

Williamson County

Storm Water Management Plan

for coverage under

Phase II (Small) Municipal Separate Storm Sewer Systems (MS4s)
General Permit No. TXR040000

Williamson County

710 Main Street, Suite 101

Georgetown, Texas 78626

512-943-1550

Published on

March 4, 2014

for submission to TCEQ

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Williamson County

Storm Water Management Program Phase II MS4 General Permit No. TXR040112

Williamson County

710 Main Street, Suite 101

Georgetown, Texas 78626

512-943-1550

March 4, 2014

OVERVIEW OF STORMWATER RULES

Section (§) 26.121 of the Texas Water Code (TWC) makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission. TWC, § 26.027 authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state. TWC, § 26.040 provides the commission with authority to amend rules adopted under TWC § 26.040 prior to amendment of the statute by House Bill (HB) 1542 in 1997, and to authorize waste discharges by general permit. On September 14, 1998, the TCEQ received authority from the United States Environmental Protection Agency (EPA) to administer the Texas Pollutant Discharge Elimination System (TPDES). The TCEQ and the EPA have signed a Memorandum of Agreement (MOA) which authorizes the administration of the National Pollutant Discharge Elimination System (NPDES) program to the TCEQ as it applies to the State of Texas. CWA, §§ 301, 304, and 401 (33 United States Code (USC), §§ 1331, 1314, and 1341) include provisions which state that NPDES permits must include effluent limitations requiring authorized discharges to: (1) meet standards reflecting levels of technological capability; (2) comply with EPA-approved state water quality standards; and (3) comply with other state requirements adopted under authority retained by states under CWA, § 510, 33 USC, §1370.

The 1972 amendments to the Federal Water Pollution Control Act, later referred to as the Clean Water Act (CWA), prohibit the discharge of any pollutant to navigable waters of the U.S. from a point source unless the discharge is authorized by an NPDES permit. Efforts to improve water quality under the NPDES program traditionally have focused on reducing pollutants in industrial process wastewater and municipal sewage treatment plant discharges. Over time, it has become evident that more diffuse sources of water pollution, such as stormwater runoff from small MS4s, are also significant contributors to water quality problems. EPA developed permit requirements for small MS4s that are intended to improve water quality by reducing the quantity of pollutants that stormwater discharges into storm sewer systems during storm events.

In 1990, EPA promulgated rules establishing Phase I of the NPDES stormwater program. Phase I addresses discharges from medium and large MS4s, which are those MS4s with a population of 100,000 people or more, based on the 1990 Census. Phase I MS4s were required by the EPA to obtain individual NPDES permits. No additional Phase I MS4s will be created by later Census results. The federal Phase II stormwater regulations extended permitting requirements to certain small MS4s, and required that a more general stormwater management program (SWMP) be developed than was required for medium and large MS4s under Phase I. The Phase

II regulations were published on December 8, 1999 in the Federal Register, requiring affected small MS4s to obtain permit coverage by March 10, 2003. The Phase II regulations are identified in federal rules at 40 CFR §§ 122.30 through 122.37, which were adopted by the TCEQ at 30 TAC § 281.25(b).

On December 13, 2013 TCEQ re-issued the Phase II MS4 general permit (TXR040000). This TPDES general permit offers the necessary authorization for these small MS4 discharges.

REGULATORY MECHANISM RESTRICTIONS FOR COUNTIES

Texas is somewhat unique in the U.S. regarding the restrictions it places upon counties. Basically, the Texas Constitution and State statutes do not grant Texas counties the ability to create or enforce ordinances, such as the ones that Texas cities (Home Rule) are allowed to create in order to meet the TPDES permit requirements. To address this restriction, TCEQ rules contain text stating “to the extent allowable under state and local law”. This statement is cited several times in Part III, SWMP development and implementation, of the general permit. Williamson County will address the various elements in the General Permit SWMP requirements to the extent allowable under current state and local law.

The existing Williamson County Storm Water Management Plan has been effective in minimizing pollution and obtaining compliance. Through the Subdivision Regulations the county has authority to review and approve subdivision plats and construction plans. The construction plans are required to include erosion and sediment control plans and applicable TCEQ notes, plans and calculations as needed for various TCEQ compliance (WPAP, CZP, SCS, etc.). During construction subdivisions are monitored regularly by trained county inspectors to assure construction is in compliance with county standards. These inspections include monitoring compliance with applicable stormwater regulations. Post construction inspections are conducted periodically for the first two years and as needed based on citizen complaints. Illegal dumping and illicit discharges are normally reported by county road personnel or by citizens through the hot-line or web site. The Constable investigates and enforces applicable state laws related to illegal dumping and illicit discharges. County road crews provide clean-up as needed. County personnel (reviewers, inspectors, and road personnel) receive periodic training as needed to assure compliance with the Williamson County Storm Water Management Plan.

PERMIT APPLICABILITY AND COVERAGE

This general permit provides authorization for storm water and certain non-storm water discharges from small municipal separate storm sewer systems (MS4) to surface water in the state. The general permit contains requirements applicable to all small MS4s that are eligible for coverage under this general permit.

A. Small MS4s Eligible for Authorization by General Permit

1. Small MS4s Located in an Urbanized Area

A small MS4 that is fully or partially located within an urbanized area, as determined by the 2000 or 2010 Decennial Census by the U.S. Bureau of Census must obtain authorization for the discharge of storm water runoff and is eligible for coverage under this general permit.

2. Designated Small MS4s

A small MS4 that is outside an urbanized area that is Adesignated@ by TCEQ based on evaluation criteria as required by 40 CFR ' 122.32(a)(2) or 40 CFR ' 122.26(a)(1)(v) and adopted by reference in Title 30, Texas Administrative Code (TAC), ' 281.25, is eligible for coverage under this general permit. Following designation, operators of small MS4s must obtain authorization under this general permit or apply for coverage under an individual TPDES storm water permit within 180 days of notification of their designation.

The portion of the small MS4 that is required to meet the conditions of this general permit are those portions that are located within the urbanized area, as well as any portion of the small MS4 that is designated.

B. Allowable Non-Storm Water 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 de-chlorinated 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. de-chlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. street wash water excluding street sweeper waste water;;
15. discharges or flows from firefighting activities (firefighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, and similar activities);
16. other allowable non-storm water discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
17. non-storm water discharges that are specifically listed in the TPDES Multi Sector General Permit (MSGP) TXR050000 or the TPDES Construction General permit (CGP) TXR150000; and
18. other similar occasional incidental non-storm water discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

C. Limitations on Permit Coverage

1. Discharges Authorized by Another TPDES Permit

Discharges authorized by an individual or other general TPDES permit may be authorized under this TPDES general permit only if the following conditions are met:

- (a) the discharges meet the applicability and eligibility requirements for coverage under this general permit;
- (b) a previous application or permit for the discharges has not been denied, terminated, or revoked by the executive director as a result of enforcement or water quality related concerns. The executive director may provide a waiver to this provision based on new circumstances at the regulated small MS4; and
- (c) the executive director has not determined that continued coverage under an individual permit is required based on consideration of an approved total maximum daily loading (TMDL) model and implementation plan, anti-backsliding policy, history of substantive non-compliance or other 30 TAC Chapter 205 considerations and requirements, or other site-specific considerations.

2. Discharges of Storm Water Mixed with Non-Storm Water

Storm water discharges that combine with sources of non-storm water are not eligible for coverage by this general permit, unless either the non-storm water source is described in Part II.C of this general permit or the non-storm water source is authorized under a separate TPDES permit.

3. Compliance with Water Quality Standards

Discharges to surface water in the state that would cause, has the reasonable potential to cause, or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit except as described in Part II.D.4 below. The executive director may require an application for an individual permit or alternative general permit to authorize discharges to surface water in the state if the executive director determines that an activity will cause, has the reasonable potential to cause, or contribute to, a violation of water quality standards or is found to cause, have the reasonable potential to cause, or contribute to the impairment of a designated use of surface water in the state. The executive director may also require an application for an individual permit based on factors described in Part II.F.2.

4. Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements

Discharges of the pollutant(s) of concern to impaired water bodies for which there is a TCEQ and EPA approved total maximum daily load (TMDL) are not eligible for this general permit unless they are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA approved CWA §303(d) list, as not meeting Texas Surface Water Quality Standards. The permittee shall control the discharges of pollutant(s) of concern to impaired waters and waters with approved TMDLs as provided in sections (a) and (b) below, and shall assess the progress in controlling those pollutants.

(a) Discharges to Water Quality Impaired Water Bodies with an Approved TMDL

If the small MS4 discharges to an impaired water body with an approved TMDL, where stormwater has the potential to cause or contribute to the impairment, the permittee shall include in the SWMP controls targeting the pollutant(s) of concern along with any additional or modified controls required in the TMDL and this section.

The SWMP and required annual reports must include information on implementing any targeted controls required to reduce the pollutant(s) of concern as described below:

(1) Targeted Controls

The SWMP must include a detailed description of all targeted controls to be implemented, such as identifying areas of focused

effort or implementing additional Best Management Practices (BMPs) to reduce the pollutant(s) of concern in the impaired waters.

(2) Measurable Goals

For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing BMPs to be implemented during each year of the permit term.

(3) Identification of Benchmarks

The SWMP must identify a benchmark for the pollutant(s) of concern. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the pollutant(s) of concern in stormwater discharge(s) from the MS4 to the maximum extent practicable (MEP). The BMPs addressing the pollutant of concern must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework. These benchmarks are not numeric effluent limitations or permit conditions but intended to be guidelines for evaluating progress towards reducing pollutant discharges consistent with the benchmarks. The exceedance of a benchmark is not a permit violation and does not in itself indicate a violation of in-stream water quality standards.

The benchmark must be determined based on one of the following options:

- a. If the MS4 is subject to a TMDL that identifies a Waste Load Allocation(s) (WLA) for permitted MS4 stormwater sources, then the SWMP may identify it as the benchmark. Where an aggregate allocation is used as a benchmark, all affected MS4 operators are jointly responsible for progress in meeting the benchmark and shall (jointly or individually) develop a monitoring/assessment plan as required in Part II.D.4(a)(6).
- b. Alternatively, if multiple small MS4s are discharging into the same impaired water body with an approved TMDL, with an aggregate WLA for all permitted stormwater MS4s, then the MS4s may combine or share efforts to determine an alternative sub-benchmark for the pollutant(s) of concern (e.g., bacteria) for their respective MS4. The SWMP must clearly define this alternative approach and must describe how the sub-benchmark would cumulatively support the aggregate WLA. Where an aggregate benchmark has been broken into sub-benchmarks for individual MS4s, each permittee is only responsible for progress in meeting its sub-benchmark.

(4) Annual Report

The annual report must include an analysis of how the selected BMPs will be effective in contributing to achieving the benchmark.

(5) Impairment for Bacteria

If the pollutant of concern is bacteria, the permittee shall include focused BMPs addressing the below areas, as applicable, in the SWMP and implement as appropriate. If a TMDL Implementation Plan (I-Plan) is available, the permittee may refer to the I-Plan for appropriate BMPs. The SWMP and annual report must include the selected BMPs. Permittees may not exclude BMPs associated with the minimum control measures required under 40 CFR §122.34 from their list of proposed BMPs. Proposed BMPs will be reviewed by the executive director during the NOI and SWMP review and approval process.

The BMPs shall, as appropriate, address the following:

- a. Sanitary Sewer Systems
 - (i) Make improvements to sanitary sewers to reduce overflows;
 - (ii) Address lift station inadequacies;
 - (iii) Improve reporting of overflows; and
 - (iv) Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease.
- b. On-site Sewage Facilities (for entities with appropriate jurisdiction)
 - (i) Identify and address failing systems; and
 - (ii) Address inadequate maintenance of On-Site Sewage Facilities (OSSFs).
- c. Illicit Discharges and Dumping
Place additional effort to reduce waste sources of bacteria; for example, from septic systems, grease traps, and grit traps.
- d. Animal Sources
Expand existing management programs to identify and target animal sources such as zoos, pet waste, and horse stables.
- e. Residential Education
Increase focus to educate residents on:
 - (i) Bacteria discharging from a residential site either during runoff events or directly;
 - (ii) Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;
 - (iii) Decorative ponds; and
 - (iv) Pet waste.

(6) Monitoring or Assessment of Progress

The permittee shall monitor or assess progress in achieving benchmarks and determine the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and annual reports. In addition, the SWMP must include methods to be used.

- a. The permittee may use either of the following methods to evaluate progress towards the benchmark and improvements in water quality as follows:
 - (i) Evaluating Program Implementation Measures

The permittee may evaluate and report progress towards the benchmark by describing the activities and BMPs implemented, by identifying the appropriateness of the identified BMPs, and by evaluating the success of implementing the measurable goals.

The permittee may assess progress by using program implementation indicators such as: (1) number of sources identified or eliminated; (2) decrease in number of illegal dumping; (3) increase in illegal dumping reporting; (4) number of educational opportunities conducted; (5) reductions in sanitary sewer flows (SSOs); or, (6) increase in illegal discharge detection through dry screening, etc.; or

(ii) **Assessing Improvements in Water Quality**

The permittee may assess improvements in water quality by using available data for segment and assessment units of water bodies from other reliable sources, or by proposing and justifying a different approach such as collecting additional in-stream or outfall monitoring data, etc. Data may be acquired from TCEQ, local river authorities, partnerships, and/or other local efforts as appropriate.

- b. Progress towards achieving the benchmark shall be reported in the annual report. Annual reports shall report the benchmark and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.

(7) **Observing no Progress Towards the Benchmark**

If, by the end of the third year from the effective date of the permit, the permittee observes no progress toward the benchmark either from program implementation or water quality assessments as described in Part II.D.4(a)(6), the permittee shall identify alternative focused BMPs that address new or increased efforts towards the benchmark or, as appropriate, shall develop a new approach to identify the most significant sources of the pollutant(s) of concern and shall develop alternative focused BMPs for those (this may also include information that identifies issues beyond the MS4's control). These revised BMPs must be included in the SWMP and subsequent annual reports.

Where the permittee originally used a benchmark based on an aggregated WLA, the permittee may combine or share efforts with other MS4s discharging to the same watershed to determine an alternative sub-benchmark for the pollutant(s) of concern for their respective MS4s, as described in Part II.D.4(a)(3)(b) above. Permittees must document, in their SWMP for the next permit term, the proposed schedule for the development and subsequent adoption of alternative sub benchmark for the pollutant(s) of concern for their respective MS4s and associated assessment of progress in meeting those individual benchmarks.

(b) **Discharges Directly to Water Quality Impaired Water Bodies without an Approved TMDL**

The permittee shall also determine whether the permitted discharge is directly to one or more water quality impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. If the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform the following activities:

- (1) Discharging a Pollutant of Concern
 - a. Within the first year following the permit effective date, the permittee shall determine whether the small MS4 may be a source of the pollutant(s) of concern by referring to the CWA §303(d) list and then determining if discharges from the MS4 would be likely to contain the pollutant(s) of concern at levels of concern.
 - b. If the permittee determines that the small MS4 may discharge the pollutant(s) of concern to an impaired water body without an approved TMDL, the permittee shall, no later than two years following the permit effective date, ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittee will implement, to reduce, the discharge of pollutant(s) of concern that contribute to the impairment of the water body.
 - c. In addition, no later than three years following the permit effective date, the permittee shall submit an NOC to amend the SWMP to include any additional BMPs to address the pollutant(s) of concern.
- (2) Impairment of Bacteria
Where the impairment is for bacteria, the permittee shall identify potential significant sources and develop and implement focused BMPs for those sources. The permittee may implement the BMPs listed in Part II.D.4(a)(5) or proposed alternative BMPs as appropriate.
- (3) The annual report must include information on compliance with this section, including results of any sampling conducted by the permittee.

