

The City of Alamo Heights
Storm Water
Management Plan
TPDES General Permit
Number TXR040000 for
Small MS4

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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 January 24, 2019 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 1: 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

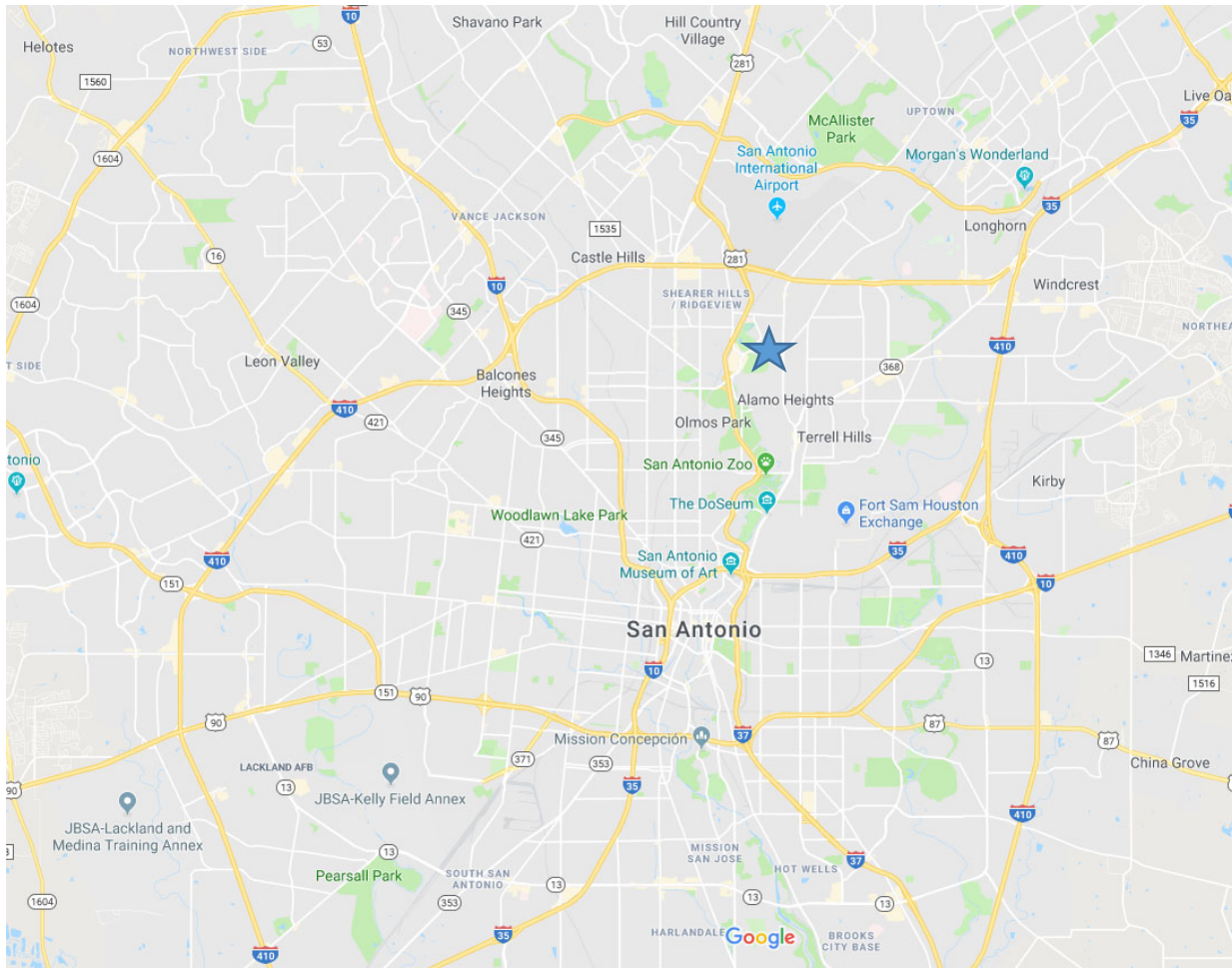
The City of Alamo Heights has updated the SWMP in accordance with the requirements of the reissued TPDES General Permit TXR040000 for obtaining authorization for stormwater discharges and certain non-stormwater discharges. The SWMP has been developed to facilitate the City's efforts in reducing stormwater 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 IV.B.2. 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 IV.B.2. of the General Permit and must meet the requirements of Part II.D.3. 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 2014 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 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.

