

**City of New Braunfels**  
**Stormwater Management Program**



**January 2025**

## **MS4 Operator Information**

**MS4 Name:** City of New Braunfels

**Address:** 550 Landa St, New Braunfels, TX 78130

**Lat/Long:** -98.142, 29.7038

**Counties of Operation:** Comal County, Guadalupe County

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## EXECUTIVE SUMMARY

The City of New Braunfels (the “City”) was initially authorized for coverage under the Texas Commission on Environmental Quality’s (TCEQ) Texas Pollutant Discharge Elimination System (TPDES) Phase II (Small) MS4 General Permit (TXR040000) on December 4, 2014. Since that time, the City has implemented a Stormwater Management Program (SWMP) and submitted annually to TCEQ annual reports summarizing activities and actions taken to meet MS4 permit requirements and achieve goals set forth in its SWMP.

On August 14, 2024, the TCEQ adopted the 2024 TPDES General Permit for small MS4s in Texas. The general permit became effective on August 15, 2024. As such, the City is required to submit to TCEQ within 180 days from the effective date a Notice of Intent (NOI) for coverage under the new permit along with an updated SWMP.

Under the general permit, the City is required to reduce through activities outlined in its SWMP the discharge of pollutants to Waters of the United States to the “maximum extent practicable” in order to protect water quality. At a minimum, the SWMP must addresses the following issues:

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

This SWMP describes in detail the BMPs New Braunfels has developed to address each of the required MCMs. An implementation schedule has been included for each measurable goal and will show SWMP implementation over the course of the five-year permitting term. The City has a dedicated stormwater program manager leading this effort and is supported by the Public Works Director in coordination with all City departments.

## OVERVIEW

### 1.0 INTRODUCTION AND HISTORY

In 1972, Congress amended the Clean Water Act (CWA) to prohibit the discharge of pollutants into the waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES program initially targeted easily detectable sources of water pollution such as municipal sewage and industrial process wastewater and was successful in improving water quality. However, the NPDES program was not addressing other significant sources of water quality impairment – nonpoint sources such as runoff from agricultural and forestry operations, and stormwater runoff.

In 1987, Congress, once again, amended the CWA in order to address the additional sources of water quality impairment throughout the United States. In response to the 1987 amendments to the CWA, the U.S. Environmental Protection Agency (EPA) initiated a comprehensive, two-phase approach to stormwater quality. On November 15, 1990, the EPA published Phase I of the NPDES program requiring permit coverage for stormwater discharges from medium and large municipal separate storm sewer systems (MS4s) with populations of 100,000 or more and several categories of industrial activities, including construction sites that disturb five or more acres of land. Phase I of the NPDES program addresses sources of stormwater runoff with the greatest potential to impact water quality. On December 8, 1999, the EPA published Phase II of the NPDES program requiring that small MS4s with populations less than 100,000 residents served within the U.S. Census Bureau's defined Urbanized Area (UA) and construction activities disturbing between one and five acres of land obtain permit coverage.

In response to the NPDES permit requirements, the EPA delegated regulatory authority in Texas to the State of Texas, and with the authority of the Texas Water Code and the CWA, the Texas Commission on Environmental Quality (TCEQ) assumed the authority to issue MS4 stormwater permits. As a regulatory entity, the TCEQ developed the Texas Pollutant Discharge Elimination System (TPDES) program, a program patterned after the federal NPDES stormwater program, which now has federal regulatory authority over discharges to Waters of the United States.

On August 13, 2007, the TCEQ issued TPDES General Permit No. TXR040000 for stormwater discharges from Phase II cities in Texas. Small Phase II communities were required to obtain permit coverage within 180 days of the permit issuance and develop a five-year Stormwater Management Program (SWMP) and summarize all stormwater activities in permit required annual report submittals to the TCEQ. The permit expired on August 13, 2012 and had been superseded and replaced by the new TPDES General Permit that became effective on January 24, 2019. The TPDES Small MS4 General Permit expired on January 23, 2024.

The TCEQ reissued the TPDES Small MS4 General Permit No. TXR040000 on August 14,

2024. The new Permit is based on the 2020 U.S. Census.

As per the 2019 permit, the new permit requires permittees to seek coverage on a tiered basis according to the population of residents served under the UA as determined by the 2020 Census. The four levels, based on population in the UA, are as follows:

Level 1: Operators of traditional small MS4s that serve a population of less than 10,000 within an “urban area with a population of at least 50,000 people”.

Level 2a: Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within an “urban area with a population of at least 50,000 people”.

Level 2b: Operators of 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 “urban area with a population of at least 50,000 people”, unless the non-traditional 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 100,000 within an “urban area with a population of at least 50,000 people”.

Level 4: Operators of traditional small MS4s that serve a population of 100,000 or more within an “urban area with a population of at least 50,000 people”.

According to the 2020 census, the population of the City of New Braunfels is 90,408. Therefore, the City of New Braunfels will remain a Level 3 entity under the new Phase II MS4 permit. The City will implement this SWMP throughout the five-year permit period and will submit a report annually to TCEQ summarizing activities and actions taken to meet MS4 permit requirement and goals set forth in the SWMP.

## **1.1 CITY OF NEW BRAUNFELS**

The City of New Braunfels is located along Interstate Highway I-35 between San Antonio and San Marcos, Texas and is the county seat of Comal County. New Braunfels has a large tourist industry with a focus on river and water-related recreation. New Braunfels discharges to multiple creeks and rivers within the Guadalupe River Basin that include the Comal River (Segment 1811), Dry Comal Creek (Segment 1811a), Blieders Creek, Alligator Creek (Segment 1804c) as well as the Guadalupe River itself (Segments 1804 & 1812). A portion of the City is located on the Edwards Aquifer recharge zone. The area receives approximately 34-inches of rain annually.

City of New Braunfels is one of several partners in the Edwards Aquifer Habitat Conservation

Plan program (EAHCP) (see <http://eaahcp.org/>). The EAHCP is intended to provide assurance that suitable habitat is protected at Comal and San Marcos River systems for several endangered aquatic species. The EAHCP is the basis for an Incidental Take Permit (ITP) that was issued by the United States Fish and Wildlife Service in 2013 under the Endangered Species Act. The EAHCP includes habitat and spring flow protection measures, as well as biological and water quality monitoring activities, that are implemented by the permittees of the ITP (City of New Braunfels, City of San Marcos, Edwards Aquifer Authority, Texas State University and the City of San Antonio-represented by the San Antonio Water System). The City of New Braunfels primary obligation is the implementation of various habitat restoration and improvement projects within the Comal River system and its watershed area. The City's EAHCP activities include a water quality protection component that aims to protect water quality and minimize pollutant loading to the Comal River. The City has been implementing various EAHCP-related habitat restoration activities since 2013 and fully anticipates continuing implementation through the term of the MS4 permit.

City of New Braunfels is also partially located over the Edwards Aquifer Recharge zone. Any construction-related or post-construction activity on the recharge zone of the Edwards Aquifer having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams is required to create a Water Pollution Abatement Plan (WPAP). These plans are developed by the construction operator and approved by TCEQ. As of January 1<sup>st</sup>, 2025, there have been two projects (California Boulevard Improvements in 2019, and Westpoint drainage improvements in 2014) within the recharge zone where the City of New Braunfels was the operator. These projects required the City to create a WPAP, and were both accepted by TCEQ.

## 1.2 STORMWATER REGULATION

- **TPDES Phase II Minimum Control Measures**

The TPDES permit requires the permittee to select *appropriate* BMPs as a Level 3 entity for each of the required MCMs. In other words, the TCEQ expects Phase II permittees to tailor their stormwater management plans and their BMPs to fit the characteristics and needs of the permittee and the area served by its MS4.

