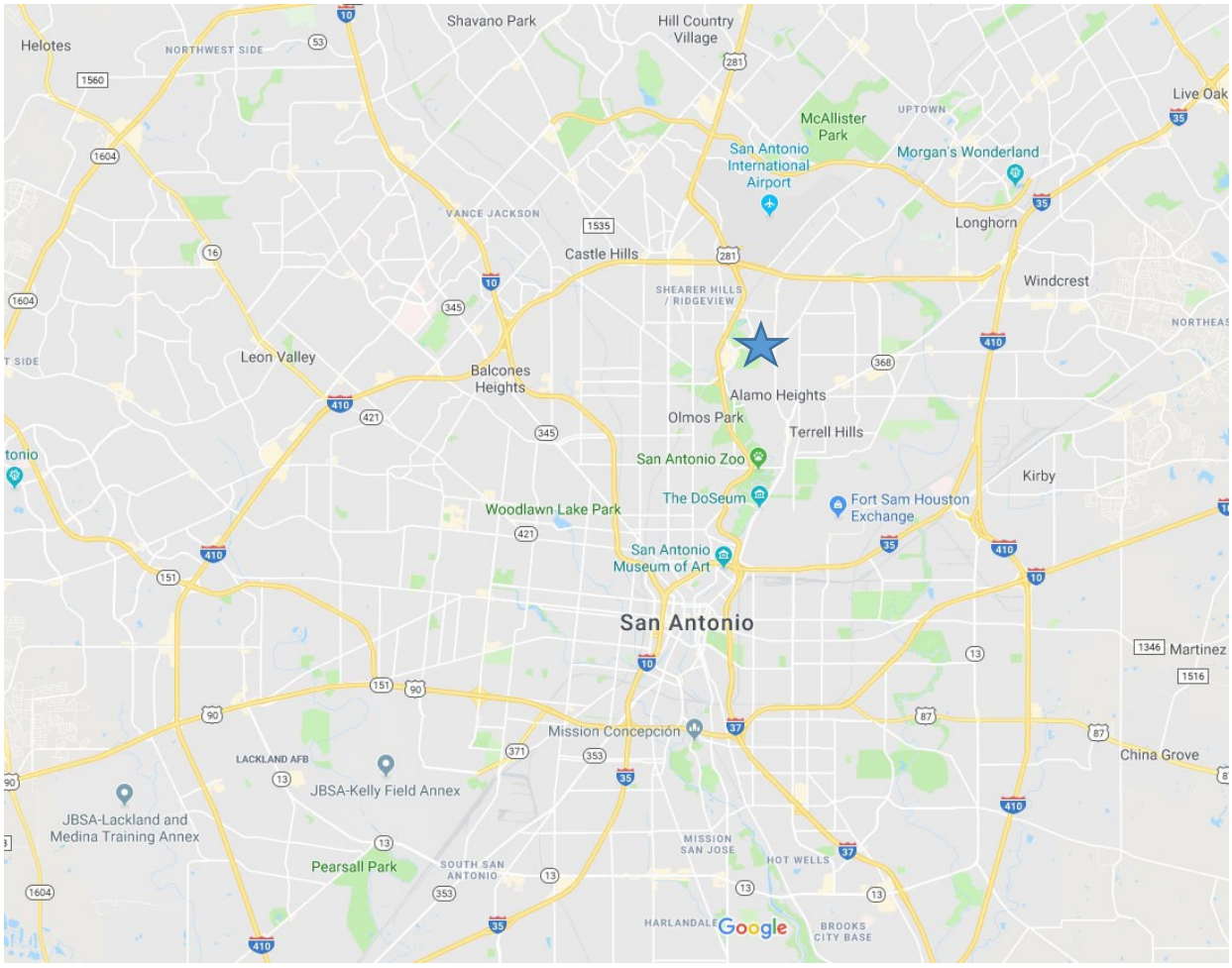
The City of Alamo Heights has updated the SWMP in accordance with the requirements of the reissued TPDES General Permit TXR040000 for obtaining authorization for stormwater discharges and certain non-stormwater discharges. The SWMP has been developed to facilitate the City's efforts in reducing stormwater pollutants from the City's MS4 to the maximum extent practicable.

This document serves as the City's SWMP. It includes all selected BMPS for each of the minimum control measurable goals for each BMP, the evaluation method and implementation schedule. It proposes the means to develop, to implement, and to enforce a plan to reduce the discharge of pollutants to the maximum extent practicable (MEP). It identifies five Minimum Control Measures (MCMs), which are required to be addressed by the General Permit.

The SWMP proposes scheduling for each MCM and establishes criteria for measuring the success of the implementation. The detailed proposals for each MCM are provided behind tabs which are numbered correspondingly.

The city must maintain records on the SWMP, submit an annual report to the TCEQ regularly, and submit other records to the TCEQ when requested. The records must include documentation pertaining to the effectiveness of BMPs and shall be included in the annual reports as required in Part V. of the General Permit. The records must also be kept available to the public. Any changes to the SWMP must be included in the annual report as described in Part V.B.2. of the General Permit and must meet the requirements of Part II.F.6. of the General Permit. The city must report non-compliance with the General Permit to the TCEQ and maintain accurate records at TCEQ offices.

The center of the City of Alamo Heights is located just 4.5 miles to the North of downtown San Antonio. Alamo Heights is surrounded by San Antonio, the seventh largest metropolitan area in the U.S. and is adjacent to the cities of Terrell Hills and Olmos Park. The city encompasses a total area of 2.1 square miles and sits 807 feet above sea level.



The City of Alamo Heights is located in the San Antonio River watershed. Based on review of the 2024 Texas Integrated Report of Surface Water Quality, associated 303(d) list, the Texas TMDL Program, and the San Antonio River Basin Clean Rivers Program, this memorandum describes water quality in the vicinity of the City of Alamo Heights.

303(d) List

As required under Sections 303(d) and 304(a) of the federal Clean Water Act, the 303(d) list identifies the water bodies in or bordering Texas for which effluent limitations are not stringent enough to implement water quality standards, and for which the associated pollutants are suitable for measurement by maximum daily load. Texas' 303(d) list is included as part of the Texas Integrated Report of Surface Water Quality.

One of three subcategories is assigned to each impaired parameter to provide information about water quality status and management activities on that water body. The categories are defined as:

Category 4: Impairments that are not suitable for a TMDL or for which a TMDL has already been approved. Available data and/or information indicate that at least one designated use is not being supported or is threatened, but a TMDL is not needed.

- **Category 4a** - A state-developed TMDL has been approved by EPA or a TMDL has been established by EPA for any water-pollutant combination.

- **Category 4b** - Other required control measures are expected to result in the attainment of an applicable water quality standard in a reasonable period of time.
- **Category 4c** - The impairment or threat is not caused by a pollutant.

Category 5: The water body does not meet applicable water quality standards or is threatened for one or more designated uses by one or more pollutants.

- **Category 5a** - TMDLs are underway, scheduled, or will be scheduled for one or more parameters.
- **Category 5b** - A review of the standards for one or more parameters will be conducted before a management strategy is selected, including the possible revision to the water quality standards.
- **Category 5c** - Additional data or information will be collected and/or evaluated for one or more parameters before a management strategy is selected.
- **Category 5r**- A Watershed Protection Plan (WPP) is under development or accepted by EPA for this parameter.

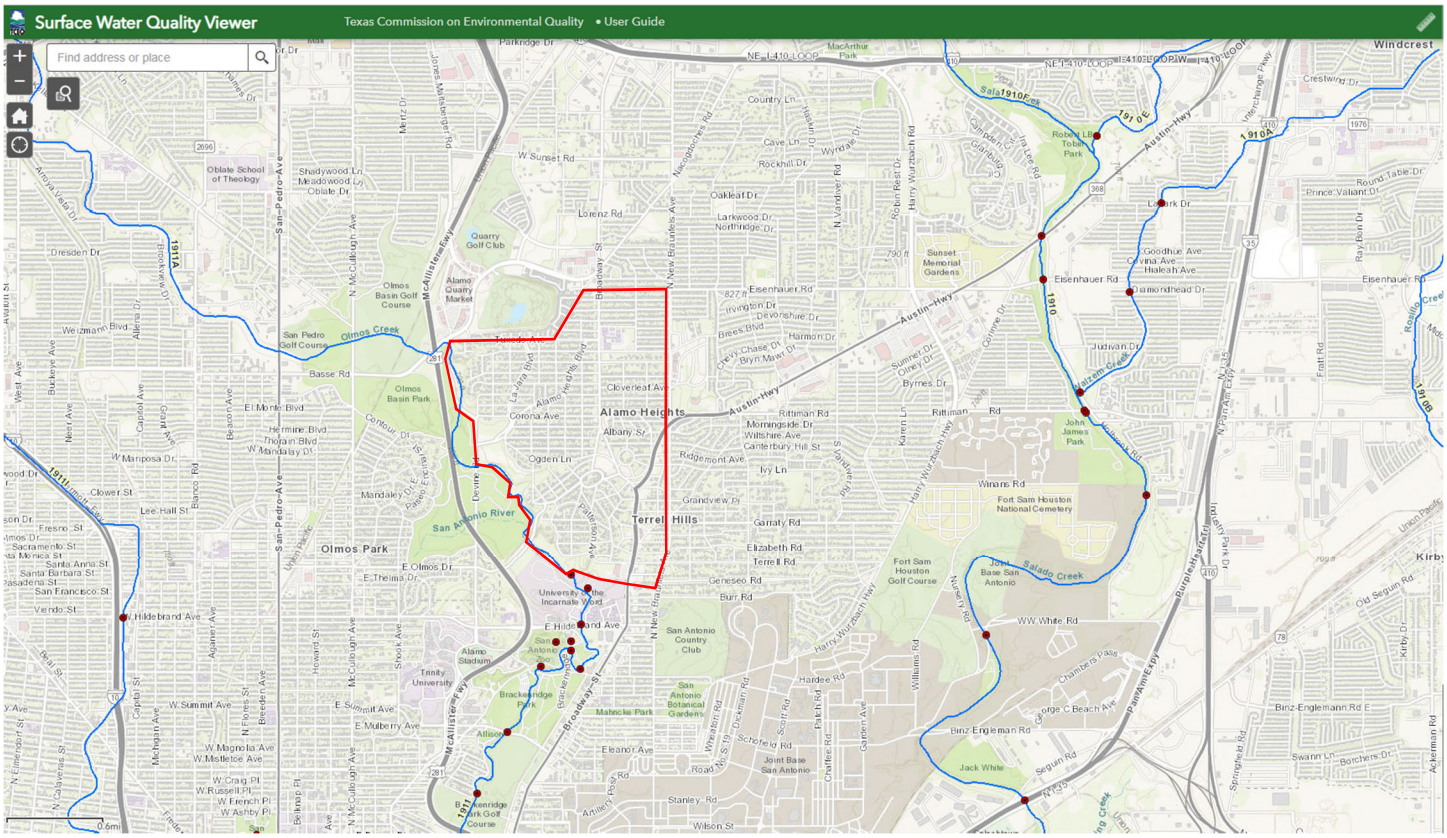
The stream segments included on the Texas 303(d) list in the area of the City of Alamo Heights are included in **Table 1** below.