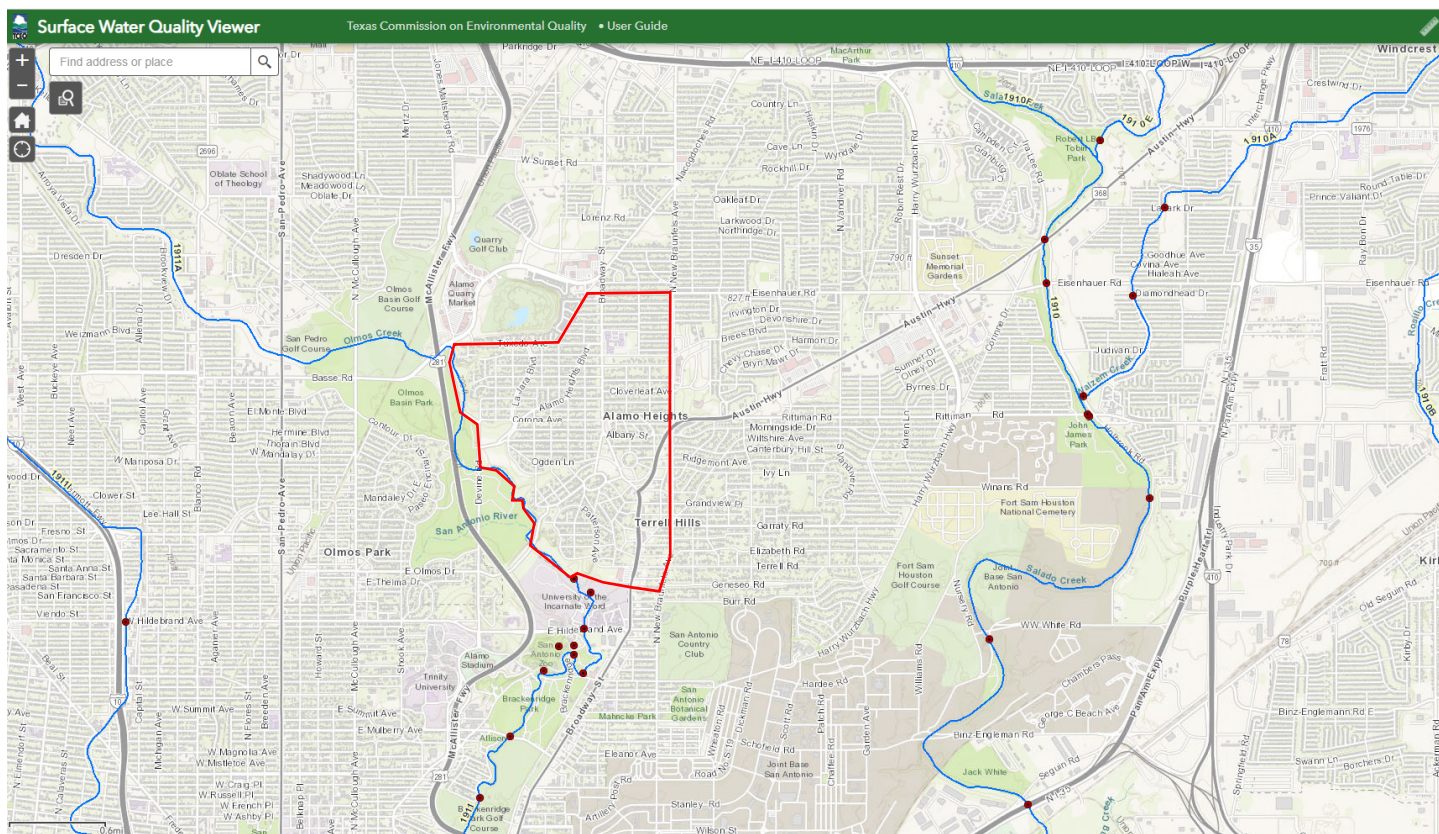
The stream segments included on the Texas 303(d) list in the area of the City of Alamo Heights are included in **Table 1** below.