To qualify for permit coverage, the MS4 operator must develop a SWMP that describes the BMPs the City will develop and implement to minimize the discharge of pollutants from the MS4 to the maximum extent practicable. The seven MCMs defined by the TCEQ that are applicable to the City of New Braunfels as Level 3 permit holder are as follows:

*Public Education and Outreach* – The small MS4 operator shall implement a public education and outreach program to distribute educational materials to the community and conduct equivalent outreach about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

*Public Involvement/Participation* – The small MS4 operator must create opportunities, or support activities that are coordinated by citizen groups, for residents and others to become involved with the SWMP. The activities/BMPs must demonstrate an impact on stormwater runoff by improving water quality.

*Illicit Discharge Detection and Elimination (IDDE)* – The MS4 must develop, implement, and enforce a program to investigate, detect, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the small MS4.

*Construction Site Stormwater Runoff Control* – The MS4 is required to develop, implement, and enforce a program requiring operators of small and large construction activities to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or the regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

*Post-construction Stormwater Management in New Development and Redevelopment* – The MS4 is required to develop, implement, and enforce a program to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites.

*Pollution Prevention and Good Housekeeping for Municipal Operations* – The MS4 shall develop and implement an operation and maintenance program (O&M), including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas.

*Authorization for Municipal Construction Activities* – The development of this MCM for construction activities, where the small MS4 is the construction site operator, is optional and provides an alternative to the MS4 operator seeking coverage under TPDES CGP, TXR150000, for each construction activity. Permittees that choose to develop and implement this MCM will be authorized to discharge stormwater and certain non-stormwater from construction activities only where the MS4 operator meets the definition of a construction site operator. This MCM only authorizes the small MS4 operator and does not provide authorization for other construction site operators at a municipal project.

In the SWMP, the permittee must identify the BMPs implemented during the five-year permit term, a schedule for the implementation of the selected BMPs, and the measurable goals by which the permittee will self-report progress in an Annual Report to the TCEQ. Existing programs or BMPs may be used to fulfill the requirements of the general permit.

- **Capacity & Authority of MS4s to Implement and Enforce MCMs and BMPs**

City of New Braunfels Ordinance No. 2016-74, approved by the New Braunfels City Council on December 12, 2016, provides authority for the City to effectively implement its SWMP and regulate pollutant discharges.

Ordinance No. 2016-74 is incorporated into Section 143 of the City's Code of Ordinances and includes the following provisions:

- Section 143-6. Illicit Discharges
- Section 143-7. Stormwater Discharges Associated with Construction Activity
- Section 143-8. Permanent Stormwater Treatment Facilities
- Section 143-9. Authority to Enter and Inspect
- Section 143-10. Enforcement

In addition, the City's Drainage and Erosion Control Design Manual, 2016 (with updates in 2017, 2018 and 2021) includes water quality treatment requirements for areas of new development and redevelopment that meet certain criteria. The use of the Drainage and Erosion Control Design Manual is required by Section 143-2 of the Code of Ordinances.

The ordinance will continue to be upheld and will be reviewed annually and revised as needed.

- **Municipal Facilities Subject to TPDES Permits**

New Braunfels owns and operates a municipal airport that is subject to TPDES stormwater regulations. New Braunfels Utilities (NBU) is a utility service that does not own and operate the City's MS4 and has permits for the different facilities they operate. NBU provides water and wastewater services to the residents of New Braunfels.

City of New Braunfels Municipal Facilities Subject to TCEQ Permits		
Facility Name	Facility Address	TCEQ Permits
New Braunfels Municipal Airport	1588 Entrance Dr. New Braunfels	TXR05Z417

## IMPAIRED WATER BODIES

The City of New Braunfels discharges into several water bodies that are included on the 2024 Texas 303(d) list as impaired for bacteria. These include the Dry Comal Creek (Segment 1811a), the Comal River (Segment 1811), and the Guadalupe River below Comal River (Segment 1804). Total Maximum Daily Load (TMDL) plans have not been issued for these waterbodies. Instead, the City and project partners have completed the Dry Comal Creek and Comal River Watershed Protection Plan (WPP) that was accepted by TCEQ and EPA. The City began implementation of the WPP in 2018.

## DRY COMAL CREEK, COMAL RIVER, AND GUADALUPE RIVER BELOW COMAL RIVER

The Dry Comal Creek (Segment 1811A) is defined as the stream portion “from the confluence of the Comal River in New Braunfels in Comal County to the upstream perennial portion of the stream southwest of New Braunfels in Comal County” (TCEQ, 2012). The Dry Comal Creek is monitored monthly at Seguin Avenue by the Guadalupe Blanco River Authority (GBRA) as part of the Guadalupe River Basin Surface Water Quality Monitoring Program and

TCEQ Clean Rivers Program. The Dry Comal Creek does not meet water quality standards for bacteria and is therefore considered an impaired water body as per the latest TCEQ and EPA approved Texas 303(d) list (i.e. the 2024 Texas 303(d) list). The Dry Comal Creek was first listed in 2010 and has remained listed since that time. Currently there is no TMDL for the Dry Comal Creek. A large portion of the Dry Comal Creek and watershed lie outside of the City of New Braunfels city limits.

The Comal River (Segment 1811) extends from its confluence with the Guadalupe River to Klingemann Street in New Braunfels. The Comal River issues from the Comal Springs of the Edwards Aquifer and is considered the shortest navigable river in Texas at approximately 2.5 miles long. The Comal River lies entirely within the City of New Braunfels city limits. The Comal River does not meet water quality standards for bacteria and is therefore considered an impaired water body as per the latest TCEQ and EPA approved Texas 303(d) list (i.e. the 2024 Texas 303(d) list). The Comal River was first listed in 2019 and has remained listed since that time. Currently there is no TMDL for the Comal River.

The Guadalupe River below Comal River (Segment 1804) extends from its confluence with the Comal River to the confluence of the San Marcos River. While the Guadalupe River below Comal River has not previously been listed as an impaired waterbody, it is included on the draft 2024 Texas 303(d) for bacteria impairment.

The City worked with local stakeholders and agencies to develop the Dry Comal Creek and Comal River Watershed Protection Plan (WPP) to address bacteria loading to both these waterbodies. The City worked with Texas A&M University and Guadalupe Blanco River Authority to perform bacterial source tracking (BST) analyses on the Dry Comal Creek and Comal River in 2013 and 2016. The results of the BST analyses indicated that approximately 65% of the bacteria found in the waterbodies was from avian and non-avian wildlife with approximately 20% and less than 10% from livestock and human sources, respectively. The WPP includes bacteria management measures to address bacteria from these sources and includes urban wildlife management, OSSF management, pet waste management and education/ outreach initiatives. The WPP was accepted by both the TCEQ and EPA in September 2018.

## **ALLIGATOR CREEK AND GERONIMO CREEK**

Alligator Creek begins on the west side of IH-35 and continues southeast before it meets the confluence with Geronimo Creek midway through the watershed. Alligator Creek crosses the City limits and the UA along the northeastern portion of the City. The area that it crosses is not

very large, however the City's MS4 does discharge to it. Currently Alligator Creek is not listed on the 303(d) list as an impaired water body. This area is experiencing rapid growth. The upper portion of the watershed lies in the extra-territorial jurisdiction (ETJ) of New Braunfels and the lower portion is in the ETJ of Seguin. With continuing development and the conversion of rural land to urban land use will increasingly impact the hydrology and water quality in the watershed. Alligator Creek is a tributary to Geronimo Creek which is located outside of the New Braunfels city limits. Geronimo Creek is currently listed on the 303(d) for bacteria concerns.