Table 1 - **Stream Segments and Impaired Parameters in the 2024 Texas 303(d) List**

Segment ID	Name	Parameter	Category	Carry Forward? True (T) or False (F)
1911-09	Upper San Antonio River	impaired fish community	5r	F
1911-08	Upper San Antonio River	impaired fish community, Impaired macrobenthic community in water	5r	F
1911B	Apache Creek	bacteria	4a	F
1911C_01	Alazan Creek	bacteria	4a	F
1911C_02	Alazan Creek	bacteria	4a	F
1911D_01	San Pedro Creek	bacteria	4a	F
1911D_02	San Pedro Creek	bacteria	4a	F
1911E_01	Sixmile Creek	bacteria	4a	T
1911H_01	Picosa Creek	depressed dissolved oxygen	5c	T

A map of stream segments in the vicinity of the City of Alamo Heights is shown in Figure 1.

Figure 1 – Stream Segments in the Vicinity of the City of Alamo Heights



Water Bodies with Concerns for Use Attainment and Screening Levels

The 2024 Texas Integrated Report includes a list of water bodies of concern. The level of concern is classified as the following:

CN - Concern for near-nonattainment of the Water Quality Standards
CS - Concern for water quality based on screening levels

Table 2 includes the list of stream segments in the area of the City of Alamo Heights where sampling results have led to a level of concern. Potential pollution sources as indicated in the 2024 Texas Integrated Report include non-point sources and municipal point source discharges of nutrients, including nitrate, total phosphorus, and bacteria.

Table 2 - Segments with Concerns in the 2024 Texas Integrated Report

Segment ID	Name	Parameter	Level of Concern
1911_02	Upper San Antonio River	bacteria	CN
1911_05	Upper San Antonio River	impaired habitat	CS

Segment ID	Name	Parameter	Level of Concern
1911_01,1911_02, 1911_03, 1911_04, 1911_05, 1911_06, 1911_07, 1911_08, 1911_09	Upper San Antonio River	nitrate	CS
1911_01, 1911_02, 1911_03, 1911_04, 1911_05, 1911_09	Upper San Antonio River	total phosphorus	CS
1911_08	Upper San Antonio River	chlorophyll-a	CS
1911B_01	Apache Creek	nitrate	CS
1911D_02	San Pedro Creek	nitrate	CS
1911H_01	Picosa Creek	depressed dissolved oxygen	CS

Total Maximum Daily Loads (TMDLs)

The Texas TMDL Program works with communities to restore and improve water quality of Texas streams, lakes and bays. They work with stakeholders/communities in watersheds where pollution is limiting the full beneficial use of surface waters. The TMDL programs helps to develop targets to reduce pollution and helps the communities to improve their waterways. TMDLs exist in the vicinity of the City of Alamo Heights. TMDL's in the San Antonio River basin are shown in **Table 3**.

Table 3 - TMDLs in the San Antonio River Basin

Segment ID	Name	Parameter
1911	Upper San Antonio River	Bacteria

Clean Rivers Program

The San Antonio River Authority (SARA) administers the Texas Clean Rivers Program (CRP). The CRP Long Term Action Plan/Goal: to maintain and improve the quality of water resources within each river basin in Texas through an ongoing partnership involving the TCEQ, other agencies, river authorities, regional entities, local governments, industry and citizens. The CRP's objective is to provide quality-assured data to the TCEQ for use in Water Quality decision-making, identify and evaluate water quality issues, promote cooperative watershed planning, inform and engage stakeholders, maintain efficient use of public funds and adapt the program to emerging Water Quality issues[1].

To aid in achieving consensus within river basins, the TCEQ contracts with local agencies to administer the program within their respective river basins. SARA is the Planning Agency in the San Antonio River Basin. The City of Alamo Heights is located within the larger San Antonio River watershed. The 2018 San Antonio River Basin Summary Report[2] summarizes water quality for the San Antonio River basin. SARA conducts water quality monitoring in support of the Upper San Antonio River Watershed Protection Plan, the Implementation Plan for Three Total Maximum Daily Loads for

Bacteria in the Upper San Antonio River Watershed, and the Implementation Plan for Five Total Maximum Daily Loads for Bacteria in the Lower San Antonio River Watershed. The goal of these TCEQ water quality stakeholder driven projects are to reduce E. coli bacteria levels so that the Upper and Lower San Antonio River Watersheds are in compliance with the primary contact recreational use designation as stated in the Texas State Water Quality Standards (TSWQS). The primary contact criterion for all waterbodies in the San Antonio River Basin is a geometric mean of less than or equal to 126 E. coli colonies/100mL.

As SARA is committed to innovative, collaborative, adaptive and strategic actions that result in watershed solutions, SARA has established a permanent long-term network of automated instream stormwater stations to help characterize stormwater runoff and determine its effect on bacterial impaired waterbodies. During storm events, E.coli and other contaminants concentrate and mobilize to nearby waterways overland or via stormwater infrastructure and can have negative effects on human health and aquatic ecosystems. Use of automated instream samplers enables the collection of water quality data from urban and rural waterbodies throughout the San Antonio River Watershed. The automated feature makes stormwater collection safer for field staff, more economically feasible and minimizes exposure to hazardous weather conditions. These stations capture water quality data prior to, during and after storm events. [2]

Implementation Plan for Three TMDL for Bacteria in the Upper San Antonio River Watersheds

The City of Alamo Heights began attending the public meetings for stakeholders to understand the I-Plan that will improve water quality for the Salado Creek, Walzem Creek and Upper San Antonio River watersheds. This is a 5 year I-Plan that describes voluntary steps that watershed stakeholders will take toward improving water quality and outlines the schedule for the implementation activities. The ultimate goal of this I-Plan is to achieve Primary Contact Recreation uses in Segments 1910, 1910A and 1911 by reducing concentrations of E. coli bacteria levels established in the TMDL.[3] This I-Plan was accepted by EPA in 2015. This update calls for a 30% reduction in bacteria loading form stormwater across the watershed.

At the two retrofit sites, a permeable parking lot, nine bioretention cells, and seven cisterns were installed. The BMPs were designed to treat 1.8 inches of rainfall. The projects were constructed from the summer of 2016 to spring of 2017. During and after construction, the site was used to educate the local professional communities on urban stormwater management to improve water quality with BMPs. The demonstration site was the centerpiece of 13 tours, 2 workshops, and an Open House. Documentation of the construction process and lessons learned were used in over 8 presentations, four articles, and social media postings. Through these mechanisms over 439,000 individuals were reached.[3]

1.3 Form of Government

The municipal government provided by the City's Charter is known as a "Council-City Manager" form of government. Pursuant to its provisions and subject only to the limitations imposed by the state constitution and by its Charter, all powers of the city are vested in the Mayor and the five City Council Members, who enact local legislation, adopt budgets, and determine policies. All powers of the city are exercised in the manner prescribed by the City's Charter, or if not prescribed, then as may be prescribed by City ordinance.

1.4 Legal Authority

The City is a Type-A general-law municipality with home rule authority created under authority granted by Article 11, Section 5 of the Texas Constitution. Authority is granted to the City by the Texas Legislature under Local Government Code, Title 2, Organization of Municipal Government, Subtitle D, General Powers of Municipalities, Chapter 51, General Powers of Municipalities, Subchapters A and B, General Provisions and Provisions Applicable to Type A General-Law Municipality.

After obtaining coverage under TXR040000 the City of Alamo Heights adopted a new Chapter 13 titled Storm Drainage, adopting Chapter 402 Subchapter C of the Texas Local Government Code, declaring the drainage of the City to be a Public Utility, prohibiting certain dischargers into the Municipal Storm Drainage System and establishing Stormwater compliance for construction activity. on April 13, 2009.

2.0 Storm Water Management Program Overview

2.1 Development of the SWMP

The City of Alamo Heights has developed the SWMP in accordance with the requirements of the TPDES General Permit TXR040000 administered under the Texas Commission on Environmental Quality (TCEQ) for obtaining authorization for storm water discharges and certain non-storm water discharges.

All of the City limits are located within the San Antonio Urbanized Area as identified by the 2000 Census by the U.S. Census Bureau. If the City Limit area expands, then the City will comply with permit requirements for implementing SWMP in the incorporated City Limits. The Census 2020 population for Alamo Heights was 7,357.

The city is considered a Level 1 small MS4 under the permit. A Level 1 SWMP must address six areas, called Minimum Control Measures (“MCM”), as follows:

1. **Public Education and Outreach –** Distribute educational materials and/or provide presentations to inform citizens about storm water pollution.
2. **Public Involvement and Participation –** Provide opportunities for citizens to participate in program development and implementation.
3. **Illicit Discharge Detection and Elimination –** Detect and eliminate illicit discharges to the storm system.
4. **Construction Site Storm Water Runoff Control –** Control erosion and sediment in non-municipal construction activities.
5. **Post-Construction Storm Water Management in New Development and Redevelopment –** Control pollutant discharges from new development and redevelopment areas.
6. **Pollution Prevention/Good Housekeeping for Municipal Operations –** Prevent or reduce pollutant runoff from municipal operations.
7. **Industrial Stormwater Sources (applicable to Level 4 MS4’s) –** Identify and control pollutants in stormwater discharges to the MS4.
8. **Authorization for Construction Activities Where MS4 is Site Operator (optional) –** Control erosion and sedimentation on municipal projects.