5. Discharges to the Edwards Aquifer Recharge Zone

Discharges of stormwater from regulated small MS4s, and other non-stormwater discharges, are not authorized by this general permit where those discharges are prohibited by 30 TAC Chapter 213 (Edwards Aquifer Rule). New discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

For existing discharges, the requirements of the agency-approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for

reductions of suspended solids in stormwater runoff are in addition to the effluent limitation requirements found in Part VI.D. of this general permit.

The permittee's agency-approved WPAPs that are required by the Edwards Aquifer Rule must be referenced in the SWMP. Additional agency-approved WPAPs received after the SWMP submittal must be recorded in the annual report for each respective permit year. For discharges originating from the small MS4 permitted area, and located on or within ten stream miles upstream of the Edwards Aquifer recharge zone, applicants must also submit a copy of the MS4 NOI to the appropriate TCEQ regional office with each WPAP application submitted to TCEQ on or after August 13, 2012.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney

Contact:

TCEQ, Water Program Manager
San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
(210) 490-3096

Counties: Williamson, Travis, and Hays

Contact:

TCEQ, Water Program Manager
Austin Regional Office
12100 Park 35 Circle, Bldg. A, Rm 179
Austin, Texas 78753
(512) 339-2929

6. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened species or its critical habitat are not authorized by this permit. Federal requirements related to endangered species apply to all TPDES permitted discharges, and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee shall contact TCEQ for additional information prior to submittal of the NOI and SWMP. If adverse impact is determined after submittal of the NOI and SWMP or after permit issuance, the permittee shall contact TCEQ immediately to determine corrective action and potential modification to the MS4's permit.

7. Other

Nothing in Part II of the general permit is intended to negate any person's ability to assert the force majeure (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7.

This permit does not transfer liability for the act of discharging without, or in violation of, a NPDES or a TPDES permit from the operator of the discharge to the permittee(s).

OVERVIEW OF WILLIAMSON COUNTY'S SWMP

To the extent allowable under State and local law (see “Regulatory Mechanism Restrictions For Counties” preceding section), Williamson County’s SWMP was developed and will be implemented according to requirements of Part III of the TPDES General Permit TXR040000, for discharges of storm water to surface water in the state. This SWMP was developed to prevent pollution from storm drainage systems to the maximum extent practicable, with control measures being phased in during the first 5 year permit term. The SWMP addresses six minimum control measures (MCMs) as required by the General Permit. MCMs will continue to be implemented in unincorporated urbanized areas of Williamson County. MCMs will be evaluated based upon the accomplishment of listed goals for BMPs selected for each MCM.

The TPDES Permit requirements apply only to the portions of unincorporated Williamson County that are identified as urbanized areas. There are approximately 20 non-contiguous urbanized areas in unincorporated Williamson County. These areas are identified based on data in the 2000 and 2010 US Census map. The map may be viewed at

http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua04384_austin_tx/

The Williamson County SWMP addresses permit required BMPs only in the unincorporated urbanized area portions of the county; however, certain elements of the SWMP may be voluntarily implemented by the permittee within the larger unincorporated area. One example is Public Education and Outreach, which will be available to county residents and visitors on a more regional basis, such as flyers in Commissioners offices and visitors’ centers and the County website.

1.0 Public Education, Outreach and Involvement

The Public Education, outreach and involvement minimum measure consists of Best Management Practices (BMPs) that focus on the development of educational materials designed to inform the public about the impacts that storm water discharges have on local water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The BMPs describe how individuals and households will be informed about the steps they can take to reduce storm water pollution; how individuals and groups will be informed on how to become involved in the storm water program; and the mechanisms that will be used to reach target audiences. The target audiences for the education program are specified in education-related BMPs described in the other minimum control measures. The target audiences were selected based on regulation requirements and based on the goal of educating the community about the impacts that storm water discharges have on local water bodies and the steps that the public can take to reduce pollutants in storm water runoff. The Public Education, Outreach and Involvement program and BMPs, in combination, are expected to reach all of the constituents within the MS4's permitted boundary. The target pollutant sources are construction site runoff, impacts from new and re-development, illicit discharges and other pollutant sources as identified to be of local concern, i.e. approved TMDL parameters. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the

various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

Best Management Practices:

1. **Flyers and Brochures:** Development of Flyers for the purpose of educating the public on storm water quality issues.

Implementation Tasks:

1. Develop a list of subjects for inclusion and discussion in the flyers based on the consideration of the following subjects:- Citizen reporting under the illicit discharge and construction programs- Water quality impacts of storm water runoff to local water bodies- Steps the public can take to reduce storm water pollution (implemented March, 2010)
2. Design and print flyers for each of the selected subjects. (implemented March, 2010-on-going program)
3. Post flyers at selected locations in accordance with the identified schedule. (implemented March, 2010-on-going program)
4. Maintain records of the number of flyers posted under this program. (implemented March, 2010-on-going program)
5. Annually report on the number of flyers posted under this program. (implemented March, 2010-on-going program)
6. Design, print, and distribute a flyer related to bacterial pollution from pet waste. (implement in 2015)

Measurable Goals:

Year 2 (2009): Develop a list of subjects for inclusion and discussion in storm water flyers and brochures. (completed 2009)

Year 3(2010): Design and print flyers and brochures covering the selected subjects. (completed 2010)

Year 4(2011): Distribute 250 flyers to the public. (completed 2011)

Year 2015 – Distribute 100 Pet Waste Flyers

Responsible Party:

Department of Infrastructure – Engineering Division

- 2. Storm Water Website:** Design, publish and maintain a website that informs the public about the impacts of storm water pollution and related Pollution prevention activities the public can take.

Implementation Tasks:

1. Develop a list of subjects for inclusion and discussion in the website based on consideration of the following subjects:- Citizen reporting under the illicit discharge and construction programs- Water quality impacts of storm water runoff to local water bodies- Steps the public can take to reduce storm water pollution- Public involvement programs (implemented March, 2010-on-going program)
2. Design and publish the website to the internet for public access. (implemented March, 2010 on- going program)
3. Develop a website maintenance schedule that is consistent with the implementation schedule of other BMP's included in this SWMP. (implemented March, 2010 on-going program)
4. Post new information to the website on an as-needed basis. (implemented March, 2010 on-going program)
5. Maintain records of website traffic using a hit counter or other acceptable method. (implemented March, 2010-on-going program)
6. Annually report on website traffic under this program. (implemented March, 2010-on-going program)

Measurable Goals:

Year 1 (2008): Develop a list of subjects for inclusion and discussion in the storm water website. (completed 2008)

Year 2 (2009): Design and publish the storm water website to the internet for public access. (completed 2009)

Year 2015: Update website.

Responsible Party:

Department of Infrastructure – Engineering Division

- 3. Education of the public and construction site personnel:** Development and distribution of public education materials that focus on the impacts of construction site runoff and steps the public can take to report the occurrence of potential construction related storm water quality problems. Include information regarding the reporting of construction sites with potential storm water quality issues.