The Geronimo and Alligator Creeks WPP was developed with the assistance of by regional stakeholders and was accepted by the EPA in September 2012. The Geronimo and Alligator Creeks Watershed Partnership, which is a collaboration of citizens, local city and county governments and agencies, was developed to implement bacteria and nitrate-nitrogen management measures included in the WPP. The portion of City of New Braunfels ETJ that might discharge to Geronimo Creek are not believed to be included in the regulated UA. Also, Alligator Creek has several surface water quality monitoring stations that do not indicate bacteria problems prior to its confluence with Geronimo Creek. City of New Braunfels will continue to support bacteria reduction efforts along with public education, outreach, and involvement measures to those creeks.

### **Discussion of Impaired Waterbodies**

According to Part III.A. of the new Small MS4 permit, MS4s that discharge directly to bacteria impaired water bodies without approved TMDL's shall perform the following activities:

- (a) Sanitary Sewer System
- (b) On-site Sewage Facilities
- (c) Illicit Discharges and Dumping
- (d) Animal Sources
- (e) Residential Education

The SWMP and annual report must include the selected BMPs. Permittees may not exclude BMPs associated with the minimum control measures (MCMs) required under 40 CFR § 122.34 from their list of BMPs. The BMPs shall, as appropriate address the following in Table 1.

Table 1: BMPs for Bacteria Impaired Water Bodies

<b>Activity/BMP</b>	<b>Measurable Goal</b>
Sanitary Sewer Systems as described by Part III.A.5.(a).	<p>Conduct a review of 100% of the sanitary sewer system in the MS4 area within the impairment watershed to identify areas for improvement within the first two years of the permit term. Initiate all feasible improvement projects by the end of the permit term.</p> <p>Conduct weekly lift station inspections at 100% of the MS4 owned and operated lift stations in the MS4 area within the impairment watershed each year.</p> <p>Investigate and address 100% of sanitary sewer overflow complaints identified through the public reporting mechanism implemented by the MS4 each year.</p> <p>Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease by reviewing and updating ordinances or other regulatory mechanisms and inspection programs at least one time annually.</p>
On Site Sewage Facilities (OSSFs) as described by Part III.A.5.(b).	<p>Develop and implement procedures to screen 20% of the MS4 area within the impairment watershed annually to identify failing OSSFs.</p> <ul style="list-style-type: none"> <li>• Maintain an inventory of 100% of the identified OSSFs and their status each year. <ul style="list-style-type: none"> <li>○ Review and update this inventory at least one time each year to address changes or additions.</li> </ul> </li> <li>• Address 100% of failing OSSFs each year by requiring the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.</li> </ul> <p>Investigate and address 100% of OSSF complaints identified through the public reporting mechanism implemented by the MS4 each year.</p>

Activity/BMP	Measurable Goal
Illicit Discharges and Dumping as described by Part III.A.5(c).	<p>Ensure 100% of procedures and ordinances or other regulatory mechanisms established for BMPs in MCM 3: Illicit Discharge Detection and Elimination address discharges that may contribute bacteria including from OSSFs, grease traps, and grit traps.</p>
Animal Sources as described by Part III.A.5.(d).	<p>Provide and maintain at least one pet waste station in 100% of public parks or similar greenspaces in the MS4 area within the impairment watershed each year.</p> <p>Develop and distribute educational materials related to animal sources of bacteria to 75% of the intended audiences identified by the MS4 in MCM 1: Public Education and Outreach each year. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.</p>
Residential Education as described by Part III.A.5.(e).	<p>Implement at least one additional BMP from MCM 1: Public Education and Outreach annually.</p> <p>In addition, ensure at least one of the BMPs implemented for MCM 1: Public Education and Outreach focuses on at least one of the following:</p> <ul style="list-style-type: none"> <li>• Bacteria discharging from a residential site either during runoff events or directly;</li> <li>• Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;</li> <li>• Identifying and reporting illicit discharges or illegal dumping;</li> <li>• Maintenance and operation of decorative ponds; and Proper disposal of pet waste.</li> </ul>

## MCM 1: PUBLIC EDUCATION AND OUTREACH

### 2.0 TPDES PHASE II PERMIT OVERVIEW

The Small MS4 operator shall implement a public education and outreach program to distribute educational materials to the community and conduct equivalent outreach about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. Traditional Level 3 MS4s shall address the residents being served and one additional target audience within the small MS4 service area (Table 2).

Small MS4 operators shall target specific pollutant(s) in the permittee's education program. Each small MS4 shall have a minimum of one target pollutant for each target audience. Small MS4s may implement more than one target pollutant where desired or appropriate to address pollutants in stormwater discharges to the MEP. The target pollutant must be appropriate for the target audience. The same pollutant may be used for more than one target audience and the target pollutant(s) may change annually as needed.

Table 2: Target audience and specific pollutant

Target Audience	Target Pollutants
MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.
Construction Operations	Sediment runoff, proper containment of all construction materials.
Restaurants	Oil and grease containment.
HOAs, Commercial/Retail operations, Schools	Proper maintenance of structural controls.

### 2.2 REQUIREMENTS FOR ALL PERMITTEES

Small MS4 operators must use appropriate educational resources as BMPs (materials, events, activities, etc.) in conjunction with the selected pollutants for the selected audiences. The message delivered by these BMPs must be applicable

to the target audience and relate to the target pollutant (such as a newsletter article about updated illegal dumping and discharge ordinances distributed to auto mechanic businesses or a hazardous household waste disposal flyer when applying for trash or recycling services). BMPs which are ongoing throughout the year or permit term may be counted as one annual BMP. Permittees shall explain how each BMP relates to the target pollutant and target audience. Small MS4 operators may change BMPs during the permit cycle if determined appropriate through annual reviews and a different BMP may be more effective for the small MS4's target pollutant or target audience. Any changes shall be reflected in the SWMP and explained in the annual report.

### **2.3 DISCUSSION OF STORMWATER PROGRAM**

The City of New Braunfels is required to develop and implement a Public Education Program to distribute information to the community about the impacts of stormwater discharges on water quality, hazards related to illegal discharges and dumping, concerns of bacteria, the improper disposal of waste, and steps the public can take to reduce pollutants in stormwater runoff.

The following (Table 3) are the specific BMPs and measurable goals the City will implement for the entire permit term.

Table 3: Public Education and Outreach BMPs

<b>Activity/BMP</b>	<b>Target Audience</b>	<b>Target Pollutant</b>	<b>Measurable Goal</b>
Information on the MS4 operator's website.	MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.	Maintain a webpage with current, accurate information and working links. All links shall be checked, and the page shall be updated at minimum of once annually. Website must be maintained for the full year, each year.
Social Media posts/ campaign.	MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.	Post a minimum of four times each year on a minimum of one social media platform. The message must address ways attendees can minimize or avoid adverse stormwater impacts or practices to improve the quality of stormwater runoff. Post must be seasonally appropriate and visible to the public for the full year, each year.