Table 1 - Stream Segments and Impaired Parameters in the 2014 Texas 303(d) List

Segment ID	Name	Parameter	Category	Carry Forward
1911-09	Upper San Antonio River	impaired fish community	5c	Yes
1911B	Apache Creek	bacteria	5a	No
1911C_01	Alazan Creek	bacteria	5a	No
1911C_02	Alazan Creek	bacteria	5c	No
1911D_01	San Pedro Creek	bacteria	5a	No
1911D_02	San Pedro Creek	bacteria	5a	No
1911E_01	Sixmile Creek	bacteria	5c	No
1911H_01	Picosa Creek	depressed dissolved oxygen	5c	No

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 2014 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 2014 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 2014 Texas Integrated Report

Segment ID	Name	Parameter	Level of Concern
1911_08	Upper San Antonio River	impaired fish community	CN
1911_05, 1911_07, 1911_08, 1911_09	Upper San Antonio River	impaired habitat	CS

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_06, 1911_07,1911_08, 1911_09	Upper San Antonio River	total phosphorus	CS
1911B_01	Apache Creek	depressed dissolved oxygen	CS
1911C_02	Alazan Creek	ammonia	CS
1911C_02	Alazan Creek	chlorophyll-a	CS
1911D_02	San Pedro Creek	depressed dissolved oxygen	CS
1911D_01, 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 issues¹.

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 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.³

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.³

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 TMDL⁴. This I-Plan was accepted by EPA in 2015. This update calls for a 30% reduction in bacteria loading from 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.⁴

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 2010 population for Alamo Heights was 7,319.

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

- 1. Public Education, Outreach and Involvement** — Distribute educational materials and/or provide presentations to inform citizens about storm water pollution. Provide opportunities for citizens to participate in program development and implementation. *See Tab 1.*
- 2. Illicit Discharge Detection and Elimination** Detect and eliminate illicit discharges to the storm system. *See Tab 2.*
- 3. Construction Site Storm Water Runoff Control** — Control erosion and sediment in non-municipal construction activities. *See Tab 3.*
- 4. Post-Construction Storm Water Management in New Development and Redevelopment** Control pollutant discharges from new development and redevelopment areas. *See Tab 4.*
- 5. Pollution Prevention/Good Housekeeping for Municipal Operations** — Prevent or reduce pollutant runoff from municipal operations. *See Tab 5.*

Operations. For each MCM the SWMP must:

- Define measurable goals that include the development of ordinances or other regulatory mechanisms, allowed by state, federal and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;
- Define a schedule including the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action;

- Include a summary of written procedures describing how the permittee will implement the SWMP; and,
- Include a description of a program or a plan of compliance to address discharges to impaired water bodies and Total Maximum Daily Load (TMDL) requirements.

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 Terrell Hills's SWMP is organized around the following seven major minimum control measures and the selected best management practices:

MCM #1 - Public Education, Outreach and Involvement

- 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 Public Comment
- BMP 1.6 NOI and NOC Public Comment
- BMP 1.7 Recurring Public Comment
- BMP 1.8 Volunteer Projects
- BMP 1.9 Water Conservation Program
- BMP 1.10 Pet Waste Stations
- BMP 1.11 Stormwater Education Booth
- BMP 1.12 Drain Marking
- BMP 1.13 Content on City Website - **New**

MCM #2 - Illicit Discharge Detection and Elimination

- BMP 2.1 Storm Sewer System Map
- BMP 2.2 Illicit Discharge Detection Plan
- BMP 2.3 Illicit Discharge Ordinance
- BMP 2.4 Illicit Discharge Discharge and Dumping Hotline
- BMP 2.5 Household Chemical Collection Program

MCM #3 - Construction Site Storm Water Runoff Control

- BMP 3.1 Technical Manual for Construction Storm Water Runoff
- BMP 3.2 Site Plan Review Program
- BMP 3.3 Construction Site Inspection Program
- BMP 3.4 Construction Storm Water Runoff Management Ordinance
- BMP 3.5 Construction Runoff Hotline

MCM #4 - Post-Construction Storm Water Management in New Development and Redevelopment

- BMP 4.1 Technical Manual for Post Construction Storm Water Management
- BMP 4.2 Site Plan Review for Post Construction Runoff

- BMP 4.3 Long Term Inspection and Maintenance
- BMP 4.4 Post Construction Storm Water Management Ordinance
- BMP 4.5 Sediment Trap Enhancements
- BMP 4.6 Trash Trap Enhancements