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.

As an existing permittee, the city assessed program elements in the previous permit, made modifications as necessary, and developed new elements to implement, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP.

2.2 Organization of the SWMP

The City of Alamo Heights SWMP is organized around the following eight major minimum control measures and the selected best management practices:

MCM #1 - Public Education, and Outreach

BMP 1.1 Brochures and Fact Sheets
BMP 1.2 Speakers Bureau to Address Public Groups
BMP 1.3 Public Service Announcement Planning
BMP 1.4 School Book Cover Program
BMP 1.5 Drain Marking
BMP 1.6 Content on City's Public Website
BMP 1.7 Content on City's Social Media
BMP 1.8 Stormwater Signage

MCM #2 - Public Involvement and Participation

BMP 2.1 Watershed Clean-up Event
BMP 2.2 Habitat Improvement Program
BMP 2.3 Water Conservation Program
BMP 2.4 Pet Waste Stations
BMP 2.5 Resident Training Program
BMP 2.6 Stormwater Education Booth
BMP 2.7 Public Comment

MCM #3 - Illicit Discharge Detection and Elimination

BMP 3.1 Storm Sewer System Map
BMP 3.2 Illicit Discharge Detection Plan- Source Investigation/Elimination, Response, Corrective Action and Follow-Up Inspection
BMP 3.3 Illicit Discharge Ordinance
BMP 3.4 Illicit Discharge and Dumping Hotline
BMP 3.5 Illicit Discharge Staff Training

MCM #4 - Construction Site Storm Water Runoff Control

BMP 4.1 Site Plan Review Program
BMP 4.2 Construction Site Inspection Program
BMP 4.3 Construction Storm Water Runoff Management Ordinance
BMP 4.4 Public Reporting for Construction Runoff
BMP 4.5 Construction Site Inspection Staff Training

MCM #5 - Post-Construction Storm Water Management in New Development and Redevelopment

BMP 5.1 Site Plan Review for Post Construction Runoff
BMP 5.2 Long Term Inspection and Maintenance
BMP 5.3 Post Construction Storm Water Management Ordinance
BMP 5.4 Sediment Trap Enhancements
BMP 5.5 Trash Trap Enhancements
BMP 5.6 Documentation of Enforcement Actions

MCM #6 - Pollution Prevention / Good Housekeeping for Municipal Operations

BMP 6.1 Municipal Employee Training
BMP 6.2 Excess Sediment
BMP 6.3 Vehicle Maintenance and Upkeep Plan
BMP 6.4 Sediment Trap Enhancements
BMP 6.5 Trash Trap Enhancements
BMP 6.6 Disposal of Waste Materials
BMP 6.7 Inventory of Facilities and Stormwater Controls
BMP 6.8 Assessment of Operations and Maintenance Activities
BMP 6.9 Pollution Prevention Measures
BMP 6.10 Structural Control Maintenance

MCM #7 - Industrial Storm Water Sources

Not Applicable for Level 1 Small MS4s

MCM #8 - Authorization for Municipal Construction Activities

Not Applicable

Each of the minimum control measure sections describes regulatory permit requirements and selected best management practices with measurable goal(s), evaluation, implementation schedule, target audience and the responsible party.

3.0 Minimum Control Measure No. 1: Public Education and Outreach

3.1 Regulatory Requirements

The city will develop and implement a public education program which will distribute educational materials to the community and/or conduct equivalent outreach activities that will be used to inform the public. The city will direct its education and outreach efforts toward multiple segments of the population to promote a broad understanding among those who have the potential to impact storm water quality.

Efforts will be directed toward residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel. This MCM will inform the public about the impacts that storm water runoff can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and steps that can be taken to reduce pollutants in storm water runoff.

The city shall document the activities performed and materials used to fulfill this MCM. Documentation shall be detailed enough to demonstrate the amount of resources used to address each group. This documentation shall be included in the annual reports.

Discussions of the Best Management Practices (BMPs) to be utilized in public education and outreach follow:

3.2 Selected Best Management Practices

BMP 1.1: Brochures and Fact Sheets

Description – Develop or obtain informational brochures and fact sheets pertaining to the improvement and preservation of storm water quality. Distribute through city newsletter, utility mailings such as bills and notices, door hangers, handouts and/or place brochures at city hall and on city website. Coordinate with other nearby government offices and/or utilities to determine if resources might be shared in a productive manner.

Target Population – The BMP will be directed toward:

1. **residents** through newsletter articles included in the monthly newsletter sent with the water bill to all customers;
2. **visitors** by posting the SWMP on the city's website;
3. **public service employees** by posting the SWMP on the city's website and through the employee manual training;
4. **businesses** through newsletter articles included in the monthly newsletter sent with the water bill to all customers;
5. **commercial and industrial facilities** through newsletter articles included in the monthly newsletter sent with the water bill to all customers; and
6. **construction site personnel** through instructions attached to the building permit. The instructions will require contractors requiring building permits to prominently display a particular brochure or fact sheet on the project site in plain view for the workers to read.

Topics – Brochures and fact sheets will educate residents on how to maintain their homes in an environmentally-friendly manner including proper fertilizer, herbicide, and pesticide use and proper waste disposal. Other brochures and fact sheets will address commercial, industrial, and institutional pollution issues. Additionally, bacteria has been identified by the TCEQ as a pollutant of concern in the TMDL watershed project associated with discharges from the city's MS4. Therefore, information concerning the reduction or elimination of bacteria in stormwater discharges will be included in these brochures and fact sheets once annually, at a minimum.

Measurable Goal / Evaluation Criteria for Effectiveness – The number and frequency of mailings and publishing's shall be recorded in the document file. City shall ensure that the brochures and fact sheets are distributed to at least 75% of the intended audience.

Completed By (Month and Year or Frequency of Action) – January 2026 and annually thereafter.

Responsible Party – Public Works / Administration

BMP 1.2: Speakers Bureau to Address Public Groups

Description – Invite environmental professionals, such as TCEQ or EPA representatives or others, to make presentations at city council meetings on preventing storm water pollution.

Frequency – Speakers will be invited annually, with at least one event being held per permit year.

Target Population – The BMP will be directed toward all of the following who attend city council meetings including residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.

Measurable Goal / Evaluation Criteria for Effectiveness – The number, frequency, and topic of the presentation shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – December 2026 and annually thereafter.

Responsible Party – Public Works

BMP 1.3: Public Service Announcement (PSA) Planning

Description – PSAs will be provided through the city's website, social media and newsletter articles twice per year. The city will also explore coordination with other agencies and utilities to determine the feasibility of joining existing efforts.

Frequency – The website will be available continuously upon posting and the newsletter articles will be included in the monthly newsletter sent to every water customer at least twice per year.

Target Population – The BMP will be directed toward all of the following who have internet access or receive a monthly water bill including residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel.

Measurable Goal / Evaluation Criteria for Effectiveness – The number, frequency, and newsletter article topics shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – December 2026 and annually thereafter.

Responsible Party – Public Works / Administration

BMP 1.4: School Book Cover Program

Description – Design storm water pollution prevention messages for school book covers. Distribute to local schools for student use.

Frequency – Distribute to schools once a year.

Target Population – The BMP will be directed toward residents.

Measurable Goal / Evaluation Criteria for Effectiveness – Distribution will be conducted with at least 75% of the school-age residents. The number, frequency, and examples of the book covers issued shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – December 2026, annually thereafter.

Responsible Party – Public Works

BMP 1.5: Drain Marking

Description – The City staff marked public storm drains with a durable aluminum plaque during 2009-2011. The City has modified its drainage standards to require all new City inlets to be marked with "No Dumping – Drains to Creek" prior to the City's acceptance. City staff will inspect all of the inlets and will replace any missing markers.

Frequency – Newly constructed storm drains will be marked as described above. All existing storm drain markings will be inspected and maintained as necessary, annually.

Measurable Goal / Evaluation Criteria for Effectiveness – List of drainage inlet markers installed or replaced will be kept in document file. A minimum of 15% of all known stormwater inlets will be inspected and maintained.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – Public Works

BMP 1.6: Content on City's Public Website

Description – The City will continue to maintain a website for online activity. The city will make a copy of this Stormwater Management Program (SWMP) and annual reports for each year available on the stormwater section of the city's existing website. www.alamoheightstx.gov

Frequency – The webpage will be active and maintained for each full year of the permit period. All links will be checked and the page will be updated as necessary at least once annually.

Measurable Goal / Evaluation Criteria for Effectiveness – The website will be available continuously upon posting.

Completed By (Month and Year or Frequency of Action) – February 2026, reviewed annually.

Responsible Party – Public Works / Administration

BMP 1.7: Content on City's Social Media

Description – The City will share stormwater pollution prevention measures, practices to improve to improve the quality of the stormwater runoff, and other educational information on at least one social media platform. The message shall address ways attendees can minimize or avoid adverse stormwater impacts or practices to improve the quality of stormwater runoff. Messages shall be seasonally appropriate.

Frequency – Posts shall be uploaded to at least one social media platform, at least once per quarter for a total of at least four posts per year. All posts will remain visible for each full year of the permit period.

Measurable Goal / Evaluation Criteria for Effectiveness – The message shall address ways attendees can minimize or avoid adverse stormwater impacts or practices to improve the quality of stormwater runoff. Messages shall be seasonally appropriate. A minimum of one post per quarter. The quarterly posts will be available for the full year, each year.

Completed By (Month and Year or Frequency of Action) – March 2026, quarterly thereafter throughout the permit term.

Responsible Party – Public Works / Administration

BMP 1.8: Stormwater Signage

Description – The City will install stormwater signage at curbs and sidewalks, near storm drain inlets where signage will be highly visible by residents and visitors. These will be installed in 2026 and maintained annually.

Frequency – The city will annually inspect and maintain as necessary, all signage installed.