<b>Activity/BMP</b>	<b>Target Audience</b>	<b>Target Pollutant</b>	<b>Measurable Goal</b>
Publish article in local newspaper or newsletter.	MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.	<p>Develop article topics that are group specific and address activities or pollutants of concern at a seasonally appropriate time.</p> <p>Publish or email at least two articles to target audience groups each year.</p>
Fact sheets/brochures	MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.	<p>Develop material topics that are group specific and address activities or pollutants of concern.</p> <p>Fact sheets, brochures, bill inserts, or handouts must be distributed each year for at least 75% of the intended audience. Develop and implement tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.</p>

<b>Activity/BMP</b>	<b>Target Audience</b>	<b>Target Pollutant</b>	<b>Measurable Goal</b>
Promote, host, or develop educational meetings, seminars, or trainings.	MS4 residents, Construction Operations, HOAs	Pet waste, bacteria, grass clippings, illegal dumping, sediment runoff, proper containment of all construction materials, proper maintenance of structural controls.	<p>Hold, host, or promote a minimum of two events annually.</p> <p>The events shall address ways attendees can minimize or avoid adverse impacts to stormwater or practices to improve the quality of stormwater runoff.</p>
Targeted educational campaign via mail, email, or in person.	MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.	<p>Minimum of one campaign annually distributed to at least 75% of the intended audience.</p> <p>Develop and implement a tracking system to estimate percentage of intended audience reached.</p>

## **MCM 2: Public Involvement/Participation**

### **3.0 TPDES PHASE II PERMIT OVERVIEW**

All permittees, except prisons/correctional facilities, shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP. The small MS4 operator must create opportunities, or support activities that are coordinated by citizen groups, for residents and others to become involved with the SWMP. The activities/BMPs must demonstrate an impact on stormwater runoff by improving water quality.

#### **3.1 REQUIREMENTS FOR ALL PERMITTEES**

Small MS4 operators shall create/host or support the public involvement/participation BMP(s) in Part IV.D.2.(a) and Table 5. To be considered support given to the coordinating groups the small MS4 operator shall at minimum conduct at least one of the following or similar:

Support may include:

1. Plan, or assist with planning, the event or activity;
2. Contribute supplies, materials, tools, or equipment;
3. Provide assistance from MS4 staff during the activity;
4. Provide assistance with recruiting volunteers for events;
5. Make a space available for projects, meetings, or events;
6. Advertisement for the events;
7. Supply disposal services;
8. Arrange land or stream access;
9. Provide financial support; or
10. Provide donations of goods and services such as food.

#### **3.2 DISCUSSION OF STORMWATER PROGRAM**

The City must implement a public involvement/participation program to include opportunities for the constituents residing within the City's permitted municipal separate storm sewer

system (MS4) area to participate in the development and implementation of the Storm Water Management Plan.

The following (Table 4) are the specific BMPs and measurable goals the City will implement for the entire permit term.

Table 4: Public Involvement/Participation BMPs

Activity/BMP	Target Audience	Target Pollutant	Measurable Goal
Stream or watershed clean-up events, Adopt-A-Spot program	MS4 residents	Illegal dumping, litter cleanup	Host or support a minimum of two events annually. To be considered an event, the area cleaned must be a minimum of two acres or 400 yards.
Education display/booth at a school or public event to provide information or displays that work to improve public understanding of issues related to water quality.	MS4 residents	Pet waste, bacteria, grass clippings, illegal dumping.	Provide or support one booth or display annually.
Public education events/workshops	MS4 residents, HOAs, Commercial/Retail operators, Schools	Pet waste, bacteria, illegal dumping, water quality	Host at least one project or training annually on stormwater topics (building rain barrels, rain garden and bioretention creation or maintenance, how to recognize and report illicit discharge, etc.).

Activity/BMP	Target Audience	Target Pollutant	Measurable Goal
Public input meeting	MS4 residents	Pet waste, bacteria, illegal dumping, water quality	Host at least one meeting annually for input on the program implementation such as city council meetings, board meetings, or stakeholder meetings. Event advertisement must reach at least 75% of the intended audience.

## MCM 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

### 4.0 TPDES PHASE II PERMIT OVERVIEW

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

The following are the program requirements for MCM 2: Illicit Discharge Detection and Elimination, according to Part IV.D.3 of the general permit.

#### 4.1 Program Development

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

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

1. A current and accurate MS4 map.
2. Methods for informing and training MS4 field staff.
3. Methods for facilitating public reporting of illicit discharges and illegal dumping.
4. Procedures for responding to illicit discharge, illegal dumping, and spills.
5. Procedures for tracing the source of an illicit discharge and illegal dumping.
6. Procedures for removing the source of the illicit discharge and illegal dumping.
7. Conduct inspections in response to complaints including follow-up inspections, and procedures for inspections.
8. For Levels 2, 3 and 4, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4.

## **4.2 Allowable Non-Stormwater Discharges**

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

1. Water line 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 do not violate 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 washing;
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 wastewater;
15. Discharges or flows from emergency fire-fighting activities (emergency fire-fighting activities do not include washing of trucks, runoff 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)(1);
17. Non-stormwater discharges that are specifically listed in the TPDES Multi-Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
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 such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

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

Since portions of the City discharge to impaired water bodies, bacteria generating sources and illicit discharges will be given high-priority for this program.

#### **4.3 REQUIREMENTS FOR ALL PERMITTEES**

All permittees shall meet all the following requirements.

1. **MS4 Mapping**

All permittees shall maintain a current and accurate MS4 map, which must be located on site and available for review by TCEQ. The MS4 map must show at a minimum the following information:

- a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into Waters of the U.S.;
- b. The location and name of all surface waters receiving discharges from the small MS4 outfalls; and
- c. Priority areas identified under Part IV.D.3.(e)(1), if applicable.

2. **Education and Training**

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise

observe an illicit discharge, illegal dumping, or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained onsite and made available for review by the TCEQ.

3. Public Reporting of Illicit Discharges and Spills

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

4. All permittees shall develop and maintain onsite procedures for responding to illicit discharges, illegal dumping, and spills.

5. Source Investigation and Elimination

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

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

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

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

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

c. Corrective Action to Eliminate Illicit Discharge

If and when the source of the illicit discharge or illegal dumping has been determined, all permittees shall immediately notify the responsible party of the problem and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge and illegal dumping.

6. Inspections – The Permittee shall conduct inspections, in response to complaints, and shall conduct follow-up inspections to ensure that corrective measures have been implemented by the responsible party. The permittee shall develop written procedures describing the basis for conducting inspections in response to complaints and conducting follow-up inspections.
7. Permittees who operate Levels 3 or 4 small MS4s shall upon being notified that the discharge has been eliminated, conduct a follow-up investigation or field screening, consistent with Part IV.D.2.(e)(2), to verify that the discharge has been eliminated. Follow-up investigations shall be completed within five business days, on average. The permittee shall document its follow-up investigation. The permittee may seek recovery and remediation costs from responsible parties consistent with Part IV.C.3, and require compensation-related costs. Resulting enforcement actions must follow the procedures for enforcement action in Part IV.C.3 and 6. If the suspected source of the illicit discharge is authorized under an NPDES/TPDES permit or the discharge is listed as an authorized non-stormwater discharge, as described in Part II.D, no further action is required.

#### **4.4 DISCUSSION OF STORMWATER PROGRAM**

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

- Develop a storm sewer system map with locations of all known outfalls.
- Uphold existing ordinances prohibiting illicit discharges
- Maintain enforcement procedures and actions.
- Implement procedures to detect, track down, and eliminate illicit discharges.
- Initiate corrective actions and enforcement proceedings as needed.
- Inform employees, businesses, and the general public of the program.

The following (Table 5) are the specific BMPs and measurable goals the City will implement for the entire permit term.