MCM #5 - Pollution Prevention / Good Housekeeping for Municipal Operations

- GH-1 Municipal Employee Pollution Prevention Manuals
- GH-2 Municipal Employee Training
- GH-3 Sediment Trap Enhancements
- GH-4 Trash Trap Enhancements
- GH-5 Public Works Yard Improvements
- GH-6 Public Works Storage Improvements
- GH-7 City Hall / Fire Station Improvements
- GH-8 Stabilized Alley Entrances

MCM #6 – Industrial Storm Water Sources

Not Applicable for Level 1 Small MS4s

MCM #7 - 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 on Storm Water Impacts

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. The city will seek to encourage citizens and business owners to invest themselves 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:

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 and/or utility mailings such as bills and notices. 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.

Frequency and Target Population – The BMP will be directed toward:

1. **residents** through newsletter articles included twice a year 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 twice a year in the monthly newsletter sent with the water bill to all customers;
5. **commercial and industrial facilities** through newsletter articles included twice a year 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.

Evaluation Criteria for Effectiveness – The number and frequency of mailings and publishing's shall be recorded in the document file.

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

BMP 1.2: Speakers 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.

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.**

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) – Annually

BMP 1.3: Public Service Announcement 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.**

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) – Annually

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.**

Evaluation Criteria for Effectiveness – 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) – Annually

BMP 1.5: Public Comment

Description – The city will solicit public comment in its newsletter articles and receive it by email in person, or through the public works hotline at (210) 882-1516.

Frequency – Newsletter articles will be included in the monthly newsletter sent with the water bill twice per year.

Evaluation Criteria for Effectiveness – Copies of the newsletter articles shall be kept in the document file.

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

BMP 1:6 NOI and NOC Public Comment

Description – Post this SWMP Implementation Program on the city's website and make it available in the public works office for public review. When comments from the TCEQ's Executive Director are received regarding this SWMP Implementation Program, publish in the city's official notice newspaper a notice that states that the comments have been received and that public review and comment are invited. Provide at least 30 days for public comment. In the event that significant public interest exists, host a public meeting that would be facilitated by the TCEQ and that would allow for public participation.

Frequency – This will occur once, when the NOI has been submitted and the initial comments are received from the Executive Director. It will also occur on a recurring basis at least to the extent required by the TCEQ when NOCs are submitted.

Evaluation Criteria for Effectiveness – Record copies of the Executive Director's comments, the public newspaper notice, public meeting records, and any written public comments in the document file.

Completed By (Month and Year or Frequency of Action) - Publish the newspaper notice inviting public review and comment after receipt of the Executive Director's preliminary determination (comments). The notice will allow the public to request a public meeting and will be held if the TCEQ determines that there is significant public interest.

BMP 1.7: Recurring Public Comment

Description – Post this SWMP Implementation Program in on the city's website and make it available in the public works office for ongoing public review. Provide regular opportunities for attendees of city council meetings to address the council on matters that could include the SWMP and its Implementation Program. The regular "Citizens to Be Heard" item on the agenda (or its equivalent) will satisfy this requirement.

Frequency – This will occur approximately once per month, according to the regular city council meeting schedule.

Evaluation Criteria for Effectiveness – Record copies of city council minutes and supplemental documents, if any, in the document file.

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

BMP 1:8 Volunteer Projects

Description – The city currently supports the voluntary clean-up efforts of many civic groups that collect 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. This year the Wells Fargo has organized two events in which volunteers have collected litter in the Olmos Basin.

Frequency – The frequency of projects will vary depending on climate variations, flood conditions, and the timing of pollution accidents or events.

Evaluation Criteria for Effectiveness –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) – Ongoing

BMP 1:9 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 twice per year.

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) – Two Times Per Year

BMP 1:10 Pet Waste Stations

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

Evaluation Criteria for Effectiveness – List of locations and any requests of additional ones.

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

Target Population – The BMP will be directed toward **residents**.

BMP 1:11 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 information that will be given will be such **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.

Evaluation Criteria for Effectiveness – List of events and dates.

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

Target Population – The BMP will be directed toward **residents**.