Implementation Tasks:

1. Develop and distribute public education materials that focus on the following construction related items:- TCEQ storm water regulations- Methods for the public to report potentially out of compliance construction activities - Impacts of uncontrolled construction site runoff to local water bodies and the MS4 (implemented March, 2010-on-going program)
2. Maintain records of the number and type of public education materials distributed. (implemented March, 2010-on-going program)
3. Annually report on the number and type of public education materials distributed. (implemented March, 2010-on-going program)
4. Add the TCEQ General permit information to the website for the following:
 - a. Industrial Storm Water Multi-Sector General Permit TXR050000
 - b. TPDES Construction General Permit TXR150000
 - c. TPDES Small MS4 General Permit TXR040000
 - d. Storm Water Permits for the Edwards Aquifer (Implement in 2015)

Measurable Goals:

Year 3: Design and publish construction/new development public education material based on local research. (completed 2010)

Year 3: Identify construction related subjects for inclusion in construction/new development public education materials that focus on local construction regulations, public reporting opportunities, and construction and new development storm water discharge impacts to local water bodies. (completed 2010)

Year 2015: Add task 4 information to website

Responsible Party:

Department of Infrastructure – Engineering Division

4. SWMP Committee: Formation of a committee on SWMP program development and implementation

Implementation Tasks:

1. Develop a list of BMP's which are included in the SWMP that would benefit by including local committee review of the following types of items:- Public education materials- Local illicit discharge elimination regulations and investigation procedures.- Construction storm water regulations, guidance materials, permitting procedures, and inspection procedures – Post-construction guidance and permitting information- Feedback on good housekeeping practices (completed 2010)
2. Invite members of the public, design, construction and development communities, MS4 personnel, and other persons affected by the various BMP's. (completed 2009)
3. Develop meeting schedules that correlate to required implementation dates for certain tasks. (completed 2009)
4. Conduct SWMP Committee meetings in accordance with the developed schedule. (implemented March, 2010-on-going program)
5. Record attendance and take minutes at each meeting. (implemented March, 2010-on-going program)
6. Maintain records of agenda, attendance, and minutes for each meeting. (implemented March, 2010-on-going program)AM)
7. Annually report on the number of meetings and subjects presented. (implemented March, 2010-on-going program)

Measurable Goals:

Year 2: Invite members of the public, design, construction and development communities, MS4 personnel, and other persons affected by the various BMPs to participate on the SWMP Committee. (completed 2009)

Year 3: Conduct SWMP Committee meetings in accordance with the identified schedule. (implemented March, 2010-on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

5. **Community Hotlines:** Develop and publicize a community hotline for the public to call and report storm water quality problems.

Implementation Tasks:

1. Identify phone number(s) and contact person(s) that should receive reports from the public on storm water quality issues (completed 2009)
2. Develop a list of storm water quality problems that could be reported by the public through the community hotlines. (completed 2009)
3. Develop and distribute public education materials that detail the types of storm water quality issues that should be reported through the community hotlines. (completed 2010)
4. Maintain records of public reports and comments received under this program. (completed 2009)
5. Annually report on the number and type of public reports received through the community hotlines. (completed 2009)

Measurable Goals:

Year 2: Develop a list of storm water quality problems that could be reported by the public through the community hotline program. (completed 2009)

Year 2: Identify phone number(s) and contact person(s) that should receive reports on storm water quality issues through the community hotline program. (completed 2009)

Year 3: Distribute community hotline public education material in accordance with identified schedule. (completed 2010)

Responsible Party:

Department of Infrastructure – Engineering Division

2.0 Illicit Discharge Detection and Elimination

The Illicit Discharge Detection and Elimination minimum measure consists of Best Management Practices (BMPs) that focus on the detection and elimination of illicit discharges into the MS4. A storm sewer system map showing the location of all outfalls and the names and location of all receiving waters will be developed from existing mapping information, e.g. MS4 CAD or GIS map bases. The BMPs describe map update procedures; the legal authority mechanism (to the extent allowable under State, Tribal or local law) which will be used to effectively prohibit illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; the dry weather screening program and procedures for tracing and locating the source of an illicit discharge; procedures for locating priority areas; and procedures for removing the source of the illicit discharge. BMPs focusing on education and training of public employees, businesses, and the general public with regard to the hazards associated with illegal discharges and improper disposal of waste are described in the Public Education minimum measure. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

Best Management Practices:

1. Maintain the MS4 map and Outfall Inventory: Maintain an updated map of the MS4 indicating the location of storm water discharge outfalls.

Implementation Tasks:

1. Develop a map of the MS4 system including the location of the following: MS4 receiving streams, Storm Water Outfalls, Permit Coverage Area (implemented March, 2009 on-going program)
2. Identify new outfalls and drainage structures during the review of development and construction plans. (implemented March, 2009 on-going program)
3. Develop a method for updating the MS4 map with new drainage structures and outfalls (implemented March, 2009 on-going program)
4. Develop procedures for including new outfalls found in the field while conducting the MS4 outfall screening programs. (implemented March, 2009 on-going program)
5. Train MS4 screening personnel and plan review personnel on proper procedures for updating the MS4 map and outfall inventory. (implemented March, 2009 on-going program)
6. Annually report on the number of new outfall locations identified under this program. (implemented March, 2009 on-going program)

7. Update MS4 map annually (implement in 2015).

Measurable Goals:

Year 2(2009): Identify new outfalls and drainage structures during the review of development and construction plans. (implemented March, 2009 on-going program)

Year 2(2009): Conduct training programs for MS4 screening personnel and plan review personnel on proper procedures for updating the MS4 map and outfall inventory. (implemented March, 2009 on-going program)

Year 2(2009): Develop a training program for personnel that will be responsible for MS4 map maintenance. (implemented March, 2009 on-going program)

Year 2(2009): Develop procedures for including new outfalls found in the field while conducting the MS4 outfall screening programs. (completed 2009)

Year 2(2009): Develop a method for updating the MS4 map with new drainage structures and outfalls. (completed 2009)

Year 2(2009): Develop a map of the MS4 including MS4 receiving streams, storm water outfalls, permit coverage area, and any other information that may be required by the approved permit. (implemented March, 2009 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

2. MS4 Outfall Screening: Conduct systematic inspection of outfalls in the MS4 in order to identify the presence of illicit discharges.

Implementation Tasks:

1. Develop outfall screening forms and procedures for record keeping and data entry into MS4 outfall screening databases. (completed 2009)
2. Train personnel in field techniques necessary for the identification of illicit discharges. (implemented March, 2009 on-going program)
3. Develop a system to track locations of illicit discharges upon identification (MS4 Database). (completed 2009)
4. Develop a schedule that allows for the screening of the entire MS4 system within the permit term. (completed 2009)

5. Conduct outfall screening efforts according to the developed schedule. (implemented March, 2009 on-going program) Repeat screening of all outfalls starting in 2015.
6. Develop internal tracking and record keeping procedures for outfall screening results. (completed 2009)
7. Investigate outfall drainage systems that are identified as having non-storm water discharges from the MS4 and take actions to eliminate illicit discharges. (implemented March, 2009 on-going program)
8. Maintain records of outfall screening and investigations for each outfall and any elimination activities. (implemented March, 2009 on-going program)
9. Annually report on the number of outfalls screened, number of non-storm water discharges, number of illicit discharges, and elimination activities conducted under this program. (implemented March,2009 on-going program)

Measurable Goals:

Year 2 (2009): Complete screening of 25% of the storm water outfalls that discharge to the MS4 in accordance with the identified schedule. (completed 2009)

Year 2 (2009): Develop a systematic outfall screening schedule to ensure the screening of the entire MS4 system within the 5 year permit term (completed 2009)

Year 3 (2010): Complete screening of 50% of the storm water outfalls that discharge to the MS4 in accordance with the identified schedule. (completed 2010)

Year 3 (2010): Investigate outfall drainage systems that are identified as having non-storm water discharges from the MS4 and eliminate illicit discharges according to TCEQ storm water regulations. (completed 2010)

Year 4 (2011): Complete screening of 75% of the storm water outfalls that discharge to the MS4 in accordance with the identified schedule. (completed 2010)

Year 5 (2012): Complete screening of 100% of the storm water outfalls that discharge to the MS4 in accordance with the identified schedule. (completed 2010) Rescreened all outfalls in years 4, 5, and 6.

Year 2015: Locate new outlets and rescreen all outlets.