Table 5: Required IDDE BMPs

Activity/BMP	Measurable Goals
Maintain a current and accurate MS4 map	Review and update, as necessary, at least one time annually to include features which have been added, removed, or changed.
<p>Conduct training for all MS4 field staff.</p> <p>Training may be conducted in person or using self-paced training materials such as videos or reading materials.</p>	Conduct a minimum of one training annually for 100% of MS4 field staff that may come into contact with or otherwise observe an illicit discharge, illegal dumping, or illicit connection to the small MS4 as part of their normal job responsibilities.
Maintain and publicize a public reporting methods for the public to report illicit discharges, illegal dumping, or water quality impacts associated with discharges into or from the small MS4 such as a reporting hotline, online form, or other similar mechanism.	Maintain a minimum of one public reporting mechanism 100% of the time during the permit term. Publicize the public reporting mechanism a minimum of two times annually in a method designed to reach the majority of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness. The public reporting mechanism must be publicized on the public website 100% of the time during the permit term.
Develop and maintain procedures for responding to illicit discharges, illegal dumping, and spills.	Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.

Activity/BMP	Measurable Goals
Source investigation and elimination of illicit discharges and illegal dumping	<p>Respond to 100% of known illicit discharges and illegal dumping incidents each year to investigate sources.</p> <p>Respond to 100% of high priority discharges each year.</p> <p>Notify TCEQ immediately of 100% of illicit flows believed to be an immediate threat to human health or the environment throughout the permit term.</p>
Corrective action to eliminate illicit discharges and illegal dumping	<p>For 100% of illicit discharges or illegal dumping where a source has been determined, notify the responsible party of the problem within 24 hours.</p> <p>Require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.</p>
Inspection procedures	<p>Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.</p>
Inspections in response to complaints	<p>Conduct inspections in response to 100% of complaints each year according to established procedures.</p> <p>Conduct follow up inspections in 100% of cases each year</p>
Conduct follow-up investigations or field screenings when notified that a discharge has been eliminated	<p>Conduct follow-up investigations or field screening in response to 100% of notification each year.</p> <p>Complete the follow-up investigations within five business days, on average.</p>

## **MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL**

### **5.0 TPDES PHASE II PERMIT OVERVIEW**

The MS4 operator, to the extent allowable under State and local law, must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more of land. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions, to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

The City will assess their current program elements and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the Maximum Extent Practical (MEP). The following are the requirements as per Part IV.D.4 of the general permit.

#### **5.1 CONTROL MEASURES**

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

#### **5.2 REQUIREMENTS FOR ALL PERMITTEES**

All permittees shall meet the following requirements:

- (1) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure erosion and sediment controls, soil stabilization, and BMP requirements

are effectively implemented for all small and large construction activities discharging to its small MS4 consistent with the TPDES CGP, TXR150000.

(2) Prohibited Discharges - The following discharges are prohibited:

- a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;
- b. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;
- c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- d. Soaps or solvents used in vehicle and equipment washing; and
- e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

(3) Construction Plan Review Procedures

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

- a. The site plan review procedures must incorporate consideration of potential water quality impacts.
- b. The permittee may not approve any plans unless the plans contain appropriate site-specific construction site control measures that, at a minimum, meet the requirements described in the TPDES CGP, TXR150000.

The permittee may require and accept a plan, such as a stormwater pollution prevention plan (SWP3), that has been developed pursuant to the TPDES CGP, TXR150000.

(4) Construction Site Inspections and Enforcement

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

- a. The permittee shall conduct inspections based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site.
- b. Inspections must occur during the active construction phase.
  - (i) All permittees shall develop and implement updated written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on-site or in the SWMP and be made available to TCEQ.
  - (ii) Inspections of construction sites must, at a minimum:
    1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage;
    2. Conduct a site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the small MS4's requirements;
    3. Assess compliance with the permittee's ordinances and other regulations; and
    4. Provide a written or electronic inspection report.
- c. Based on site inspection findings, all permittees shall take all necessary follow-up actions (for example, follow-up-inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and documentation maintained for review by the TCEQ.

(5) Information Submitted By the Public

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

(6) **MS4 Staff Training**

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

### **5.3 ADDITIONAL REQUIREMENTS FOR LEVEL 3 SMALL MS4s**

In addition to the requirements described in Parts IV.D.4.(b) above, permittees who operate Levels 3 or 4 small MS4s shall meet the following requirements.

#### **Construction Site Inventory**

Permittees who operate Levels 3 or 4 small MS4s shall maintain an inventory of all TPDES permitted active public and private construction sites in the small MS4 area, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. Notification to the small MS4 must be made by submittal of a copy of an NOI or a small construction site notice, as applicable. The permittee shall make this construction site inventory in the small MS4 area available to the TCEQ upon request for review.

### **5.4 DISCUSSION OF STORMWATER PROGRAMS**

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

The following (Table 6) are the specific BMPs and measurable goals the City will implement for the entire permit term.

Table 6: Construction Site Stormwater Runoff Control BMPs

Activity/BMP	Measurable Goals
Develop and maintain an ordinance or other regulatory mechanism	Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
Prohibit discharges	Develop and maintain an ordinance or other regulatory mechanism to prohibit these discharges. Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address
Maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction.	Review and update site plan review procedures at least one time annually to address changes and make improvements to the established procedures where applicable. Implement site plan review procedures for 100% of new construction site plans received each year.
Implement procedures for inspecting large and small construction projects	Review and update inspection procedures at least one time annually to address changes and make improvements to the established procedures where applicable.
Conduct construction site inspections	Conduct inspections at a minimum of 80% of active construction sites annually according to the established procedures. Each year, conduct follow up inspections in 100% of cases where necessary as described in the established procedures.

<b>Activity/BMP</b>	<b>Measurable Goal</b>
<p>Conduct training for all the MS4 staff whose primary job duties are related to implementing the construction stormwater program.</p> <p>Training may be conducted in person or using <u>self-paced training materials</u>.</p>	<p>Conduct a minimum of one training annually for 100% of MS4 staff whose primary job duties are related to implementing the construction stormwater program.</p>
<p>Maintain a construction site inventory</p>	<p>Maintain an annual inventory of 100% of TPDES permitted active public and private construction sites in the small MS4 area, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale.</p>
<p>Develop, implement, and maintain procedures for receipt and consideration of information submitted by the public</p>	<p>Review and update procedures for the receipt and consideration of information submitted by the public at least one time annually to address changes and make improvements to the established procedures where applicable.</p> <p>Maintain one webpage, hotline, or similar method for receipt of information submitted by the public throughout the permit term.</p>

## **MCM 5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT**

### **6.0 TPDES PHASE II PERMIT OVERVIEW**

Post-construction stormwater management in new development and redevelopment focuses on the implementation of controls to maintain good water quality conditions after an area has been developed. New development can also have a significant effect on water quality because during development, natural landscapes are often replaced by impermeable roads, parking lots, sidewalks and other paved surfaces that lead to increases in both the volume of stormwater runoff and the accompanying pollutants that reach local water bodies.

The MS4s are required to develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that discharge to the small MS4. The program must ensure that controls are in place to prevent or minimize water quality impacts. The following are the requirements as per Part IV.D.6 of the general permit.

To the extent allowable under state and local law, the MS4 operator must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre of land, including projects less than one acre that are part of a larger common plan of development or sale that will result in disturbance of one or more acres, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.

### **6.1 POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM**

All permittees shall meet the requirements below including Table 7.

- (1) All permittees shall develop, implement, and enforce a program, to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre

that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

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

## **6.2 REQUIREMENTS FOR ALL PERMITTEES**

- (1) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.
- (2) Long-Term Maintenance of Post-Construction Stormwater Control Measures  
All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:
  - a. Maintenance performed by the permittee.
  - b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirement for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator and made available for review by the small MS4.