BMP 1:12 Drain Marking

Description – The City staff marked public storm drains with a durable aluminum plaque during 2009-2011. Modify the City’s drainage standards to require all new City inlets to be marked prior to the City’s acceptance. City staff will inspect all of the inlets and will replace any missing markers.

Evaluation Criteria for Effectiveness – List of drainage inlet markers installed or replaced.

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

New BMPS

BMP 1:13 Content on City 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

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

Completed By (Month and Year or Frequency of Action) – July 2019 - Annually

4.0 Minimum Control Measure No. 2: Illicit Discharge Detection and Elimination

4.1 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.B and Part VI.B 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;
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. external building wash water;
13. flows from wetlands and riparian habitats;
14. dechlorinated swimming pool discharges;
15. pavement and street wash water;
16. water used to control dust;
17. discharges or flows from fire fighting activities (fire fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
18. other allowable non-storm water discharges listed in 40 CFR ' 122.26(d)(2)(iv)(B)(1);
19. non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) or the TPDES Construction General permit (CGP); and
20. other similar occasional incidental non-storm water 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 IV.B.2. of the General Permit and must meet the requirements of Part II.D.3. 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 IV.B.2. of the General Permit.

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

4.2 Selected Best Management Practices

BMP 2.1: Storm Sewer Map

Description – The city has completed mapping the storm sewer system. The map, with its source cited, is found in this section (Tab 3) following the list of BMPs.

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, zones pertaining to inspection schedules, and additional information required to implement the SWMP. The source of information used to develop the final storm sewer map will be cited on the map. A description of how the outfalls were verified will be developed with photos, where possible.

Photos of some outfalls and other significant storm conveyance features are keyed to the preliminary map (Tab 3) and are found following the map within the same section (Tab 3). 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 revised every two years in even-numbered years.

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) – Every Two Years

BMP 2.2: Illicit Discharge Detection Plan

Description – The city has already developed program procedures that describe how will write a plan listing techniques to be used to detect illicit discharges are detected, investigated, and eliminated. The procedures describe how the City enforces the program. Upon identification of an illicit discharge City personnel investigate 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.

and will include forms to be used to document the results of the inspection. 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. The plan will also provide actions for eliminating the illicit discharges and provide the basis for establishing an ordinance. 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.

Frequency – each zone identified on the completed Storm Sewer Map will be assigned an inspection season, which is a portion of the calendar year during which the zone’s storm water conveyance system will be inspected. The inspections will occur annually during dry weather, when illicit discharges are easier to identify. Allowance shall be made for the fact that weather does not always permit inspections to occur at the scheduled times.

Evaluation Criteria for Effectiveness – 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) – Completed during last permit cycle.

BMP 2.3: 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.

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

Completed By (Month and Year or Frequency of Action) – Completed during last permit cycle.

BMP 2.4: 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.

Evaluation Criteria for Effectiveness – 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

BMP 2.5: Household Hazardous Chemical Collection

Description - Bexar County operates a free home pickup service for household hazardous waste through a grant administered by the Alamo Area Council of Governments. This service is available to all of the residents of Alamo Heights.

Evaluation Criteria for Effectiveness – Proper disposal of household hazardous waste prevents it from entering the MS4. Obtain a list of Alamo Heights addresses that used this service.

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

Target Population – The BMP will be directed toward residents.

5.0 Minimum Control Measure No. 3: Construction Site Storm Water Runoff Control

5.1 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 IV.B.2. of the General Permit.

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

5.2 Selected Best Management Practices

BMP 3.1: Technical Manual for Construction Runoff

Description – The City will evaluate and update the City’s Construction Runoff Control Criteria Manual and any other related materials to include BMPs that comply with TPDES Permit No. TX040000. The manual will include prohibitions of illicit discharges such as wash out wastewater, fuels, oils, soaps, solvents, and dewatering activities.

Frequency – Evaluate existing criteria manual relating to construction site runoff and waste disposal controls. Revise and/or adopt existing criteria manual for use by the City.

Evaluation Criteria for Effectiveness – Prepare brief memorandum documenting necessary criteria document additions or changes.

Completed By (Month and Year or Frequency of Action) – Year 1 and evaluate annually

BMP 3.2: 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.

Frequency – All eligible projects will be reviewed.