Year 2016: Locate new outlets and rescreen all outlets

Year 2017: Locate new outlets and rescreen all outlets

Year 2018: Locate new outlets and rescreen all outlets

Responsible Party:

Department of Infrastructure – Engineering Division

3. Illicit Discharge Employee Training: Educate permittee personnel on the identification of illicit discharges and procedures for reporting observations to outfall inspection personnel.

Implementation Tasks:

1. Develop a list of personnel to be educated on the identification and reporting of illicit discharges. (completed 2009)
2. Develop training materials, internal reporting forms, and reporting procedures including who will receive reports on illicit discharges. (completed 2009)
3. Develop a schedule for conducting training of identified personnel. (completed 2009)
4. Conduct training of personnel according to the schedule. (completed 2009)
5. Annually report on the personnel training program in terms of the number of training sessions conducted and employee attendance. (implemented March, 2009 on-going program)
6. Review the employee training program once per permit term in order to evaluate employee competence on the identification and reporting of illicit discharges (completed 2009).

Measurable Goals:

Year 2: Conduct training for identified personnel in accordance with the identified schedule. (completed 2009)

Year 2: Develop a schedule for conducting training of identified personnel. (completed 2009)

Year 2: Develop training materials, internal reporting forms, and reporting procedures including who will receive reports on illicit discharges. (completed 2009)

Year 2: Develop a list of personnel to be educated on the identification and reporting of illicit discharges. (completed 2009)

Year 3: Conduct training for any new personnel that may be involved with the identification and reporting of illicit discharges. (completed 2010)

Year 4: Conduct training for any new personnel that may be involved with the identification and reporting of illicit discharges. (completed 2011)

Year 2015: Training of selected road personnel and MS4 inspectors on the identification and reporting of illicit discharges.

Responsible Party:

Department of Infrastructure – Engineering Division

4. Illicit Discharge Hotline: Develop an illicit discharge hotline for the public to report potential illicit discharge locations to the MS4.

Implementation Tasks:

1. Develop a list of locally occurring non-storm water discharges that may be observed by the public. (completed 2009)
2. Develop or identify a hotline phone number for the reporting of potential illicit discharges by the public. (completed 2009)
3. Conduct appropriate public education activities designed to inform the public of the hotline and types of potential discharges to report (completed 2010)
4. Develop internal procedures for receiving hotline phone calls. (completed 2009)
5. Develop internal reporting forms to track reported discharges, investigation of public reports, and corrective actions associated with the elimination of illicit discharges reported by the public. (completed 2009)
6. Conduct investigations of reports made by the public if the reports are valid and are not currently under investigation. (implemented March, 2010 on-going program)
7. Annually report on the number of public reports received, investigated, and the number of illicit discharges eliminated as a result of public reports. (implemented March, 2009 on-going program)

Measurable Goals:

Year 2: Develop internal reporting forms to track reported discharges, investigation of public reports, and corrective actions associated with the elimination of illicit discharges reported by the public.

Year 2: Develop internal procedures for receiving hotline phone calls. (completed 2009)

Year 2: Develop an illicit discharge hotline public education material distribution schedule. (completed 2009)

Year 2: Develop a list of locally occurring non-storm water discharges that may be observed by the public. (completed 2009)

Year 2: Develop or identify a hotline phone number for the reporting of potential illicit discharges by the public. (completed 2009)

Year 3: Conduct investigations of reports made by the public if the reports are valid and are not currently under investigation. (implemented March, 2010 on-going program)

Year 3: Distribute illicit discharge public education material in accordance with the identified schedule. (implemented March, 2010 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

3.0 Construction Site Runoff

The Construction Site Runoff minimum measure consists of Best Management Practices (BMP's) that focus on the reduction of pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs describe the legal authority mechanism (to the extent allowable under State, Tribal or local law) which will be used to require erosion and sediment controls; enforcement procedures and actions to ensure compliance; requirements for construction site operators to implement appropriate erosion and sediment control BMPs; requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site; procedures for site plan review which incorporate the consideration of potential water quality impacts; procedures for receipt and consideration of information submitted by the public; and procedures for site inspection and enforcement of control measures. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by

formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

Best Management Practices:

- 1. Construction Inspection Procedures:** Develop inspection procedures and educate the local construction community on TCEQ storm water regulations related to construction activities

Implementation Tasks:

1. Develop a list of items to incorporate in the inspection of local construction sites based on the TCEQ storm water regulations and including the following categories: Use of temporary erosion controls, Control of other construction related wastes, Operational and general prohibitions, Site closure and stabilization requirements, On-site documentation and records (completed 2008)

Measurable Goals:

Year 1: Develop draft inspection forms and procedures necessary to inspect local construction sites in order to ensure compliance with TCEQ construction storm water regulations. (completed 2008)

Year 1: Develop a list of items to incorporate in the inspection of local construction sites based on TCEQ construction storm water regulations. (completed 2008)

Year 2015: Review inspection forms and procedures and revise as necessary to inspect local construction sites in order to ensure compliance with TCEQ construction storm water regulations. (implement in 2015)

Responsible Party:

Department of Infrastructure – Engineering Division

- 2. Construction Plans Review:** Implement a construction plan review process that focuses on compliance with TCEQ construction storm water regulations.

Implementation Tasks:

1. Develop a process to obtain construction plans for subdivisions for review to determine compliance with TCEQ construction storm water regulations. (completed 2008)

2. Develop internal tracking and plan review procedures to cover the following issues: Conformance to TCEQ storm water regulations, Appropriate use of temporary erosion controls, Inclusion of any required local, state, and/or federal storm water permit documents (completed 2008)
3. Educate the local construction community (contractors, developers, engineers, architects) on the subdivision construction plans review process. (completed 2010)
4. Implement the subdivision construction plans review procedures and sign plans when approved. (completed 2010)
5. Maintain records of plans reviewed and approved for construction under this program. (completed 2010)
6. Annually report on the number of plans reviewed, approved and rejected under the plans review program. (completed 2009)

Measurable Goals:

Year 1: Develop a process to obtain subdivision construction plans for review to determine compliance with TCEQ construction storm water regulations. (completed 2008)

Year 2: Educate the local construction community on the subdivision construction plans review process. (implemented 2010)

Year 3: Implement the subdivision construction plans review procedures for local construction sites. (implemented 2009)

Responsible Party:

Department of Infrastructure – Engineering Division

3. Construction Site Inspection: Conduct inspections of subdivision construction sites that discharge storm water to the MS4 to determine compliance with TCEQ construction storm water regulations.

Implementation Tasks:

1. Develop internal procedures for tracking new and on-going subdivision construction activities. (completed 2008)

2. Train permittee inspection personnel on TCEQ construction storm water regulations and inspection procedures. (implemented 2009 on-going program)
3. Inspect subdivision construction sites using appropriate inspection procedures and forms to ensure compliance with storm water regulations. (implemented 2009 on-going program)
4. Conduct drive-thru inspections of subdivisions one year after letter of completion is issued for roads and drainage improvements to evaluate individual homebuilder compliance with TCEQ construction storm water regulations. (implemented 2010 on-going program)
5. Maintain records of construction site inspections, letters of non-compliance, and corrective actions performed by local construction site owners and operators. (implemented 2010 on-going program)
6. Annually report on the total number of construction sites permitted, the number of construction sites inspected, and the number of letters of non-compliance issued. (implemented 2009 on-going program)

Measurable Goals:

Year 2: Inspect qualifying construction sites using appropriate inspection procedures and forms to ensure compliance with TCEQ storm water regulations. (implemented 2009 on-going program)

Year 2: Train permittee inspection personnel on TCEQ construction storm water regulations and inspection procedures. (implemented 2009 on-going program)

Year 4: Conduct voluntary on-site meeting with owners and operators of local construction sites that are not in compliance with TCEQ construction storm water regulations. Issue letters of non-compliance to owners and operators of local construction sites that do not voluntarily comply with TCEQ construction storm water regulations. (implemented 2010 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

4. Permittee Owned Construction Sites: Comply with local, state, and federal construction storm water regulations that apply to permittee owned and operated construction sites.