### **6.3 DISCUSSION OF STORMATER PROGRAM**

The City of New Braunfels is required to develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre of land (including smaller sites that are part of a larger common plan of development). The City has enacted an ordinance to address post-construction runoff, included water quality treatment requirements for areas of new development and implemented procedures to ensure adequate long-term operation and maintenance of permanent stormwater control measures. The City will continue to uphold these measures to reduce pollutant impacts to stormwater that are associated with development.

The following are the specific BMPs and measurable goals the City will implement for the entire permit term.

Table 6: Required Post Construction Stormwater Management in New Development and Redevelopment BMPs

Activity/BMP	Measurable Goals
Develop and maintain an ordinance or other regulatory mechanism.	Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
Document and maintain records of enforcement actions and make them available for review by TCEQ.	Maintain records of 100% of enforcement actions taken each year. Make 100% of enforcement records available to TCEQ for review within 24 hours of request.
Ensure the long-term operation and maintenance of structural stormwater control measures installed.	Each year, implement a maintenance plan and schedule established by the small MS4 operator addressing 100% of stormwater control measures where the small MS4 operator is responsible for maintenance. Each year, require 100% of the owners or operators of any new development or redeveloped sites to develop and implement a maintenance plan addressing maintenance requirements for any structural control measures installed on site. Require the site owner or operator to maintain documentation, such as a tracking log, onsite for 100% of the maintenance performed and made available for review by the small MS4 operator or TCEQ within 24 hours of the request.

## **MCM 6: POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS**

### **7.0 TPDES PHASE II PERMIT OVERVIEW**

Municipalities conduct a variety of activities throughout their daily operations, which have the potential to affect water quality throughout the community. With the adoption and implementation of stormwater management policies and procedures, the City of New Braunfels will protect stormwater quality and continue to deliver public services at the present service levels. A variety of municipal operations are affected by stormwater management policies and procedures. These municipal operations include, but are not limited to, parks maintenance, open space management, road and rights-of-way maintenance, water/wastewater utilities, fleet and building maintenance, city construction projects, and stormwater system maintenance. The following are the requirements as per Part III.B.4 of the general permit.

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

### **7.1 PROGRAM DEVELOPMENT**

All permittees shall develop and implement an operation and maintenance program (O&M), including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to: park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

## 7.2 REQUIREMENTS FOR ALL PERMITTEES

All permittees shall meet the following requirements:

(1) Permittee-owned Facilities and Control Inventory

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

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

- r. Street repair and maintenance sites;
- s. Vehicle storage and maintenance yards; and
- t. Structural stormwater controls.

(2) Training and Education

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

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

(4) Contractor Requirements and Oversight

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

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

(5) Municipal Operation and Maintenance Activities

a. Assessment of permittee-owned operations

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

- (i) Road and parking lot maintenance, including such areas as pothole repair, pavement marking, sealing, and re-paving;
- (ii) Bridge maintenance, including such areas as re-chipping, grinding, and saw cutting;

- (iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and
- (iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.

- b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).
- c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures must include at least two of the following:
  - (i) Replacing materials and chemicals with more environmentally friendly materials or methods;
  - (ii) Tracking application of deicing and anti-icing compounds;
  - (iii) Using suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants generated by regular bridge maintenance; and
  - (iv) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.

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

(6) Structural Control Maintenance

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

frequency of inspections occurring at least one time annually and how they will be conducted.

### **7.3 ADDITIONAL REQUIREMENTS FOR LEVEL 3 SMALL MS4s**

In addition to the requirements described in Part IV.D.6.(b) above, permittees who operate Levels 3 or 4 small MS4s shall meet the following requirements included in Table 7.

- (1) Storm Sewer System Operation and Maintenance
  - a. Permittees who operate Levels 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the MEP the collection of pollutants in catch basins and other surface drainage structures.
  - b. Permittees who operate Levels 3 or 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping).
- (2) Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads

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

- a. Implementation schedules – If a sweeping program is implemented, the permittee shall sweep the areas in the program (for example, the streets, roads, and public parking lots) in accordance with a frequency and schedule determined in the permittee's O&M program to address at a minimum 75% of the areas in the program annually.
- b. For areas where street sweeping is technically infeasible (for example, streets without curbs), the permittee shall focus implementation of other trash and litter control procedures, or provide inlet protection measures to minimize pollutant discharges to storm drains and creeks.

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

(3) Mapping of Facilities

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

(4) Facility Assessment

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

- a. Assessment of Facilities' Pollutant Discharge Potential – The permittee shall review the facilities identified in Part IV.D.6.(b)(1) once per permit term for their potential to discharge pollutants into stormwater.
- b. Identification of high priority facilities – Based on the assessment above, the permittee shall identify as high priority those facilities that have a high potential to generate stormwater pollutants and shall develop and maintain a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of POCs to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.
- c. Documentation of Assessment Results – The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.

(5) Development of Facility-Specific Procedures

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

- a. For each high priority facility identified in Part IV.D.6.(c)(4)b, the permittee shall develop a SOP that identifies BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility.
- b. A hard or electronic copy of the facility-specific stormwater management SOP (or equivalent existing plan or document) must be maintained and be available for review by the TCEQ. The SOP must be kept onsite when possible and must be kept up-to-date.

**(6) Stormwater Controls for High Priority Facilities**

Permittees who operate Levels 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part IV.D.6.(c)(4)b. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:

- a. General good housekeeping – Material with a potential to contribute to stormwater pollution must be sheltered from exposure to stormwater.
- b. De-icing and anti-icing material storage – The permittee shall ensure, to the MEP, that stormwater runoff from storage piles of salt and other de-icing and anti-icing materials is not discharged; or shall ensure that any discharges from the piles are authorized under a separate discharge permit.
- c. Fueling operations and vehicle maintenance – The permittee shall develop SOPs (or equivalent existing plans or documents) that address spill prevention and spill control at permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities.
- d. Equipment and vehicle washing – The permittee shall develop SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. The discharge of equipment and vehicle wash water to the small MS4 or directly to receiving waters from permittee-owned facilities is not authorized under this general permit. To ensure that wastewater is not discharged under this general permit, the permittee's SOP may include installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the washing activity, or applying for and obtaining a separate TPDES permit.

(7) Inspections

Permittees who operate Levels 3 or 4 small MS4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.

#### **7.4 DISCUSSION OF STORMWATER PROGRAM**

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

The following are the specific BMPs and measurable goals the City will implement for the entire permit term.