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

BMP 3.3: Construction Site Inspection Program

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

Evaluation Criteria for Effectiveness – Inspect all eligible projects – larger than 1 acre. Resolve all instances of non-compliance. Record copies of completed inspection forms and related documents, such as photos, in the document file.

Completed By (Month and Year or Frequency of Action) – Inspect while active

BMP 3.4: Construction Storm Water Management Ordinance

Description – The City will update the previously adopted ordinance to include the 14-day site stabilization requirement in the new MS4 permit. Previously adopted ordinances will continue to prohibit all discharges except those defined as allowable discharges defined in Section 4.1.2 and allowable non-stormwater discharges defined in Section 4.4. The regulations include enforcement procedures and actions for failing to comply.

Evaluation Criteria for Effectiveness – Review 100% of plans for sites with disturbances larger than one acre. Maintain log of plans reviewed and status. Record number of plans reviewed.

Implementation Start Date – End of Year 1

BMP 3.5: Construction Runoff Hotline

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.

Evaluation Criteria for Effectiveness – 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

6.0 Minimum Control Measure No. 4: Post-Construction Storm Water Management in New Development and Redevelopment

6.1 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 IV.B.2. of the General Permit.

Discussions of the Best Management Practices (BMPs) to be utilized in Post-Construction Storm Water Management follow:

6.2 Selected Best Management Practices

BMP 4.1: Technical Manual for Post-Construction Runoff

Description – The city will develop a manual to explain appropriate erosion, sedimentation, and other pollutant controls for developed sites. The manual will provide alternative solutions and give guidance as to when those alternatives are appropriate. The manual will also establish minimum control thresholds and proper maintenance criteria. The manual will be developed with the intent of establishing consistency with other small cities in the region and providing a streamlined approach that will be user-friendly for developers.

Frequency – The technical manual will be scanned and made available on the city’s web site. Some hard copies will also be available at city offices with building permits.

Evaluation Criteria for Effectiveness – The city council will officially adopt the technical manual. The manual distribution will be incorporated into the building permit process. A copy of the completed technical manual will be recorded in the document file.

Completed By (Month and Year or Frequency of Action) – The city will plan and develop the manual during Year 2 and 3. Developers and contractors will be required to conform to the manual beginning Year 4. The manual will be reviewed for updates at least every three years.

BMP 4.2: 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.

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

BMP 4.3: Long-Term Inspection and Maintenance Plan for Post-Construction Runoff

Description – The city’s program establishes 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, establish the means for determining what maintenance would be required, and establishes a protocol for inspectors to follow.

Evaluation Criteria for Effectiveness – Record copies of the forms, checklists, and written procedures in the document file.

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

BMP 4.4: 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; specify sanctions to ensure compliance; establish long-term inspection and maintenance requirements; and require city review of proposed long-term storm water pollution prevention plans.

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

Completed By (Month and Year or Frequency of Action) – Completed in prior permit cycle

BMP 4.5: 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.

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) – Ongoing

BMP 4.6: 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.

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) – Ongoing

7.0 Minimum Control Measure No. 5: Pollution Prevention/Good Housekeeping for Municipal Operations

7.1 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 IV.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:

7.2 Selected Best Management Practices

BMP 5.1: Municipal Employee Pollution Prevention Manuals

Description – The city obtained written manuals for city employee reference related to proper handling of processes which may impact storm water quality. The manuals specify what methods will be used to reduce the potential for polluting, and what methods should be used to clean up spills and other types of pollution. These manuals will provide a basis for training as listed in BMP 5.2.

Evaluation Criteria for Effectiveness – The City performed municipal employee training which was customized to each department’s activities.

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

BMP 5.2: 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 process 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.

Evaluation Criteria for Effectiveness – 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) – Annually

BMP 5.3: 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.

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

BMP 5.4: 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

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

Implementation Start Date – The city will implement vehicle maintenance and inspection program in Year 1.

BMP 5.5: 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.

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

Implementation Start Date – The City will review the CIPs as they are developed and proposed.

BMP 5.6: 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.

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

Implementation Start Date – The City will review the CIPs as they are developed and proposed.

8.0 Minimum Control Measure No. 7:

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.

9.0 Record Keeping and Reporting

The City will be 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.

9.1 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.

9.2 Reporting

9.2.1 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.