Implementation Tasks:

1. Review permittee construction project planning and design criteria to determine changes needed to comply with local, state, and/or federal construction storm water regulations and Edwards Aquifer Rules. (completed 2009)
2. Prepare and distribute construction design and permitting guidelines to the local construction community (contractors, developers, engineers, architects) and involved permittee personnel. (completed 2009)
3. Develop documents (Notice Of Intent (**NOI**), Storm Water Pollution Prevention Plans (SWP3's), and inspection forms required for obtaining state and/or federal construction storm water permits applicable to permittee owned and operated construction sites. Insure compliance with Edwards Aquifer Rules including approved WPAP's when required. (completed 2009)
4. Submit required documents in order to obtain permit coverage for permittee owned and operated projects and comply with applicable state and/or federal construction storm water permit provisions and Edwards Aquifer Rules. (implemented 2009 on-going program)
5. Maintain compliance records for permittee owned and operated construction sites requiring state and/or federal construction storm water permits and Edwards Aquifer WPAP's (implemented 2009 on-going program)
6. Annually report on the number of permittee owned and operated construction projects permitted under state and/or federal construction storm water regulations and/or the Edwards Aquifer Rules. (implemented 2009 on-going program)

Measurable Goals:

Year 1: Submit required documents in order to obtain permit coverage for permittee owned and operated projects to maintain compliance with applicable state and/or federal construction storm water permit provisions and Edwards Aquifer Rules when applicable. (implemented 2009 on-going program)

Year 1: Develop documents required for obtaining state and/or federal construction storm water permits applicable to permittee owned and operated construction sites. (completed 2009)

Year 2: Distribute construction design and permitting guidelines to the local construction community and involved permittee personnel. (implemented 2010 on-

going program)

Year 2: Review permittee owned construction project, planning, and design criteria to determine changes needed to comply with local, state, and/or federal construction storm water regulations and Edwards Aquifer Rules. (completed 2010)

Responsible Party:

Department of Infrastructure – Engineering Division

5. Construction Related Public Reporting: Provide the public with a mechanism to report and receive feedback on construction related storm water problems.

Implementation Tasks:

1. Develop educational materials instructing the public on procedures for reporting to the MS4 construction sites with potential storm water quality problems (implemented 2010 on-going program)
2. Ensure that the materials developed address the following items: Contact methods for reporting public observations, Information required for a complete public report on a potential construction related storm water quality problem. (completed 2009)
3. Develop an internal tracking system to keep track of information reported by the public. (completed 2009)
4. Review public reports to determine if a site investigation is required to ensure compliance with TCEQ construction storm water regulations. (implemented 2011 on-going program)
5. Conduct on-site investigations of those sites reported by the public which warrant investigation according to the best judgment of the permittee personnel. (implemented 2011 on-going program)
6. Annually report on the number of public reports received and considered under this program. (implemented 2009 on-going program)

Measurable Goals:

Year 1: Develop construction related public reporting educational material instructing the public in procedures for reporting to the permittee construction sites with potential storm water quality problems or construction storm water regulation violations. (completed 2009)

Year 2: Distribute construction related public reporting educational material in accordance with the identified schedule. (implemented 2009 on-going program)

Year 2: Develop an internal tracking system to keep track of information reported by the public. (implemented 2009 on-going program)

Year 3: Conduct on-site investigations of those sites reported by the public which warrant investigation according to the best judgment of the permittee personnel. (implemented 2009 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

4.0 Post-Construction Site Runoff

The Post-Construction Storm Water Management minimum measure consists of Best Management Practices (BMP's) that focus on the prevention or minimization of water quality impacts 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 into the small MS4. The BMPs describe structural and/or non-structural practices; the legal authority mechanism (to the extent allowable under State, Tribal or local law) which will be used to address post-construction runoff from new development and redevelopment projects; and procedures to ensure long term operation and maintenance of BMPs. BMPs focusing on education programs for developers and the general public with regard to project designs that minimize water quality impacts are described in the Public Education minimum measure. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

Best Management Practices:

1. New Development and Re-development Plan Review: Systematically review subdivision development and re-development plans to ensure compliance with TCEQ post-construction runoff regulations

Implementation Tasks:

1. Develop a process to obtain subdivision development construction plans for review to determine compliance with TCEQ post-construction runoff regulations. (completed 2009)
2. Develop internal tracking and plan review procedures. (completed 2009)
3. Educate the local development community on the local development plan review process. (implemented 2009 on-going program)
4. Implement the subdivision development plan review process. (implemented 2009 on-going program)

5. Notify developers when revisions are made in the plan review process. (implemented 2009 on-going program)
6. Maintain records of subdivision development plans reviewed and actions taken under this program. (implemented 2008 on-going program)
7. Annually report on the number of plans reviewed, approved, and rejected under this program. (implemented 2008 on-going program)

Measurable Goals:

Year 2: Develop internal tracking and plan review procedures to ensure compliance with TCEQ post construction runoff regulations. (implemented 2008 on-going program)

Year 2: Develop a process to obtain development construction plans for review to determine compliance with TCEQ post-construction runoff regulations. (completed 2009)

Year 2: Educate the local development community on the local development plans review process. (implemented 2008 on-going program)

Year 2: Implement the subdivision development plans review process. (implemented 2008 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

- 2. Development Project Inspection Procedures:** Develop inspection forms and procedures for new development and re-development project inspections based on TCEQ post-construction runoff regulations.

Implementation Tasks:

1. Develop a list of items to incorporate in the inspection of subdivision development and re-development project sites based on TCEQ post-construction runoff control regulations including consideration of the following: Construction of controls according to approved development plans and specifications, Adherence to any legal commitment to operate or maintain permanent storm water quality structures, Conformance to open space and landscaping requirements, Conformance to any low impact development standards. (completed 2009)

2. Develop draft inspection forms and procedures necessary to inspect local new and re-development projects in order to ensure compliance with TCEQ post-construction runoff regulations and approved plans. (completed 2009)

Measurable Goals:

Year 1: Develop inspection forms and procedures necessary to inspect new and re-development projects in order to ensure compliance with TCEQ post-construction runoff regulations and approved plans. (completed 2009)

Responsible Party:

Department of Infrastructure – Engineering Division

3. New Development and Re-development Project Inspection: Inspect local new development and re-development projects to ensure conformance to approved plans and TCEQ post construction runoff regulations.

Implementation Tasks:

1. Develop internal tracking procedures for tracking subdivision development projects that are under construction and that have been completed. (completed 2009)
2. Train inspection personnel on TCEQ post-construction runoff regulations and final inspection procedures. (completed 2010)
3. Inspect qualifying development project sites using adopted inspection forms and procedures to ensure conformance with approved plans for post-construction runoff controls. (implemented 2010 on-going program)
4. Issue letter of non-compliance to owners or operators of local development projects that are not in compliance with TCEQ post-construction runoff regulations and who do not voluntarily correct the non-compliance. (implemented 2010 on-going program)
5. Maintain records of development project site inspections, letters of non-compliance, and corrective actions performed by local development project owners. (implemented 2010 on-going program)
6. Annually report on the number of development project sites inspected, and the number of letters of non-compliance issued. (implemented 2010 on-going program)

Measurable Goals:

Year 2: Develop a list of subdivision development projects that qualify for inspection under TCEQ post-construction runoff regulations. (completed 2009)

Year 3: Issue letters of non-compliance to owners or operators of local development projects that are found to be out of compliance and do not voluntarily comply with TCEQ post-construction runoff regulations. (implemented 2010 on-going program)

Year 3: Inspect qualifying development project sites using adopted inspection forms and procedures to ensure conformance with TCEQ post-construction runoff regulations. (implemented 2010 on-going program)

Year 3: Train inspection personnel on TCEQ post-construction runoff regulations and final inspection procedures. (implemented 2010 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

4. Permittee Owned New Development and Re-development Projects: Comply with TCEQ post-construction runoff regulations and plan review requirements on permittee owned and operated new development and re-development projects.