Table 7: Required Pollution Prevention and Good Housekeeping for Municipal Operations BMPs

<b>Activity/BMP</b>	<b>Measurable Goals</b>
Permittee-owned Facilities and Control Inventory	<p>Develop and maintain an annual inventory for 100% of the small MS4 owned and operated facilities and controls in the small MS4 area.</p> <p>Review and update the inventory at least one time annually to address changes or additions to the facilities and controls where applicable.</p>
Training and Education: Training may be conducted in person or using self-paced training materials such as videos or reading materials.	<p>Conduct a minimum of one training annually for 100% of employees involved in implementing pollution prevention and good housekeeping practices.</p> <p>For small MS4s which use only contractors to implement pollution prevention and good housekeeping practices, ensure training of 100% of applicable contract staff is conducted at least one time annually using contract language or another similar method.</p>

<b>Activity/BMP</b>	<b>Measurable Goals</b>
Disposal of Waste Material	Ensure that 100% of waste from the MS4 is disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable each year.
Contractor Requirements and Oversight	<p>Each year, ensure that 100% of contractors hired by the MS4 to perform maintenance activities on permittee- owned facilities is contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures described in Parts IV D.6.(b)(2)-(6).</p> <p>Implement oversight procedures of contractor activities in 100% of contracts to ensure that contractors are using appropriate control measures and SOPs each year.</p> <p>Oversight procedures must be maintained on-site 100% of the time and made available for review by TCEQ within 24 hours of request.</p>
Assessment of permittee- owned operations	<p>Evaluate 100% of O&amp;M activities, in conjunction with procedure reviews if appropriate, for their potential to discharge pollutants in stormwater annually including but not limited to:</p> <ul style="list-style-type: none"> <li>• Road and parking lot maintenance, including such areas as pothole repair, pavement marking, sealing, and re-paving;</li> <li>• Bridge maintenance, including such areas as re- chipping, grinding, and saw cutting;</li> <li>• Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and</li> <li>• Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.</li> </ul>

<b>Activity/BMP</b>	<b>Measurable Goals</b>
Identify pollutants of concern	<p>Identify pollutants of concern that could be discharged from all of the O&amp;M activities described in Part IV.D.6.(b)(5)b and maintain a list of 100% of the pollutants identified. Including for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash. Review and update the pollutants of concern list at least one time annually to address changes or additions to the O&amp;M activities where applicable.</p>
Pollution Prevention Measures	<p>Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the permittee-owned operations.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Use suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants during 80% of regular bridge maintenance each year.</li> </ul>
Inspection of Pollution Prevention Measures	<p>At least one time annually, visually inspect 100% of pollution prevention measures implemented at permittee-owned facilities to ensure they are working properly. Develop and maintain written procedures that describe the frequency of inspections and how they will be conducted. Review and update the inspection procedures at least one time annually to address changes or additions to the pollution prevention measures. Maintain a log of 100% of the inspections conducted annually and make the log available for review by the TCEQ within 24 hours of a request.</p>

<b>Activity/BMP</b>	<b>Measurable Goals</b>
Structural Control Maintenance	<p>At least one time annually, perform maintenance of 100% of the structural controls which require maintenance.</p> <p>Maintenance must follow a plan and schedule developed by the small MS4 operator to be consistent with maintaining the effectiveness of the BMP.</p> <p>The permittee shall develop and maintain written procedures that define the frequency of inspections and how they will be conducted.</p> <p>Review and update the maintenance procedures at least one time annually to address changes or additions to the pollution prevention measures.</p>
Storm Sewer System Operation and Maintenance Program	<p>Develop and implement an O&amp;M program to reduce to the MEP the collection of pollutants in catch basins and other surface drainage structures each year.</p> <ul style="list-style-type: none"> <li>Inspect at least 25% of the small MS4 owned and operated detention basins each year.</li> <li>Collect and dispose of or recycle used oil and other household hazardous waste (HHW) from the public in at least three events each year. An event is any day in which the public has an opportunity to dispose of or recycle HHW either through collection or drop off</li> </ul>
Storm Sewer System Operation and Maintenance Problem Areas	<p>Develop a list of 100% of the identified potential problem areas. Identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping). Review and update the list of potential problem areas at least one time annually to address changes or additions to the list.</p>

<b>Activity/BMP</b>	<b>Measurable Goals</b>
Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads	<p>A street sweeping and cleaning program to address 75% of the MS4 area where street sweeping is technically feasible annually.</p> <p>Ensure 100% of the MS4 area where street sweeping is technically feasible is addressed at least two times by the end of the permit term.</p>
Assessment of Facilities' Pollutant Discharge Potential	<p>Review 100% of the facilities identified in Part IV.D.6.(b) at least one time per permit term for their potential to discharge pollutants into stormwater.</p>
Identification of high priority facilities	<p>Based on the assessment in Part IV.D.6.(c)(4)a., the permittee shall identify as high priority those facilities that have a high potential to generate stormwater pollutants. A list of 100% of the identified facilities must be developed and maintained each year.</p> <p>Review and update the list of high priority facilities at least one time annually to address changes or additions to the facilities.</p>
Documentation of Assessment for High Priority Facilities Results	<p>Document the results of all the assessments and maintain copies of 100% of the site evaluation checklists used to conduct the assessments each year.</p> <p>The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.</p>
Development of Facility- Specific SOPs	<p>Develop facility-specific stormwater management SOPs for 100% of the MS4 owned and operated facilities. A description of 100% of the BMPs developed to comply with Part IV.D.6.(c)(6) must be included in each facility-specific SOP.</p> <p>Review and update the facility-specific SOPs at least one time annually to address changes or additions to the facilities.</p> <p>If requested, SOPs must be made available to TCEQ within 24 hours of the request for review.</p>

<b>Activity/BMP</b>	<b>Measurable Goal</b>
Stormwater Controls for High Priority Facilities, General Good Housekeeping	Shelter from exposure to stormwater 100% of material with a potential to contribute to stormwater pollution (such as, fertilizers, solvents, paints, cleaners, automotive products, etc.) each year.
Stormwater Controls for High Priority Facilities, De- icing and anti-icing material storage	Ensure that 100% of stormwater runoff from storage piles of salt and other de-icing and anti-icing materials is not discharged each year.
Stormwater Controls for High Priority Facilities, Fueling and vehicle maintenance	Develop and implement SOPs that address spill prevention and spill control at 100% of permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities each year. Review and update the facility specific SOPs at least one time annually to address changes or additions to the facilities.
Stormwater Controls for High Priority Facilities, Equipment and vehicle washing	Develop and implement SOPs that address equipment and vehicle washing activities at 100% of the permittee-owned and operated facilities where washing occurs.  To ensure that wastewater is not discharged under this general permit, the permittee's SOP must include connecting vehicle wash stations to sanitary sewer.  Review and update the facility specific SOPs at least one time annually to address changes or additions to the facilities.
Inspections of high priority facilities	Develop and implement an inspection program, which at a minimum must include inspections of 100% of high priority permittee-owned facilities one time per year. The results of 100% of the inspections and observations must be documented and available for review by the TCEQ each year.

Activity/BMP	Measurable Goals
Mapping of Facilities	<p>On a map of the area regulated under this general permit, identify where 100% of the permittee-owned and operated facilities and stormwater controls are located.</p> <p>Review and update the map at least one time annually to address changes or additions to the facilities and controls.</p>

## **MCM 8: AUTHORIZATION FOR CONSTRUCTION ACTIVITIES WHERE THE SMALL MS4 IS THE SITE OPERATOR**

### **8.0 TPDES PHASE II PERMIT REQUIREMENTS AND OVERVIEW**

The development of this MCM for construction activities, where the small MS4 is the construction site operator, is optional and provides an alternative to the MS4 operator seeking coverage under TPDES CGP, TXR150000, for each construction activity. Permittees that choose to develop and implement this MCM will be authorized to discharge stormwater and certain non-stormwater from construction activities only where the MS4 operator meets the definition of a construction site operator. This MCM only authorizes the small MS4 operator and does not provide authorization for other construction site operators at a municipal project.

When developing this measure, permittees are required to meet all requirements of, and be consistent with the following: (1) applicable effluent limitation guidelines for the Construction and Development industry (40 CFR Part 450), (2) TPDES CGP TXR150000,

- (1) Part IV.D.4 and Part VII of this general permit.

The authorization to discharge under this MCM is limited to the small MS4's regulated area, such as the portion of the small MS4 located within an urban area with a population of at least 50,000 people or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their small MS4 that are also in compliance with all of the MCMs listed in this general permit.