Measurable Goal / Evaluation Criteria for Effectiveness – List of signage installed or replaced will be kept in document file. Inspect and maintain, as necessary, 100% of the signage annually.

Completed By (Month and Year or Frequency of Action) – July 2026. Inspect/maintain annually.

Responsible Party – Public Works

4.0 Minimum Control Measure No. 2: Public Involvement and Participation

4.1 Regulatory Requirements

The city will develop and implement a public education program which will distribute educational materials to the community and/or conduct equivalent outreach activities that will be used to inform the public. The city will seek to encourage citizens and business owners to invest more into preventing and reducing storm water pollution and, thereby, to increase the effective resources in perceiving and in addressing storm water pollution problems. The city will, as a minimum, comply with any state and local public notice requirements when implementing this public involvement/participation program. The general rule will be to open opportunities to participate in the SWMP development and implementation to all people in the city.

Efforts will be directed toward residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel. This MCM will inform the public about the impacts that storm water runoff can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and steps that can be taken to reduce pollutants in storm water runoff.

The city shall document the activities performed and materials used to fulfill this MCM. Documentation shall be detailed enough to demonstrate the amount of resources used to address each group. This documentation shall be included in the annual reports.

Discussions of the Best Management Practices (BMPs) to be utilized in public education and outreach follow:

4.2 Selected Best Management Practices

BMP 2.1: Watershed Clean-up Event

Description – The city currently supports the voluntary clean-up efforts of many civic groups that collects litter in the Olmos Basin. The city provides solid waste trucks and staff to pick up the collected litter and take it to the landfill. Unless delayed by weather conditions, the event is normally scheduled each Spring and Fall. The city encourages other organizations interested in sponsoring similar events to combine forces and/or coordinate their efforts with this established annual event.

Frequency – The frequency of projects will vary depending on climate variations, flood conditions, and the timing of pollution accidents or events, with a minimal of one annual event.

Measurable Goal / Evaluation Criteria for Effectiveness – Record any project event, the area cleaned, the participants, and the accomplishments with a form and possibly photos in the document file. A minimum of one event annually for at least 2 acres of land, 400 yards of streams/streambank/riparian area, or 2 miles of roadside. These may be combined (such as one acre of land and 200 yards of stream).

Completed By (Month and Year or Frequency of Action) – December 2026, annually thereafter.

Responsible Party – Public Works

BMP 2.2: Habitat Improvement Program

Description – The city will support local habitat improvement efforts by various civic groups, including but not limited to tree planting, Invasive vegetation removal, and stream restoration. The city will provide tools and staff to assist voluntary groups. The city encourages other organizations interested in sponsoring similar events to combine forces and/or coordinate their efforts with this established annual event.

Frequency – The frequency of projects will vary depending on climate variations, flood conditions, and the timing of pollution accidents or events, with a minimum of one annual event.

Measurable Goal / Evaluation Criteria for Effectiveness – At least one event annually. Restoration and improvements efforts will be performed on at least 0.5 acres or 25 yards, and take place in streams, parks, areas adjacent to public waterways or other green spaces. An event may be a combination of locations and areas. Record project event, the location(s) and area(s), the participants, and the accomplishments with a form and possibly photos in the document file.

Completed By (Month and Year or Frequency of Action) – December 2026, annually thereafter.

Responsible Party – Public Works

BMP 2.3: Water Conservation Program

Description – Encourage citizen and commercial water conservation efforts in conjunction with the city's water conservation plan. Promote awareness/education on the relationship between appropriate water use and water quality. Distribute appropriate water conservation education information through the city's newsletter and provide water conservation and water quality tips on the city's website.

Frequency – The website will be available continuously upon posting and the newsletter articles will be included in the monthly newsletter sent to every water customer at least once per year.

Measurable Goal / Evaluation Criteria for Effectiveness – The number, frequency, and newsletter article topics shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – December 2026, annually.

Responsible Party – Public Works / City Administration

BMP 2.4: Pet Waste Stations

Description – The City of Alamo Heights Public Works staff continue to maintain the seven pet waste stations/dispensers located around the city to include "mutt mitts" bag dispenser.

Measurable Goal / Evaluation Criteria for Effectiveness – Maintain list of pet waste station locations. Provide and maintain at least one pet waste station in 100% of public parks or similar greenspaces in the MS4 area each year.

Target Population – The BMP will be directed toward residents.

Completed By (Month and Year or Frequency of Action) – Annually

Responsible Party – Public Works

BMP 2.5: Resident Training Program

Description – The city will host or support at least one annual event to train residents on various stormwater related topics. These topics will include, but are not limited to; building rain barrels; fertilizer application; rain garden/bio retention creation or maintenance; and recognizing and reporting illicit discharge activities.

Frequency – The event shall be conducted at least once, annually.

Target Population – The BMP will be directed toward residents.

Measurable Goal / Evaluation Criteria for Effectiveness – Minimum of one project or training annually. Record any project event, the participants, and the accomplishments with a form and possibly photos in the document file.

Completed By (Month and Year or Frequency of Action) – December 2026, annually thereafter.

Responsible Party – Public Works / City Administration

BMP 2.6 Stormwater Education Booth

Description – The City staff will man a booth at National Night Out Event, which draws several hundred citizens and people from around the area. The pollution prevention information provided will include messaging such as not dumping cooking oil, poultry fat and grease into the kitchen sink or the toilet bowl. The City will collaborate with other entities like SAWS to get the message out.

Frequency – This event shall be conducted at least once annually.

Measurable Goal / Evaluation Criteria for Effectiveness – Provide or support at least one booth or display annually. The booth shall be staffed during the time which the event is open to the public. Document events and dates.

Target Population – The BMP will be directed toward residents.

Completed By (Month and Year or Frequency of Action) – October 2026, annually.

Responsible Party – Public Works

BMP 2.7: Public Comment

Description – The city will provide regular opportunities for attendees of city council meetings to address the council on matters concerning the SWMP. Each year, the city will specify a council date for input regarding the SWMP.

Frequency – The city will open an agenda item dedicated to receiving public comments on the SWMP during at least one regular city council meeting, annually.

Measurable Goal / Evaluation Criteria for Effectiveness – The meeting shall be advertised to at least 75% of the intended audience. The city shall develop and implement a tracking system to estimate the percentage of the intended audience reached. When stormwater issues are discussed, the city will record copies of city council minutes and supplemental documents, if any, in the document file. Attendees shall also be recorded.

Completed By (Month and Year or Frequency of Action) – Annually

Responsible Party - Public Works / City Administration

5.0 Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination

5.1 Regulatory Requirements

The city will develop and implement a program to detect and to eliminate illicit discharges to the MS4. The program will include an ordinance. This MCM specifies the techniques to be used to detect illicit discharges, provides actions for eliminating the illicit discharges, and provides the basis for establishing an ordinance. The ordinance is, to the extent allowable under state and local law, to establish enforcement procedures for removing the source of an illicit discharge.

The following non-storm water flows (from lists in Part II.D of the General Permit) do not need to be considered as illicit discharges requiring elimination unless the Operator of the MS4 or the Executive Director identifies the flow as a significant source of pollutants to the MS4:

1. Water line and fire hydrant flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that maintain Texas Surface Water Quality standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;
8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle wash water;
12. Flows from wetlands and riparian habitats;
13. Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality standards;
14. Street wash water excluding street sweeper waste water;
15. discharges or flows from emergency 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);
16. Other allowable non-stormwater discharges listed in 40 CFR §122.26(d)(2)(iv)(b)(l);
17. Non-stormwater discharges that are specifically listed in the TPDES multi sector general permit (MSGP) or the TPDES construction general permit (CGP);
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-stormwater discharges.

The listed sources are not expected to be significant sources of pollutants because of the nature of their discharges. Consequently, no special controls or conditions are established.

Any changes to the SWMP must be included in the annual report as described in Part V.B.2. of the General Permit and must meet the requirements of the General Permit. The city shall develop inspection forms and document MS4 inspections and the results of the inspections. This documentation shall be retained in the annual reports which are required in Part V.B.2. of the General Permit.

Discussions of the Best Management Practices (BMPs) to be utilized in Illicit Discharge Detection and Elimination follow:

5.2 Selected Best Management Practices

BMP 3.1: Storm Sewer Map

Description – The city has completed mapping the storm sewer system. The map includes the location of all outfalls, the names and locations of all waters of the U.S. that receive discharges from the outfalls, and additional information required to implement the SWMP. The Storm Sewer Map is attached. The Storm Sewer Map will be updated periodically based on inspection records and construction drawings for recently completed projects that affect the drainage system.

Frequency – The Storm Sewer Map will be reviewed at least once, annually, and updated, as necessary to incorporate any features modified, added or removed.

Measurable Goal / Evaluation Criteria for Effectiveness – At least one copy of the completed/revised Storm Sewer Map, marked with the latest revision date, shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – January 2026, annually

Responsible Party – Public Works

BMP 3.2: Illicit Discharge Detection Plan- Source Investigation/Elimination, Response, Corrective Action and Follow-Up Inspection

Description – The city has already developed program procedures that describes techniques to be used to detect, investigate, and eliminate illicit discharges. The procedures describe how the city enforces the program. Upon identification of an illicit discharge, City personnel investigates the source of the discharge using existing operating procedures. Once the source of the discharge has been identified, the city informs the owner or operator of the source facility that the discharge activities must cease. The city conducts a follow-up inspection, and if the source facility fails to mitigate the discharge, the city implements its enforcement procedures. The same inspection and follow-up procedures shall be followed for those inspections performed in response to complaints.

The plan will identify city staff that will perform the inspections. Inspection techniques may include: visual observation, conventional photography, in-pipe photography, sampling and analysis of water quality and water characteristics, dye testing, and smoke testing. When the illicit discharge is detected, the city will investigate and document the source of the pollution as soon as practicable. If multiple discharges are encountered, the city will prioritize the investigations based on the relative pollution risk of the discharge. Investigations will be conducted within the City's jurisdiction; and adjacent cities or the necessary regional TCEQ office shall be notified if the discharge extends outside the City of Castle Hills permitted boundary.