Implementation Tasks:

1. Review permittee construction project planning and design criteria to determine changes needed to comply with local, state, and/or federal construction storm water regulations. Modify project planning and design criteria as necessary to comply with local, state, and/or federal construction storm water regulations. (completed 2009)
2. Conduct the development plan review process for all permittee owned new development and re-development projects. This excludes normal road maintenance. (implemented 2010 on-going program)
3. Maintain records of permittee owned development projects approved, inspected, and records of structural control maintenance if applicable. (implemented 2010 on-going program)
4. Report annually on the number of permittee owned projects approved, constructed, and inspected. (implemented 2010 on-going program)

Measurable Goals:

Year 3: Conduct the development plan review process for all permittee owned new development and re-development projects excluding normal road maintenance. (implemented 2010 on-going program)

Year 3: Distribute new project planning and design criteria changed to comply with local, state, and/or federal construction storm water regulations to the local design and engineering community when modified. (implemented 2010 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

5. Participation in Local Watershed Planning and Modeling: Participate in local watershed planning meetings in order to stay informed of local surface water quality issues, Total Maximum Daily Loads (TMDL) initiatives, and pollutants of concern for impaired or sensitive water bodies.

Implementation Tasks:

1. Identify local watershed planning and monitoring organizations. (completed 2009)
2. Participate in watershed planning and surface water monitoring data presentation meetings. (implemented 2010 on-going program)
3. Develop a list of sensitive and impaired water bodies as identified by the local watershed planning and monitoring agencies or state and federal monitoring agencies. (completed 2009)
4. Maintain records of any TMDL requirements and pollutants of concern for any local MS4 receiving streams that are considered sensitive or impaired. (implemented 2010 on-going program)
5. Review TMDL requirements or load allocations to determine if additional Best Management Practices (BMP's) or changes in existing practices are required to meet TMDL load allocations or to protect sensitive or impaired water bodies located within the MS4 jurisdiction. (implemented 2010 on-going program)
6. Develop and make presentations of MS4 BMP's and/or future plans in order to assist in local watershed protection or to meet TMDL load allocations. (implemented 2011 on-going program)
7. Annually report on the number of watershed planning meetings attended and any associated changes in the MS4's BMP's. (implemented 2009 on-going program)

Measurable Goals:

Year 1: Identify local watershed planning and monitoring organizations. (completed 2009)

Year 2: Maintain records of any TMDL requirements and pollutants of concern for any local MS4 receiving streams that are considered sensitive or impaired. (implemented 2010 on-going program)

Year 2: Develop a list of sensitive and impaired water bodies as identified by the local watershed planning and monitoring agencies or state and federal monitoring agencies. (implemented 2010 on-going program)

Year 2: Participate in watershed planning and surface water monitoring data presentation meetings. (implemented 2010 on-going program)

Year 3: Develop and make presentations of MS4 BMPs and/or future plans in order to assist in local watershed protection or to meet TMDL load allocations. (implemented 2011 on-going program)

Year 3: Review TMDL requirements or load allocations to determine if additional Best Management Practices (BMPs) or changes in existing practices are required to meet TMDL load allocations or to protect sensitive or impaired water bodies located within the MS4 jurisdiction. (implemented 2011 on-going program)

Responsible Party:

Department of Infrastructure – Engineering Division

5.0 Pollution Prevention and Good Housekeeping for Municipal Operations

The Pollution Prevention / Good Housekeeping minimum measure consists of Best Management Practices (BMP's) that focus on training and on the prevention or reduction of pollutant runoff from municipal operations. The BMPs describe the use of available training materials available from the EPA, TCEQ, or other organizations; specific municipal operations that are impacted by the proposed operation and maintenance programs (BMPs); a list of municipally owned industrial facilities which require other storm water discharge permits; maintenance activities, schedules and long term inspection procedures for controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas; procedures for the proper disposal of waste removed from the MS4 and municipal operations, including dredge spoil, accumulated sediments, floatables and other debris; and procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure.

Best Management Practices:

1. Pesticide and Herbicide Application: Train pesticide and herbicide application employees on the proper use of pesticide and herbicide products.

Implementation Tasks:

1. Develop an inventory of areas designated for herbicide and pesticide application including the following: Area of application, Type of pesticide or herbicide applied, Purpose of application (implemented 2009 on-going program)
2. Develop a preliminary pesticide and herbicide application schedule. (implemented 2009 on-going program)
3. Comply with local, state, and federal regulations associated with pesticide and herbicide application, e.g. licensing regulations. (implemented 2008 on-going program)
4. Track the volume and type of pesticide or herbicide applied. (implemented 2008 on-going program)
5. Assess each location for opportunities to implement alternative practices and to retrofit structures in order for non-pesticide methods of maintenance to become effective. (implemented 2009 on-going program)
6. Develop a prioritized list of areas where retrofits and alternative pest control practices would reduce overall pesticide and herbicide application volumes. (implemented 2010 on-going program)
7. Annually report on the total volume of pesticide and herbicide applied and the progress of any projects that results in a reduction of pesticide and herbicide application volumes. (implemented 2009 on-going program)

Measurable Goals:

Year 1: Comply with local, state, and federal regulations associated with pesticide and herbicide application. (implemented 2008 on-going program)

Year 2: Assess each location for opportunities to implement alternative practices and to retrofit structures in order for non-pesticide methods of maintenance to become effective. (implemented 2009 on-going program)

Year 3: Develop a prioritized list of areas where retrofits and alternative pest control practices would reduce overall pesticide and herbicide application volumes. (implemented 2010 on-going program)

Responsible Party:

Department of Infrastructure – Road & Bridge Division

2. Maintenance of Roadways: Assess roadway maintenance activities and modify procedures to reduce storm water quality impacts.

Implementation Tasks:

1. Assess current roadway maintenance activities to determine if modification to current practices would benefit storm water quality. (completed 2009)
2. Identify alternative practices that would reduce the discharge of road-materials during construction or maintenance activities. (implemented 2010 on-going program)
3. Revise roadway maintenance policy according to identified alternative practices. (implemented 2011 on-going program)
4. Maintain records of road maintenance activities and the use of alternative maintenance practices. (implemented 2011 on-going program)
5. Annually report on road maintenance activities and the use of alternative maintenance practices.. (implemented 2009 on-going program)

Measurable Goals:

Year 2: Assess current roadway maintenance activities to determine if modification of current practices would benefit storm water quality. (completed 2009)

Year 3: Evaluate roadway maintenance program and revise roadway maintenance policy according to identified alternative practices. (implemented 2011 on-going program)

Year 3: Identify alternative practices that would reduce the discharge of road-materials during construction or maintenance activities. (implemented 2010 on-going program)

Year 2015: Evaluate roadway maintenance program and revise roadway maintenance policy according to identified alternative practices

Responsible Party:

Department of Infrastructure – Road & Bridge Division

3. Culvert/Inlet Cleaning: Reduce sediment and floatable material discharges by routinely cleaning MS4 culvert and storm water inlet structures.

Implementation Tasks:

1. Identify areas where culvert inlets, surface inlets, and/or storm sewer manholes should be periodically cleaned to reduce discharge of floatable materials, sediment, and other materials. (completed 2010)
2. Develop a preliminary schedule for cleaning inlet structures and culvert inlets. (completed 2010)
 1. Implement the inlet cleaning program according to the developed schedule. (implemented 2010 on-going program)
 2. Maintain records of the locations where materials were removed from culvert inlet and surface inlet structures. (implemented 2010 on-going program)
 3. Evaluate the culvert and inlet cleaning schedule on an annual basis. (implemented 2011 on-going program)
 4. Annually report on the number of culvert inlets, surface inlets, and other MS4 structures cleaned. (implemented 2010 on-going program)

Measurable Goals:

Year 3: Implement the culvert cleaning program according to the developed schedule. (implemented 2010 on-going program)

Year 3: Identify areas where catch basins, surface inlets, and/or storm sewer manholes should be periodically cleaned to reduce discharge of floatable materials, sediment, and other materials. (implemented 2010 on-going program)

Responsible Party:

Department of Infrastructure – Road & Bridge Division

4. Landscaping and Lawn Care: Reduce the discharge of landscaping and lawn care waste from permittee owned facilities through better mowing and landscaping maintenance practices.