9.2.2 Annual Report

The City will submit a concise annual report to the TCEQ Executive Director within 90 days of the end of each permit 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:

SWMP 2019

- 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 II.D.4., 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 II.D.4.b.;
- 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 7th optional MCM, including the total number of acres disturbed; and

The annual report will be submitted to the following address (with a copy to the TCEQ Regional Office):

Texas Commission on Environmental Quality
Storm Water & Pretreatment Team; MC – 148
P.O. Box 13087
Austin, Texas 78711-3087
Or electronically at www.tceq.state.tx.us

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.

Effective December 21, 2020, annual reports must be submitted using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

10.0 References

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

² 2013, San Antonio River Authority, 2012 Basin Highlight Report and Watershed Characterization for Selected Watersheds.

³ 2018, San Antonio River Basin Summary Report Executive Summary

⁴2018, 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 - refers to a water body that is listed and described in Appendix A or

Appendix C of the Texas Surface Water Quality Standards, at 30 TAC ' 307.10.

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).

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**.

Daily Maximum - For the purposes of compliance with the numeric effluent limitations contained in this permit, this is the maximum concentration measured on a single day, by grab sample, within a period of one calendar year.

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 USC Section (') **1151**, means (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 Activities - manufacturing, processing, material storage, and waste material disposal areas (and similar areas where storm water can contact industrial pollutants related to the industrial activity) at an industrial facility described by the TPDES Multi Sector General Permit, TXR050000, or by another TCEQ or TPDES permit.

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 - For the purpose of this permit, 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.

Permitting Authority - For the purposes of this general permit, the TCEQ.

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 - 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 Afootprint@ 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.

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) — refers to a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) 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; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR ' 122.2; and (v) 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 (MHW) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

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

Urbanized Area (UA) - An area of high population density that may include multiple MS4s as defined and used by the U.S. Census Bureau in the 2000 decennial census.

Waters of the United States - (from 40 CFR ' 122.2) Waters of the United States or waters of the U.S. means:

- (a) all waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) all interstate waters, including interstate wetlands;
- (c) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - (1) which are or could be used by interstate or foreign travelers for

- recreational or other purposes;
- (2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
- (3) which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) all impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) the territorial sea; and
- (g) wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR ' 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area=s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

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

SWMP 2019

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	Recurring
Public Education	1.1	Brochures (twice a year)	Year 1	X
Public Involvement	1.6	NOI and NOC Public Comment	Year 1	
Public Involvement	1.5	Recurring Public Comment	Year 1	X
Public Education	1.2	Public Speakers (annual)	Year 1	X
Public Education	1.3	PSA's	Year 1	X
Public Education	1.4	School Book Covers (annual)	Year 1	X
Illicit Discharge	2.2	Illicit Discharge Detection Plan	Year 1	
Illicit Discharge	2.3	Illicit Discharge Ordinance	Year 1	
Public Involvement	1.8	Volunteer Projects (annual)	Year 1	X
Illicit Discharge	2.4	Illicit Discharge Hotline	Year 1	X
Pollution Prevention	5.4	Vehicle Maintenance and Upkeep	Year 1	X
Illicit Discharge	2.1	Storm Sewer Map Updated	Year 2	
Public Involvement	1.7	Public Comment (every 2 years)	Year 2	X
Pollution Prevention	5.3	Excess Sediment	Year 2	X
Construction	3.1	Technical Manual	Year 1	X
Construction	3.2	Site Plan Review	As Needed	
Construction	3.3	Site Inspection	As Needed	
Construction	3.4	Construction Mgt Ordinance	Year 1	
Construction	3.5	Construction Runoff Hotline	Year 1	X
Pollution Prevention	5.1	Employee Manual	Year 1	X
Pollution Prevention	5.1	Employee Training	Year 1	X
Post-Construction	4.5	Sediment Trap Enhancement	As Needed	
Post-Construction	4.6	Trash Trap Enhancement	As Needed	
Post-Construction	4.1	Technical Manual	Year 2	
Post-Construction	4.2	Site Plan Review	As Needed	
Post-Construction	4.3	Long-Term Inspection	As Needed	
Post-Construction	4.4	Post-Construction Ordinance	Year 1	