The plan will also provide actions for eliminating the illicit discharges and address additional follow-up inspections required to confirm corrective actions were completed. The city will use the Storm Sewer Map to develop an inspection plan. The map will be used to divide the city into inspection zones. The city will determine a regular time each year for each zone to be inspected for illicit discharges. The results of the inspection will be documented.

Frequency – The inspections will occur annually during dry weather, when illicit discharges are easier to identify. Procedures stated in the detection plan will be reviewed annually and updated to incorporate modifications to structures or changes to procedures, as necessary.

Measurable Goal / Evaluation Criteria for Effectiveness – The city will respond to 100% of known illicit discharge and illegal dumping incidents each year to investigate sources. The city will respond to 100% high priority discharges each year, such as sanitary sewer discharges within 24 hours. For 100% of known illicit discharge or illegal dumping incidents where the city does not have jurisdiction, the city will notify adjacent MS4 operators or the regional TCEQ office immediately of 100% of illicit flows believed to be an immediate threat to human health or the environment. For 100% of illicit discharges or illegal dumping where a source has been determined, notify the responsible party of the problem within 24 hours and require responsible party to perform necessary corrective actions to eliminate the illicit discharge. Review and update procedures at least one time annually and address changes and make improvements to procedures where applicable. The city shall file completed inspection forms documenting MS4 inspections and the results of the inspections in the document file with photos and other supporting documents as appropriate.

Completed By (Month and Year or Frequency of Action) – Ongoing.

Responsible Party – Public Works

BMP 3.3: Illicit Discharge Ordinance

Description – The city has passed an ordinance which, to the extent allowable under state and local law, identifies illicit discharges, prohibit illicit discharges, and establish enforcement procedures for removing the sources of illicit discharges.

Frequency – The ordinance will be enforced on an ongoing basis.

Measurable Goal / Evaluation Criteria for Effectiveness – The city has filed a copy of the adopted ordinance in the city code book and in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – Development Services

BMP 3.4: Illicit Discharge and Dumping Hotline

Description – The city established a phone number for reporting illicit discharges and publish the phone number in places that are readily accessible to the public. At the special number, the phone will be answered by trained city staff who will be equipped with forms for recording incoming phone calls and trained in how to refer the information for action. A recording system will accept phone calls after hours. The reporting hotline will be publicized through city newsletter and/or utility mailings such as bills and notices, and the city's public website.

Target Population - Residents

Frequency – Publicized the public reporting mechanism at least twice per year.

Measurable Goal / Evaluation Criteria for Effectiveness – Maintain the hotline 100% of the time during the permit period and publicize the number at least twice per year in a method designed to reach the majority of the intended audience. Track to estimate percentage of the intended audience reached. Completed forms, showing the nature of incoming phone calls and the resulting actions will be filed in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – Public Works/City Administration

BMP 3.5: Illicit Discharge Staff Training

Description - The city will develop a training program for its field staff that may come in contact with or witness illegal dumping/discharge into this MS4 stormwater system as part of their normal job responsibilities. The training program will include training materials covering the following topics: defining/describing non-stormwater discharges or illicit discharge; regulatory requirements for illicit discharge; environmental impacts; practical investigation or response techniques; City's Illicit Discharge Detection Plan; and safety requirements while performing duties. Training may be conducted in person or virtually using self-paced training materials, including but not limited to training videos and/or reading materials. The city shall keep records certifying that the training was completed for the designated employees.

Frequency – One training session will be conducted each year.

Measurable Goal / Evaluation Criteria for Effectiveness – One training session will be conducted per year for 100% field staff whose job responsibilities may require them to come in contact with or witness illicit discharge, illegal dumping, or illicit connection to this small MS4. Copies of the completed program shall be recorded in the document file. The training completion documentation/certification shall also be recorded in the document file. City shall maintain records of training materials used and attendance.

Completed By (Month and Year or Frequency of Action) – July 2026, annually thereafter.

Responsible Party – Public Works

6.0 Minimum Control Measure No. 4: Construction Site Storm Water Runoff Control

6.1 Regulatory Requirements

The city will, to the extent allowable under State and local law, develop, implement, and enforce a program to reduce pollutants in construction storm water runoff from projects that disturb areas of one or more acres of land or projects that are part of a larger common plan of development or sale that would disturb one or more acres of land. The plan will not pertain to sites where the construction site operator has obtained a waiver from permit requirements under NPDES or TPDES construction permitting requirements based on a low potential for erosion. The program will include the development and implementation of an ordinance requiring erosion and sediment controls with sanctions to ensure compliance to the extent allowable under state and local law; requirements for construction site contractors to control erosion and sediment; requirements for controlling construction waste; procedures for the city's review of site plans; procedures for receiving information and complaints; and procedures for the city to inspect construction sites and to enforce controls.

The city shall document the activities conducted and materials used to fulfill this MCM. This documentation shall be retained in the annual reports which are required in Part V.B.2. of the General Permit.

Discussions of the Best Management Practices (BMPs) to be utilized in Construction Site Storm Water Runoff Control follow:

6.2 Selected Best Management Practices

BMP 4.1: Site Plan Review Program

Description – The City has developed plan review and approval procedures for construction projects that requires the design of erosion and sediment control measures consistent with TPDES Permit No. TXR040000. The city will continue to review plans for compliance. The site plan will describe which plans will be reviewed and when an operator may begin construction.

Frequency – Site plans will be reviewed on an ongoing basis as the plans are submitted to the city for review. The review procedures will be reviewed and updated at least once a year to incorporate changes as necessary.

Measurable Goal / Evaluation Criteria for Effectiveness – Review 100% of new construction site plans received each year. Review and update, as necessary, the site plan review procedures annually. Execute review forms and record results with photos and other pertinent materials in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – City Engineer

BMP 4.2: Construction Site Inspection Program

Description – The city will continue to inspect construction sites in accordance with site inspection protocols and procedures that outline city inspection and enforcement requirements. 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 for review to the TCEQ.

The evaluation shall be based on the following factors:

1. Soil Erosion Potential;
2. Site Slope;
3. Project Size and Type;
4. Sensitivity of receiving water bodies;
5. Proximity to receiving water bodies;
6. Non-stormwater discharges; and
7. Past record of project Contractor's non-compliance.

Frequency – Inspections will be conducted on an ongoing basis as new construction and redevelopment projects are approved. The procedures will be reviewed and updated at least once a year to incorporate changes, as necessary.

Measurable Goal / Evaluation Criteria for Effectiveness – Inspect all eligible projects – larger than 1 acre. Resolve all instances of non-compliance. Inspections will be performed on at least 80% of active construction sites annually and follow-up inspections on 100% of cases as required in the procedures. Record copies of completed inspection forms and related documents, such as photos, in the document file. Review procedures annually.

Completed By (Month and Year or Frequency of Action) – Ongoing. Review annually.

Responsible Party – Public Works

BMP 4.3: Construction Storm Water Management Ordinance

Description – The city previously an adopted ordinance for the city, to the extent allowable under state and local law, develop, implement, and enforce a program to reduce pollutants in construction stormwater runoff from projects that disturb areas of one (1) or more acres of land or projects that are part of a larger common plan of development or sale that would disturb one (1) or more acres of land. The ordinance includes enforcement procedures and actions for failing to comply.

Frequency – The ordinance will be enforced on an ongoing basis and reviewed and/or updated at least one time during the permit period to incorporate any improvements or changes.

Measurable Goal / Evaluation Criteria for Effectiveness – Review and update ordinance at least annually to address changes and make improvements to the ordinance where applicable.

Implementation Start Date – Ongoing. Reviewing annually.

Responsible Party – Development Services

BMP 4.4: Public Reporting for Construction Runoff

Description – The city established a phone number for reporting illicit discharges and construction erosion and sedimentation and publish the phone number in places that are readily accessible to the public. At the special number, the phone will be answered by trained city staff who will be equipped with forms for recording incoming phone calls and trained in how to refer the information for action. A recording system will accept phone calls after hours. The reporting hotline will be publicized through city newsletter and/or utility mailings such as bills and notices, and the city's public website. Upon receipt of notification, city staff will follow the inspection procedures as described in BMP 4.2.

Frequency – The reporting hotline will be maintained 100% of the time during the permit period and will be publicized at least twice per year. The procedures will be reviewed and updated at least once a year to incorporate changes, as necessary.

Measurable Goal / Evaluation Criteria for Effectiveness – Maintain reporting hotline 100% of the time during the permit period. Completed forms, showing the nature of incoming phone calls and the resulting actions will be filed in the document file. Review and update procedures annually and incorporate changes, as necessary.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party - Public Works/City Administration

BMP 4.5: Construction Site Inspection Staff Training

Description – The city will develop a training program for city employees whose primary responsibilities is related to the construction stormwater program. The program will discuss procedures and requirements for permitting, plan review, construction site inspection, and enforcement; and identify what employees should receive training. Training may be conducted in person or virtually using self-paced training materials, including but not limited to training videos and/or reading materials. The city shall keep records certifying that the training was completed for the designated employees.

Frequency – One training session will be conducted each year.

Measurable Goal / Evaluation Criteria for Effectiveness – Conduct a minimum of one training session annually for 100% of staff whose primary responsibility is related to the implementation of the construction stormwater program when these employees are introduced to pertinent processes. Copies of the completed training program shall be recorded in the document file. The training completion documentation shall also be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – Implement by July 2026. Continue annually.

Responsible Party – Public Works

7.0 Minimum Control Measure No. 5: Post-Construction Storm Water Management in New Development and Redevelopment

7.1 Regulatory Requirements

The city will, to the extent allowable under state and local law, develop, implement, and enforce a program to address storm water runoff from eligible new development and redevelopment projects. The program will apply to projects that disturb one acre of land or more and smaller projects that are part of a larger common plan of development or sale that will result in a total disturbance of one or more acres. The program will ensure that controls are implemented to prevent or to minimize water quality impacts. The program will include developing and implementing strategies which include a combination of structural and/or non-structural BMPs appropriate for the community. The city will adopt an ordinance to address post-construction runoff and will ensure adequate long-term operation and maintenance of the implemented BMPs.