Implementation Tasks:

1. Develop an inventory of landscaping and lawn care areas that are owned by the permittee. (completed 2009)

2. Evaluate current landscaping and lawn care activities in order to identify opportunities to reduce the discharge of the following: Fertilizers, Leaf litter and tree trimmings, Litter and floatable materials. (completed 2010)
3. Ensure that proper litter collection is scheduled prior to any mowing activities. (implemented 2010 on-going program)
4. Use all herbicides, pesticides, and fertilizers in accordance with manufacturers' instructions for application rates and quantities. (implemented 2010 on-going program)
5. Evaluate methods for containing and/or composting trimmings and grass clippings. (completed 2010)
6. Report annually on the activities conducted under this program. (implemented 2009 on-going program)

Measurable Goals:

Year 2: Develop an inventory of all permittee owned landscaping and lawn care areas. (completed 2009)

Year 3: Use all herbicides, pesticides, and fertilizers in accordance with manufacturers' instructions for application rates and quantities. (implemented 2010 on-going program)

Responsible Party:

Building Maintenance

5. Vehicle Maintenance: Maintain permittee owned vehicles according to manufacturer's specifications and identify and eliminate vehicle fluid leaks.

Implementation Tasks:

1. Develop and maintain an inventory of permittee owned vehicles. (implemented 2008 on-going program)
2. Conduct routine maintenance on all vehicles according to manufacturer's specifications. (implemented 2008 on-going program)
3. During routine maintenance of permittee owned vehicles, inspect vehicles for the presence of fluid leaks. (implemented 2008 on-going program)
4. Schedule repairs for vehicles determined to have fluid leaks. (implemented 2008 on-going program)

5. Maintain vehicle maintenance records and document fluid leak repair activities. (implemented 2008 on-going program)
6. Require permittee vehicle operators to conduct daily inspections of vehicles to check for fluid leaks. (implemented 2008 on-going program)
7. Review vehicle inspection and maintenance records on an annual basis to evaluate conformance to vehicle manufacturer service specifications. (implemented 2008 on-going program)
8. Annually report on the number of leaking vehicles repaired under this program. (implemented 2008 on-going program)

Measurable Goals:

Year 1: Require permittee vehicle operators to conduct daily inspections of vehicles to check for fluid leaks. (implemented 2008 on-going program)

Year 1: Develop and maintain an inventory of permittee owned vehicles. (implemented 2008 on-going program)

Year 2: Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications. (implemented 2008 on-going program)

Year 3: Schedule repairs for vehicles determined to have fluid leaks. (implemented 2008 on-going program)

Year 3: Conduct routine inspection on all vehicles according to manufacturers' specifications, also inspecting vehicle for the presence of fluid leaks. (implemented 2008 on-going program)

Responsible Party:

Fleet Services

6. Spill Prevention Plans: Comply with federal spill prevention control and counter measures plan regulations, and review spill response procedures to ensure storm water quality protection measures are considered during spill response.

Implementation Tasks:

1. Evaluate each permittee owned facility and determine if Spill Prevention Control and Countermeasures Plans (SPCC) are required. (implemented 2009 on-going program)
2. Develop and/or maintain SPCC plans for permittee owned facilities that require plans. (implemented 2009 on-going program)
3. Comply with SPCC plan requirements at qualifying permittee owned facilities, including consideration of the following: Conduct employee training. Maintain spill prevention equipment, Maintain SPCC records, Update and re-certify the SPCC plan according to SPCC regulations. (implemented 2009 on-going program)
4. Annually report on the number of facilities with SPCC plans and the current status of each SPCC plan. (implemented 2009 on-going program)

Measurable Goals:

Year 2: Evaluate identified facilities and determine if SPCC Plans are required. (completed 2009)

Year 2: Develop an inventory of permittee owned facilities that may be required to have Spill Prevention Control and Countermeasures Plans (SPCC Plans). (completed 2009)

Year 3: Comply with SPCC plan requirements at qualifying permittee owned facilities. (completed 2009)

Year 3: Develop and/or maintain SPCC Plans for permittee owned facilities that require plans. (completed 2009)

Year 2015-2019: Develop and/or maintain SPCC Plans for permittee owned facilities that require plans.

Responsible Party:

Department of Infrastructure – Road & Bridge Division

7. Illegal Dumping: Identify and investigate illegal dumping locations owned by the permittee in order to determine the source of materials and initiate legal actions against dumpers.

Implementation Tasks:

1. Develop a list of illegal dumping locations based on reports from citizens and road crews. (completed 2009)
2. Develop a schedule for removing illegally dumped materials from permittee owned properties. (completed 2009)
3. Conduct investigations of illegally dumped material in order to attempt to identify the sources of the materials. (implemented 2009 on-going program)
4. Post signs at illegal dumping locations that indicate the prohibitions associated with illegal dumping. (implemented 2009 on-going program)
5. Use existing local legal authority or other means to assess enforcement actions against identified illegal dumpers. (implemented 2009 on-going program)
6. Annually report on the number of illegal dumping locations identified, volume of materials removed, and the number of associated enforcement actions. (implemented 2009 on-going program)

Measurable Goals:

Year 2: Conduct investigations of illegally dumped material in order to attempt to identify the sources of the materials. (implemented 2009 on-going program)

Year 2: Develop a list of illegal dumping locations identified. (implemented 2009 on-going program)

Year 3: Use existing local legal authority or other means to assess enforcement actions against identified illegal dumpers. (implemented 2009 on-going program)

Year 3: Post signs at illegal dumping locations that indicate the prohibitions associated with illegal dumping. (implemented 2009 on-going program)

Responsible Parties:

Department of Infrastructure – Road & Bridge Division

Constable Precinct # 3

8. Disposal of Waste removed from Storm Sewer Facilities: Evaluate disposal methods for waste removed from storm sewer facilities and develop a program to assure that the wastes are properly disposed of.

Implementation Tasks:

1. Evaluate methods used to dispose of waste from storm sewer facilities. (completed 2009)
2. Develop guidelines for proper disposal of waste removed from storm sewer facilities (completed 2009)
3. Review disposal methods to assure compliance with guidelines (implemented 2010 on-going program)

Measurable Goals:

Year 1: Annually report the amount of waste removed from storm sewers and culverts. (implemented 2009 on-going program)

Responsible Party:

Department of Infrastructure – Road & Bridge Division

9. Maintenance of Permittee owned Structural Controls: Locate and identify permittee owned structural controls within the urbanized areas and develop a program for their maintenance.

Implementation Tasks:

1. Locate and identify any permittee owned structural controls in urbanized areas during mapping of outfalls (implemented 2009 on-going program)
2. Develop a plan for maintenance of structural controls in urbanized areas if any are found. (implemented 2009 on-going program)
3. Implement maintenance plan for structural controls (implemented 2010 on-going program)

Measurable Goals:

Year 2: Annually report on the total number of permittee owned structural controls and the number that received maintenance. (implemented 2010 on-going program)

Responsible Party:

Department of Infrastructure – Road & Bridge Division

6.0 Industrial Stormwater Sources

Permittees operating a level 4 small MS4 shall include the requirements described below in Part III. B.6.(1) – this requirement is only applicable to level 4 MS4s.

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

Williamson County is a level 2 small MS4 and as such is not required to implement this minimum control measure. Much of this information is included in 5.0 Pollution Prevention and Good Housekeeping for Municipal Operations above.