Stormwater Map

The City of Alamo Heights

Water System and Improvements

City of San Antonio

Legend

Storm_Drainage_Locations

DESCRPTN

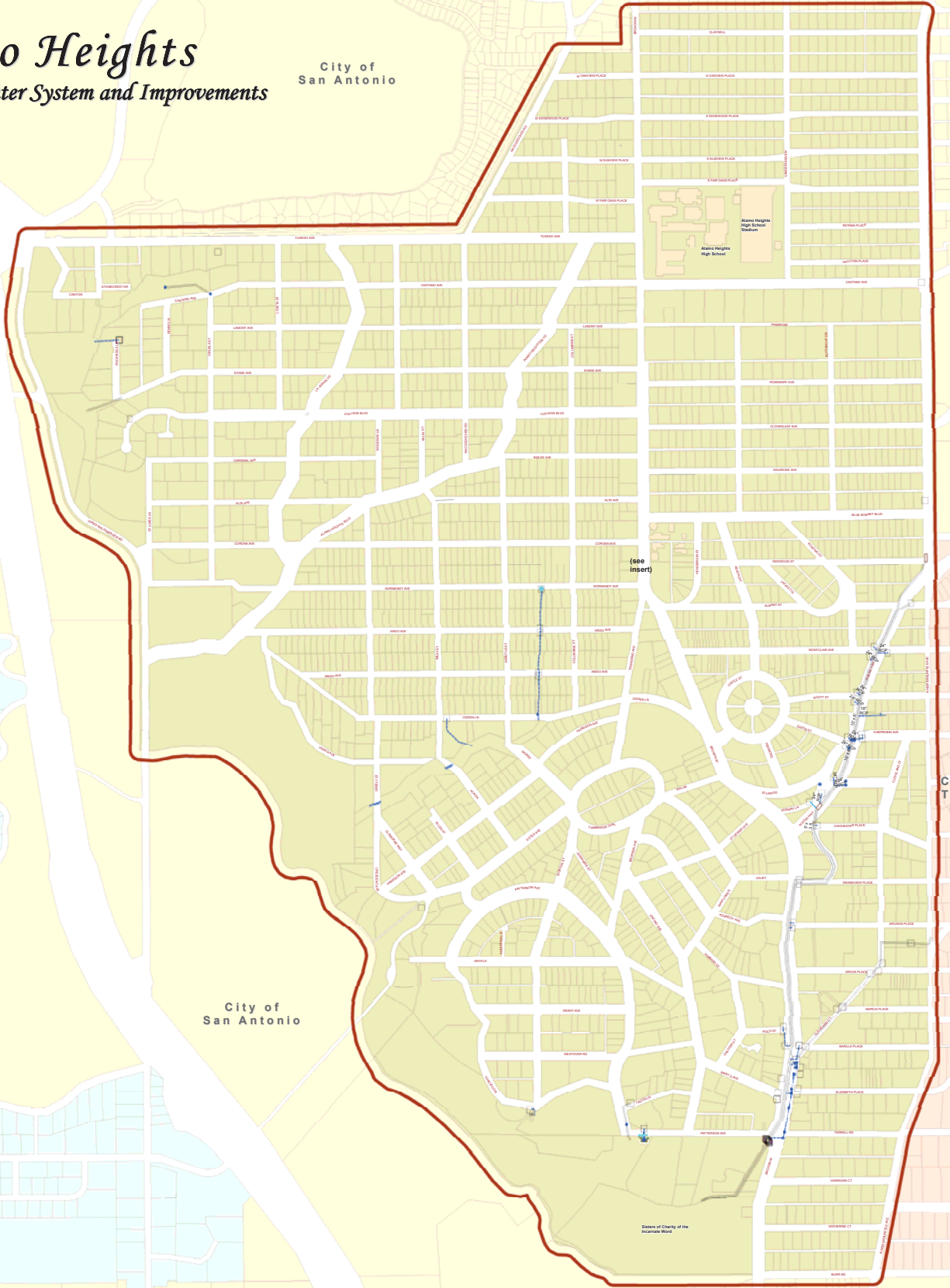
- Curb Inlet
- Drainage Inlet
- ▣ Headwall
- Spring
- Storm Drainage Manholes

Storm Drainage Lines

— <all other values>

Type

- Box Culvert
- Concrete Grate
- Concrete Gutter
- Pipe



City of Olmos Park

City of San Antonio

(see insert)

100,000 Gallon Tank
300,000 Gallon Tank
600,000 Gallon Tank



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