The city shall document the activities performed and materials used to fulfill this MCM. This documentation shall be retained in the annual reports which are required in Part V.B.2. of the General Permit. Discussions of the Best Management Practices (BMPs) to be utilized in Post-Construction Storm Water Management follow:

7.2 Selected Best Management Practices

BMP 5.1: Site Plan Review Program for Post-Construction Runoff

Description – The city developed a program that requires city staff to review site plans and storm water pollution prevention plans for eligible projects. The review process is attached to the building permit process and ensures that proper measures are incorporated into the construction procedures that control erosion, sedimentation, and other sources of storm water pollution.

Measurable Goal / Evaluation Criteria for Effectiveness – Review all eligible projects. Execute review forms and record results with photos and other pertinent materials in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – City Engineer

BMP 5.2: Long-Term Inspection and Maintenance Plan for Post-Construction Runoff

Description – The city's program established procedures for city staff to inspect post-construction storm water management controls on a long-term basis. The program identifies which city staff will perform the inspections, identifies control performance criteria, establishes the means for determining what maintenance would be required, and establishes a protocol for inspectors to follow.

Frequency – Annually. The maintenance plan will be executed each year of the permit period to inspect and address all stormwater control measures.

Measurable Goal / Evaluation Criteria for Effectiveness – Each year, implement a maintenance plan and schedule established by the city addressing 100% of stormwater control measures where the city is responsible for maintenance. Each year, require 100% of owners or operators of any new development or redeveloped sites to develop and implement a maintenance plan addressing maintenance requirement for any structural control measures installed on site. Require the site owner or operators to maintain documentation, such as tracking log, onsite of 100% of the maintenance performed. Record copies of the forms, checklists, and written procedures in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – Public Works

BMP 5.3: Post-Construction Storm Water Management Ordinance

Description – The city's ordinance which, to the extent allowable under State and local law, establishes requirements for storm water quality controls for post-construction conditions; specifies sanctions to ensure compliance; establishes long-term inspection and maintenance requirements; and requires city review of proposed long-term storm water pollution prevention plans.

Frequency – The ordinance will be enforced on an ongoing basis and reviewed and/or updated at least one time during the permit period to incorporate any improvements or changes.

Measurable Goal / Evaluation Criteria for Effectiveness – Annual review of ordinance. Record copies of adopted ordinance and supplemental documents, if any, in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing. Review ordinance annually and updated as necessary.

Responsible Party – Development Services / Public Works

BMP 5.4: Sediment Trap Enhancements

Description – For each Capital Improvement Project, the City will review the proposed improvements to determine if there are any locations that would be suitable for sediment traps. If an opportunity for a sediment trap is identified, the plans will include the design of the sediment trap with recommendations for regular maintenance.

Measurable Goal / Evaluation Criteria for Effectiveness – Sediment traps are most cost effective when they are included as part of a larger CIP project. Document installation and maintenance of sediment traps.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – City Engineer

BMP 5.5: Trash Trap Planning

Description – For each Capital Improvement Project, the City will review the proposed improvements to determine if there are any locations that would be suitable for trash traps. If an opportunity for a trash trap is identified, the plans will include the design of the trash trap with recommendations for regular maintenance.

Measurable Goal / Evaluation Criteria for Effectiveness – Trash traps are most cost effective when they are included as part of a larger CIP project. Document installation and maintenance of trash traps.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – City Engineer

BMP 5.6: Documentation of Enforcement Actions

Description – In the event of any non-compliance identified by the city, the city will issue a violation notice to the site owner as stipulated in the city ordinances and will document the enforcement actions required to restore compliance to local, state, and nation regulations.

Measurable Goal / Evaluation Criteria for Effectiveness – 100% of enforcement actions records will be maintained for each year of the permit period. Copies of the violation notice and respective enforcement actions will be maintained in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing, annually.

Responsible Party – Public Works

8.0 Minimum Control Measure No. 6: Pollution Prevention/Good Housekeeping for Municipal Operations

8.1 Regulatory Requirements

The city will develop and implement an operation and maintenance program with the goal of preventing or reducing pollutant runoff from municipal operations. Examples of municipal operations include, but are not limited to:

1. park and open space maintenance;
2. street, road, or highway maintenance;
3. fleet and building maintenance;
4. storm water system maintenance;
5. new construction and land disturbances;
6. municipal parking lots;
7. vehicle and equipment maintenance and storage yards;
8. waste transfer stations; and
9. salt/sand storage locations.

The program will provide employee training and a list of applicable BMPs. The training program will apply to all employees who are responsible for municipal operations that are subject to the pollution prevention/good housekeeping program. The training program will include training materials directed at preventing and reducing storm water pollution from municipal operations. The city will develop a maintenance plan for structural BMPs that will establish the frequency and manner of approach and preserve the effectiveness of the BMPs. The plan will also address the disposal of waste, including dredge spoil; accumulated sediments; and floatables. The program will include a list of municipal operations that are subject to the operation, maintenance, or training program developed under the conditions of this section; and municipally owned or operated industrial activities that are subject to TPDES industrial storm water regulations.

The city shall document the activities performed and materials used to fulfill this MCM. This documentation shall be retained in the annual reports which are required in Part V.B.2. of the General Permit.

Discussions of the Best Management Practices (BMPs) to be utilized in Pollution Prevention/Good Housekeeping for Municipal Operations follow:

8.2 Selected Best Management Practices

BMP 6.1: Municipal Employee Training

Description – The city developed a program to train city employees who handle processes which may impact storm water quality. The program identifies what processes have the potential to impact storm water, identifies what employees should receive training, specifies what methods will be used to train them, and what forms and methods will be used to certify that the training has been accomplished. The city will implement more training opportunities for employees and ensure at least one annual individual participation.

Frequency – The city will provide training on an annual basis.

Measurable Goal / Evaluation Criteria for Effectiveness – Providing annual training for 100% of employees who are involved in implementing the pollution prevention and good housekeeping practices. Copies of the completed program shall be recorded in the document file. The training completion documentation shall also be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – July 2026, Annually

Responsible Party – Public Works

BMP 6.2: Excess Sediment

Description – For each Capital Improvement Project, the city will review the proposed improvements to determine if there are any locations that would be suitable for sediment traps. If an opportunity for a sediment trap is identified, the plans will include the design of the sediment trap with recommendations for regular maintenance. Identify areas where catch basins, surface inlets or storm drain manholes should be cleaned.

Measurable Goal / Evaluation Criteria for Effectiveness – Issue a brief report and record with photos and other pertinent materials in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – City Engineer

BMP 6.3: Vehicle Maintenance and Upkeep Plan

Description – Conduct routine inspection on all city vehicles according to manufacturer specifications, also inspecting vehicle for presence of fluid leaks. Wash city vehicles in approved areas to prevent was water entering the storm drains

Measurable Goal / Evaluation Criteria for Effectiveness – Issue a brief report and other pertinent materials in the document file.

Completed By (Month and Year or Frequency of Action) – Ongoing

Responsible Party – Public Works

BMP 6.4: Sediment Trap Enhancements

Description – For each Capital Improvement Project, the city will review the proposed improvements to determine if there are any locations that would be suitable for sediment traps. If an opportunity for a sediment trap is identified, the plans will include the design of the sediment trap with recommendations for regular maintenance.

Measurable Goal / Evaluation Criteria for Effectiveness – Sediment traps are most cost effective when they are included as part of a larger CIP project.

Completed By (Month and Year or Frequency of Action) – The city will review the CIPs as they are developed and proposed.

Responsible Party – City Engineer

BMP 6.5: Trash Trap Enhancements

Description – For each Capital Improvement Project, the city will review the proposed improvements to determine if there are any locations that would be suitable for trash traps. If an opportunity for a trash trap is identified, the plans will include the design of the trash trap with recommendations for regular maintenance.

Measurable Goal / Evaluation Criteria for Effectiveness – Trash traps are most cost effective when they are included as part of a larger CIP project.

Completed By (Month and Year or Frequency of Action) – The city will review the CIPs as they are developed and proposed.

Responsible Party – City Engineer

BMP 6.6: Disposal of Waste Materials

Description –The city will ensure that all materials removed from the MS4 are disposed of in accordance with Chapters 330 and 335 of Title 30, Texas Administrative Code, as applicable. Compliance will be maintained by including 30 TAC requirements during municipal employee training as described in BMP 6.2.

Frequency – The city will ensure that 100% of waste materials is disposed of in accordance with 30 TAC Chapters 330 and 335, as applicable, each year.

Measurable Goal / Evaluation Criteria for Effectiveness – Dispose of 100% of waste materials in accordance with 30 TAC Chapters 330 and 335, as applicable, each year. Document disposal of waste materials.

Completed By (Month and Year or Frequency of Action) – Ongoing, Annually.

Responsible Party – Public Works

BMP 6.7: Inventory of Facilities and Stormwater Controls

Description – The city will develop and maintain an inventory of all facilities and stormwater controls that it owns and operates within the regulated area of the city's MS4. Where feasible, the inventory will include all applicable permit numbers, registration numbers, and/or authorizations for each facility or control. The inventory will be available for review by the TCEQ and will include, at a minimum, the following facilities and/or controls, as applicable:

1. Composting facilities;
2. Equipment storage and maintenance facilities;
3. Fuel storage facilities;
4. Hazardous waste disposal facilities;
5. Hazardous waste handling and transfer facilities;
6. Incinerators;
7. Landfills;
8. Materials storage yards;
9. Pesticide storage facilities;
10. Buildings, including schools, libraries, police stations, fire stations, and office buildings;
11. Parking lots;

12. Golf courses;
13. Swimming Pools;
14. Public works yards;
15. Recycling facilities;
16. Salt storage facilities;
17. Solid waste handling and transfer facilities;
18. Street repair and maintenance sites;
19. Vehicle storage and maintenance yards; and
20. Structural stormwater controls.

Frequency – The comprehensive inventory of 100% of facilities will be reviewed annually and updated as necessary.

Measurable Goal / Evaluation Criteria for Effectiveness – Develop and maintain inventory for 100% of the MS4 owned and operated facilities and controls in the MS4 area. Review and update the inventory, as necessary, once annually at a minimum. Inventory shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – July 2026, review and update annually.