This MCM must be developed as a part of the SWMP. If this MCM is developed after submitting the initial NOI, an NOC must be submitted notifying the executive director of this

change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit.

Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES CGP, TXR150000, or under a TPDES individual permit.

Controls required under this MCM must be implemented prior to discharge from a municipal construction site into surface water in the state.

The MCM 8 must include:

- (a) A description of how construction activities will generally be conducted by the permittee taking into consideration local conditions of weather, soils, and other site-specific considerations;
- (b) A description of the area that this MCM will address and where the permittee's construction activities are covered (for example within the boundary of the urban area with a population of at least 50,000 people, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary);
- (c) Either 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 how the permittee will make certain that contractors have a separate authorization for stormwater discharges;
- (d) A general description of how a SWP3 will be developed for each construction site, according to Part VII of this general permit; and
- (e) Records of municipal construction activities authorized under this optional MCM, in accordance with Part VII of this general permit.

## **8.1 DISCUSSION OF STORMWATER PROGRAM**

The City of New Braunfels has elected to implement this MCM which authorizes the discharge of stormwater and certain non-stormwater from construction activities only where the MS4 operator meets the definition of a construction site operator.

Construction activities will follow all City ordinances and regulations, as well as all requirements detailed in the Stormwater Pollution Prevention Plan (SWPPP) created for the specific construction site. The City's covered construction activities will take place within City limits and will be subject to routine stormwater inspections (see MCM 4: Construct Site Stormwater Runoff Control for SWPPP inspection requirements and schedules). If a city-operated construction site requires the creation of a SWPPP, it will be created as part of the engineered plans and during the design phase of the project. The SWPPP will be created using

the TCEQ guidelines, Part VII, of the General Permit. All records of municipal construction activities will be kept on city-maintained servers and be available to TCEQ upon request.

## **RECORDKEEPING AND REPORTING**

As detailed in TPDES General Permit TXR040000, the City must document and report the implementation of all stormwater BMPs throughout the course of the permit period, and the TCEQ will require that the City submit annual reports to document the development and implementation of the SWMP.

### **RECORDKEEPING**

1. The permittee shall retain all records, a copy of this TPDES general permit (maintained physically or electronically), and records of all data used to complete the application (NOI) for this general permit, for a period of at least three years, or for the remainder of the term of this general permit, whichever is longer. This period may be extended by request of the executive director at any time.
2. The permittee shall submit the records to the executive director only when specifically asked to do so. The SWMP required by this general permit must be retained at a location accessible to the TCEQ for review upon request.
3. The permittee shall make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP must be made available within ten working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act. However, all requests for records from federal facilities must be made in accordance with the Freedom of Information Act.
4. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

### **REPORTING**

- (a) Noncompliance Notification

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ.

Report of such information must be provided orally or by fax to the TCEQ Regional Office within 24 hours of becoming aware of the noncompliance. A written report must be provided by the permittee to the appropriate TCEQ Regional Office and to the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

- (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 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.

(b) Other Information

When the permittee becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, NOC, Option 1 Waiver, Option 2 Waiver, or any other report, the permittee shall promptly submit the facts or information to the executive director.

## **ANNUAL REPORT**

The small MS4 operator shall submit a concise annual report to the executive director by March 31st of each year for the previous calendar year.

The first annual report for this general permit shall address the period beginning on the day that authorization is obtained and ending on December 31 of that same year.

The small MS4 operator shall make a copy of the annual report readily available for review by TCEQ personnel upon request.

The annual report must include:

- (a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified activities/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 for receiving water bodies, a summary of any activities taken to address the discharge to impaired water bodies, including a summary of the small MS4s BMPs used to address the pollutant of concern, and if sampling was conducted include the sampling results;
- (d) A summary of the stormwater activities the small MS4 operator plans to undertake during the next reporting year;
- (e) Proposed changes to the SWMP, including changes to any activities/BMPs or any identified measurable goals that apply to the program elements;
- (f) A description and schedule for implementation of additional activities/BMP's that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans. For water bodies that are listed as impaired after discharge authorization pursuant to Part III., include a list of such water bodies 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 small 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 noticed to the permittee by the construction operator), and that were not authorized under the optional 8th MCM.

Small MS4s authorized under the 2019 TPDES Small MS4 General Permit must prepare an annual report whether or not the NOI has been approved by the TCEQ. If the permittee has

either not implemented the SWMP or not begun to implement the SWMP because it has not received approval of the NOI, then the annual report may include that information.

The annual report must be signed (in accordance with 30 TAC § 305.128 relating to Signatories to Reports) and submitted using the online electronic reporting system, NeT - MS4, available through the TCEQ website unless the permittee requests and obtains an Electronic Reporting Waiver.

If the permittee obtains an Electronic Reporting Waiver, the annual report must be submitted with the appropriate paper annual report forms provided by the executive director and submitted to the following locations:

- Original – TCEQ Austin Headquarters Office c/o the Stormwater Team (MC-148), and
- Copy – The TCEQ Regional Office that serves the area of the regulated small MS4.

If permittees share a common SWMP (i.e., coalitions), they shall contribute to a single system-wide annual report for all participating members and the designated coalition participant shall submit the annual report. At a minimum, each permittee shall sign and certify the annual report in the NeT-MS4 electronic system in accordance with 30 TAC §

305.128 (relating to Signatories to Reports). If the coalition participant designated to submit the annual report changes during the permit term, all participating members must submit an NOC to update the designated member.

## APPENDIX: DEFINITION AND TERMINOLOGY

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

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

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

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

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

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

**Construction Activity** – Soil disturbance, including clearing, grading, and excavating; and not including routine maintenance that is performed to maintain the original line and grade,

hydraulic capacity, or original purpose of the site (e.g. the routine grading of exiting dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

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

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

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

- (a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or
- (b) The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan (SWP3) for the site or other permit conditions (for example, they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

**Control Measures** – 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.

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

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

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

- (b) For individual lots in a residential construction site by either:
  - (1) the homebuilder completing final stabilization as specified in condition (a) above; or
  - (2) the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.
- (c) For construction activities on land used for agricultural purposes (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.

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

**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.

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

urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

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

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

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

**Impaired Water** – A surface water body that is identified on the latest approved CWA § 303(d) List as not meeting applicable state water quality standards. Impaired waters include waters with approved or established total maximum daily loads (TMDLs), and those where a TMDL has been proposed by TCEQ but has not yet been approved or established.

**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 (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the 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.

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

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

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

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

**Municipal Separate Storm Sewer System (MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (a) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA §208 that discharges to surface water in the state;
- (b) That is designated or used for collecting or conveying stormwater;
- (c) That is not a combined sewer; and
- (d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR§ 122.2.

**Non-traditional Small MS4** – A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons and universities.

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

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

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

**Outfall** – A point source at the point where a small MS4 discharges to waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts, traffic or right-of-way barriers with drainage slots that drain into open culverts, open swales or an adjacent property, or otherwise not actually discharging into waters of the U.S. are not considered an outfall.

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

**Point Source** – (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection

system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

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

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

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

**Small Municipal Separate Storm Sewer System (MS4)** – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- (a) Owned or operated by the 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 CWA § 208;
- (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 National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined 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.

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

**Stormwater Associated with Construction Activity** – Stormwater runoff from an area where there is either a large construction 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 non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

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

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

**Urbanized Area (UA)** – An area of high population density that may include multiple MS4s as defined and used by the U.S. Census Bureau in the 2000 and 2010 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, sand flats, 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 U.S. (such as disposal area in wetlands) nor resulted from the impoundment of waters of the U.S. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.