Responsible Party – Public Works

BMP 6.8: Assessment of Operations and Maintenance Activities

Description – The city will evaluate municipal operations and maintenance (O&M) activities for their potential to discharge pollutants in stormwater. The assessment will include, but will not be limited to:

1. Road and parking lot maintenance, including pothole repair, pavement marking, sealing, and re-paving;
2. Bridge maintenance including such areas as re-chipping, grinding, and saw cutting;
3. Cold weather operations including sanding, plowing, and application of deicing and anti-icing compounds, and maintenance of any snow disposal areas; and
4. Right-of-way maintenance including mowing, herbicide and pesticide application, and planting of vegetation.

The city has identified pollutants of concern in that could be discharged from the above O&M activities including, metals; chlorides; hydrocarbons such as benzene; toluene; ethyl benzene; and xylenes; sediment; and trash. The city has developed and implemented a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. Additionally, the city has established procedures to inspect the adopted measures, providing the frequency and protocols for methods. City will document inspection results and maintain a log of all inspections performed annually.

Frequency – The city will perform this evaluation annually on 100% of O&M activities to identify the relevant pollutants of concern and maintain the list of 100% of the pollutants of concern. Following the evaluation, 100% of the pollution prevention measures will be reviewed, visually inspected and modified to ensure continued prevention of discharges into surface waters. Inspection procedures will be reviewed and updated at least once annually.

Measurable Goal / Evaluation Criteria for Effectiveness – The controls or measures utilized in implementation will be inspected once annually, at a minimum, and 100% of the inspection records will be kept in the documentation file. Review inspection procedures at least once annually and update, as needed. Document inspections and reviews. Identify pollutants of concern that could be discharged from all O&M activities and maintain a list of 100% of the pollutants identified. Review and update the pollutants of concern list annually and address changes or additions where applicable.

Completed By (Month and Year or Frequency of Action) – July 2026, Annually

Responsible Party – Public Works

BMP 6.9: Pollution Prevention Measures

Description – The city will implement the following pollution prevention measures in order to reduce the discharge of pollutants to stormwater from the city's operations:

1. Place barriers around or conduct runoff away from 100% deicing chemical storage areas to prevent discharge into surface waters each year;
2. Replace at least 50% of the MS4's materials and chemicals with more environmentally friendly materials or methods by the end of the permit term; and
3. Track 100% of the application of deicing and anti-icing compounds in the MS4 area and record the amount of compound used for each application annually.

Measurable Goal / Evaluation Criteria for Effectiveness – The physical measures implemented will be inspected once annually, at a minimum, and 100% of the inspection records will be kept in the documentation file. The city will document the materials and chemicals replaced with more environmentally friendly materials or methods and track all applications of deicing and anti-icing compounds used. Records shall be maintained in the documentation file.

Completed By (Month and Year or Frequency of Action) – Implement by December 2026, continue throughout the permit period.

Responsible Party – Public Works

BMP 6.10: Structural Control Maintenance

Description – The city will perform maintenance on all structural controls which require maintenance. The city will develop a set of procedures to and schedule specifying the method and frequency of inspection for each structural control.

Frequency – The city will inspect and perform maintenance on 100% of the structural controls at least one time annually. The procedures will be reviewed and updated, as necessary, at least once annually to address modifications to the pollution prevention measures.

Measurable Goal / Evaluation Criteria for Effectiveness – The city will maintain 100% of the inspection and maintenance records. These records will be kept in the documentation file.

Completed By (Month and Year or Frequency of Action) – Annually

Responsible Party – Public Works

BMP 6.11: Contractor Oversight Procedures

Description – Contractors hired by the city to perform maintenance activities on city-owned facilities will be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater operating procedures described in Parts IV.D.6 of the General Permit. The city will provide oversight of contractor activities to ensure that they are using appropriate control measures and SOPs.

Frequency – Contractual and oversight requirements will be reviewed for continued relevance and updated as necessary within the first year of the permit renewal.

Measurable Goal / Evaluation Criteria for Effectiveness – Contractual obligations and oversight procedures will be enforced on 100% of Contractors hired to perform maintenances activities on the city's facilities. Oversight procedures will be maintained on-site 100% of the time. Contractor oversight procedures, once completed, shall be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – Implement by December 2026 and continue to enforce throughout the permit renewal period. Oversight procedures will be reviewed and updated as necessary.

Responsible Party – Public Works

9.0 Minimum Control Measure No. 7: Industrial Storm Water Sources

This MCM would require the city to identify and control pollutants in stormwater discharges to the MS4 from 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 city determines is contributing substantial pollutant loading to the MS4. The program would include priorities and procedures for inspections, and for implementing control measures for such discharges.

However, under the provisions of the permit, Minimum Control Measure 7 applies only to level 4 MS4's, and the city does not currently meet the population threshold requiring compliance with the MCM. Since the city is not currently required to comply with this MCM, no documentation will be required.

10.0 Minimum Control Measure No. 8: Authorization for Construction Activities Where MS4 is Site Operator

This MCM would establish a city procedure for permitting its own eligible municipal construction activities instead of the default requirement to obtain coverage under TPDES General Permit TXR150000. However, this MCM is optional and **the city has elected not to use this MCM.** The reason for non-implementation of this MCM is twofold. First, most of the city's projects are too small to require permitting under TPDES General Permit TXR150000. Second, most of the city's projects are performed by contractors who are hired by the city. Conformance to TPDES General Permit TXR150000 is routinely made part of the construction contract.

If the city elects to implement this MCM in the future, it will be authorized within the regulated area to discharge storm water and certain non-storm water from construction activities where the permittee can meet the definition of "construction site operator" as defined in the General Permit. An NOG would have to be submitted notifying the executive director of the change. If implemented, the MCM would have to include:

1. a description of how construction activities will generally be conducted by the permittee so as to take into consideration local conditions of weather, soils, and other site specific considerations;
2. a description of the area that this MCM will address and where the permittee's construction activities are covered;
3. a general description of how a SWP3 shall be developed, according to Part VI.E. of the general permit, for each construction site; and
4. a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site, or a
5. description of how the permittee will make certain that contractors have a separate authorization for storm water discharges.

Since the city elects not to implement this MCM, no documentation will be required.

11.0 Record Keeping and Reporting

The city will keep records and follow reporting procedures in compliance with the TPDES General Permit. The record keeping and reporting will allow the city to evaluate the implementation of the SWMP. In the first year of the program, the city will develop a report format to follow when completing and submitting their annual report to the TCEQ.

11.1 Record Keeping

The city will retain the following documents for the permit period of five years to comply with the General Permit requirements:

1. Copy of the TPDES General Permit TXR040000.
2. Records of all data used to complete the NOI.
3. Any Notice of Changes (NOC's).
4. City's SWMP retained at a location accessible by TCEQ.
5. Copy of each annual report.
6. Any correspondence with TCEQ.

The original files will be kept at the Administration Building. The city will make the NOI and SWMP available to the public if requested to do so in writing. All other records will be provided in accordance with the Texas Public Information Act and Freedom of Information Act. See the General Permit for additional record keeping requirements.

11.2 Reporting

11.2.1 General Reporting Requirements

The city will report any noncompliance, which may endanger human health or safety, or the environment to the TCEQ. Within 24 hours of becoming aware of each noncompliance, an oral or fax notification will be sent to the TCEQ regional office. Within five days of becoming aware of each noncompliance, a written report will be sent to the TCEQ Regional office and to the TCEQ Enforcement Division (MC-224). The Written report will contain the following:

1. a description of the noncompliance and its cause;
2. the potential danger to human health or safety, or the environment;
3. the period of the noncompliance, including exact dates and times;
4. if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
5. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

If the city becomes aware that it submitted incorrect information or failed to submit complete and accurate information in any of the reports, records, NOI, NOT or NOC, then the city will promptly correct facts and send notification or information to the TCEQ executive director.

11.2.2 Annual Report

The city will submit a concise annual report to the TCEQ Executive Director by March 31st of each year for the previous calendar year. The city will keep a copy of the annual report in the original files at the Administration Building, which will be readily available for review by authorized TCEQ personnel upon request. An annual report will be prepared whether or not the NOI and SWMP have been approved by the TCEQ. If the city has not received approval of the NOI and SWMP, then this information will be included in the report.

The annual report will include the following:

a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;

b) A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;

c) If applicable, a summary of any activities taken to address the discharge to impaired waterbodies, including any sampling results and a summary of the small MS4s BMPs used to address the pollutant of concern;

d) A summary of the stormwater activities the MS4 operator plans to undertake during the next reporting year;

e) Proposed changes to the SWMP, including changes to any BMPs or any identified measurable goals that apply to the program elements;

f) Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans. For waters that are listed as impaired after discharge of authorization pursuant to Part III, include a list of such waters and the pollutant(s) causing the impairment, and a summary of any actions taken to comply with the requirements of Part III;

g) Notice that the MS4 operator is relying on another government entity to satisfy some of its permit obligations (if applicable);

h) The number of construction activities where the small MS4 is the operator and authorized under the optional 8th MCM, including the total number of acres disturbed; and

i) The number of construction activities that occurred within the jurisdictional area of the small MS4 (as notices to the permittee by the construction operator), and that were not authorized under the optional 8th MCM.

The permittee must sign and certify the annual report in accordance the general permit. The annual report must be submitted using the online electronic reporting system, NeT-MS4, available through the TCEQ website unless the permittee requests and obtains an Electronic Reporting Waiver. The annual report or a summary of the annual report shall be posted to the city's website no later than 30 days after the due date; and, a copy of the annual report must also be submitted to the TCEQ Regional Office that serves the area of the regulated small MS4, except if the report is submitted electronically.

12.0 References

[1] 2014, San Antonio River Authority, Clean Rivers Program FY2014

[2] 2018, San Antonio River Basin Summary Report Executive Summary

[3]2018, Implementation Plan for Three TMDL for Bacteria in the Upper San Antonio River Watersheds

Attachments

Definitions and Acronyms

The following explanations of storm water management terminology are from the TCEQ's TPDES General Permit No. TXR040000.

A. Definitions

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

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

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

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

Construction Site Operator - The person or persons associated with a small or large construction project that meets either of the following two criteria:

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

(b) the person or persons that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan for the site or other permit conditions (e.g. they are authorized to direct workers at a site to carry out activities required by the Storm Water Pollution Prevention Plan or comply with other permit conditions).

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

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

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

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

(a) All soil disturbing activities at the site have been completed and a uniform (e.g, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

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

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

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

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

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

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

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

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

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

Large Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and

original purpose of a ditch, channel, or other similar storm water conveyance. Large construction activity does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.

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

MS4 Operator - For the purpose of this permit, the public entity, and/ or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

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

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

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

Outfall - A point source at the point where a municipal separate storm sewer discharges to waters of the United States (U.S.) and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S.

Permittee - The MS4 operator authorized under this general permit.

Point Source - (from 40 CFR §122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

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

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

Small Construction Activity - Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar storm water conveyance. Small construction activity does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of- ways, and similar maintenance activities.

Small Municipal Separate Storm Sewer System (MS4) - A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (a) Owned or operated by the United States, a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under § 208 of the CWA; (b) Designed or used for collecting or conveying storm water; (c) Which is not a combined sewer; (d) Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR § 122.2; and (e) Which was not previously authorized under a NPDES or TPDES individual permit as a medium or large municipal separate storm sewer system, as defined at 40 CFR §§122.26(b)(4) and (b)(7). This term includes systems similar to separate storm sewer systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to an MS4 that is also operated by that public entity.

Storm Water and Storm Water Runoff - Rainfall runoff, snow melt runoff, and surface runoff and drainage.

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

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

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

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

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

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

Urban Area - A statistical geographic entity consisting of a densely settled core created from census tracts or blocks and adjacent densely settled territory that together have at least 2,000 housing units or 5,000 persons as defined and used by the U.S. Census Bureau in the 2020 Decennial Census.

Urbanized Area (UA) - A retired statistical geographic entity type consisting of a densely settled core created from census tracts or blocks and adjacent densely settled territory that together have a minimum population of 50,000 people which was used by the U.S. Census Bureau in the 2000 and 2010 Decennial Census.

Waters of the United States - Waters of the United States or Waters of the U.S. means the term as defined in 40 CFR § 122.2.

B. Commonly Used Acronyms

BMP	Best Management Practice
CFR	Code of Federal Regulations
CGP	Construction General Permit, TXR150000
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
FR	Federal Register
IP	Implementation Procedures
MCM	Minimum Control Measure
MSGP	Multi-Sector General Permit, TXR050000
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Change
NOD	Notice of Deficiency
NOI	Notice of Intent
NOT	Notice of Termination (to terminate coverage under a general permit)
NPDES	National Pollutant Discharge Elimination System
SWMP	Storm Water Management Program

SWP3, SWPPP	Storm Water Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPDES	Texas Pollutant Discharge Elimination System
TWC	Texas Water Code

Implementation Table

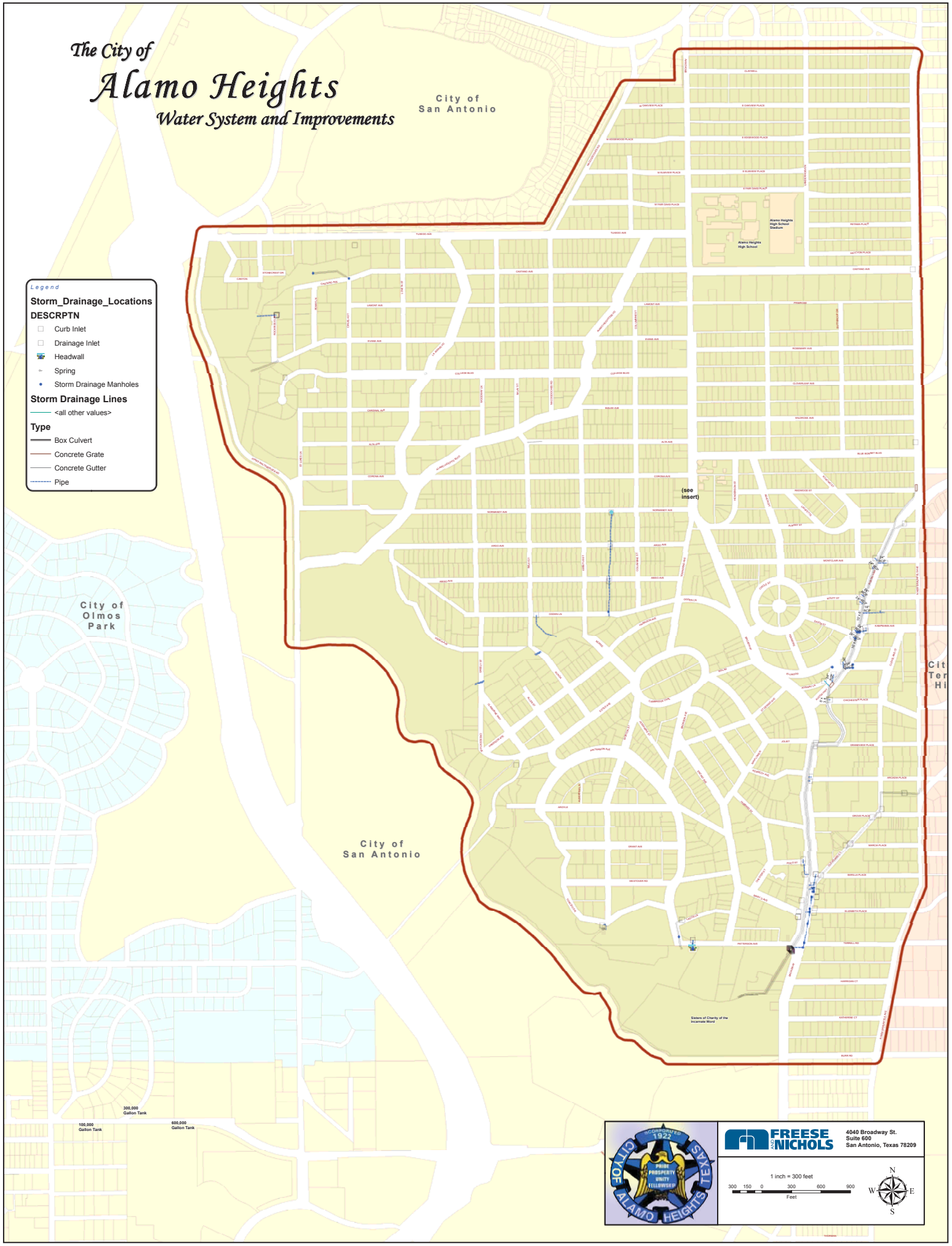
City of Alamo Heights
Storm Water Management Plan
Implementation Program

MCM	BMP	Title	Scheduled Implementation	Recurring (Frequency)
Public Education	1.1	Brochures and Fact Sheets	Jan 2026	X (Annually)
Public Education	1.2	Public Speakers	Dec 2026	X (Annually)
Public Education	1.3	PSA's	Dec 2026	X (Annually)
Public Education	1.4	School Book Covers	Dec 2026	X (Annually)
Public Education	1.5	Drain Marking	Ongoing	X (As Needed)
Public Education	1.6	Content on City's Website	Feb 2026	X (Annually)
Public Education	1.7	Content on Social Media	March 2026	X (Quarterly)
Public Education	1.8	Stormwater Signage	July 2026	
Public Involvement	2.1	Watershed Clean-Up Event	Dec 2026	X (Annually)
Public Involvement	2.2	Habitat Improvement Program	Dec 2026	X (Annually)
Public Involvement	2.3	Water Conservation Program	Dec 2026	X (Annually)
Public Involvement	2.4	Pet Waste Station Maintenance		X (Annually)
Public Involvement	2.5	Resident Training	Dec 2026	X (Annually)
Public Involvement	2.6	SW Education Booth	Oct 2026	X (Annually)
Public Involvement	2.7	Public Comment	Dec 2026	X (Annually)
Illicit Discharge	3.1	Storm Sewer Map Update	January 2026	X (Annually)
Illicit Discharge	3.2	IDDP Implementation		Ongoing
Illicit Discharge	3.3	Ordinance Enforcement		Ongoing
Illicit Discharge	3.4	Hotline		Ongoing
Illicit Discharge	3.5	Staff Training	July 2026	X (Annually)
Construction	4.1	Site Plan Review		Ongoing
Construction	4.2	Site Inspection		Ongoing
Construction	4.3	Construction Enforcement		Ongoing
Construction	4.4	Hotline		Ongoing
Construction	4.5	Staff Training	July 2026	X (Annually)
Post-Construction	5.1	Site Plan Review		Ongoing
Post-Construction	5.2	Long-Term Inspection		Ongoing
Post-Construction	5.3	Ordinance Enforcement		Ongoing
Post-Construction	5.4	Sediment Trap Enhancement	As Needed	
Post-Construction	5.5	Trash Trap Planning	As Needed	
Post-Construction	5.6	Enforcement Documentation		Ongoing
Pollution Prevention	6.1	Employee Training	July 2026	X (Annually)
Pollution Prevention	6.2	Excess Sediment	As Needed	
Pollution Prevention	6.3	Vehicle Maintenance		Ongoing
Pollution Prevention	6.4	Sediment Trap Enhancement	As Needed	
Pollution Prevention	6.5	Trash Trap Enhancements	As Needed	
Pollution Prevention	6.6	Waste Disposal		Ongoing
Pollution Prevention	6.7	Facility Inventory	July 2026	X (Annually)
Pollution Prevention	6.8	Operation and Maintenance	July 2026	X (Annually)
Pollution Prevention	6.9	Pollution Prevention Measures		X (Annually)
Pollution Prevention	6.10	Structural Control Maintenance	Dec 2026	X (Annually)
Pollution Prevention	6.11	Contractor Oversight Procedures	Dec 2026	X (Annually)

Stormwater Map

The City of Alamo Heights

Water System and Improvements



FREESE AND NICHOLS
4040 Broadway St.
Suite 600
San Antonio, Texas 78209

1 inch = 300 feet

300 150 0 300 600 900

Feet

N W E S