

*STORM WATER MANAGEMENT
PROGRAM*

CITY OF ROUND ROCK

PHASE II MUNICIPAL SEPARATE STORM SEWER
SYSTEM (MS4)



TXR040253

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City of Round Rock

Introduction

Overview

The City of Round Rock (City) storm water team in collaboration with staff from multiple City departments prepared this Storm Water Management Program (SWMP) which documents a comprehensive plan to manage the quality of the discharges from the Municipal Separate Storm Sewer System (MS4) and ultimately protect and improve water quality in our creeks and waterways.

The City is required under the Texas Pollutant Discharge Elimination System (TPDES) to obtain permit coverage from the Texas Commission on Environmental Quality (TCEQ) for discharges from its MS4. The SWMP describes the five Minimum Control Measures (MCMs) and Best Management Practices (BMPs) that the City will implement over a five year period. The City will enhance existing activities that are designed to protect the environment and water quality and supplement those activities with new BMPs. The BMPs were selected based on the requirements of the TCEQ general permit, a general assessment of their effectiveness, applicability to the City, and implementation cost.

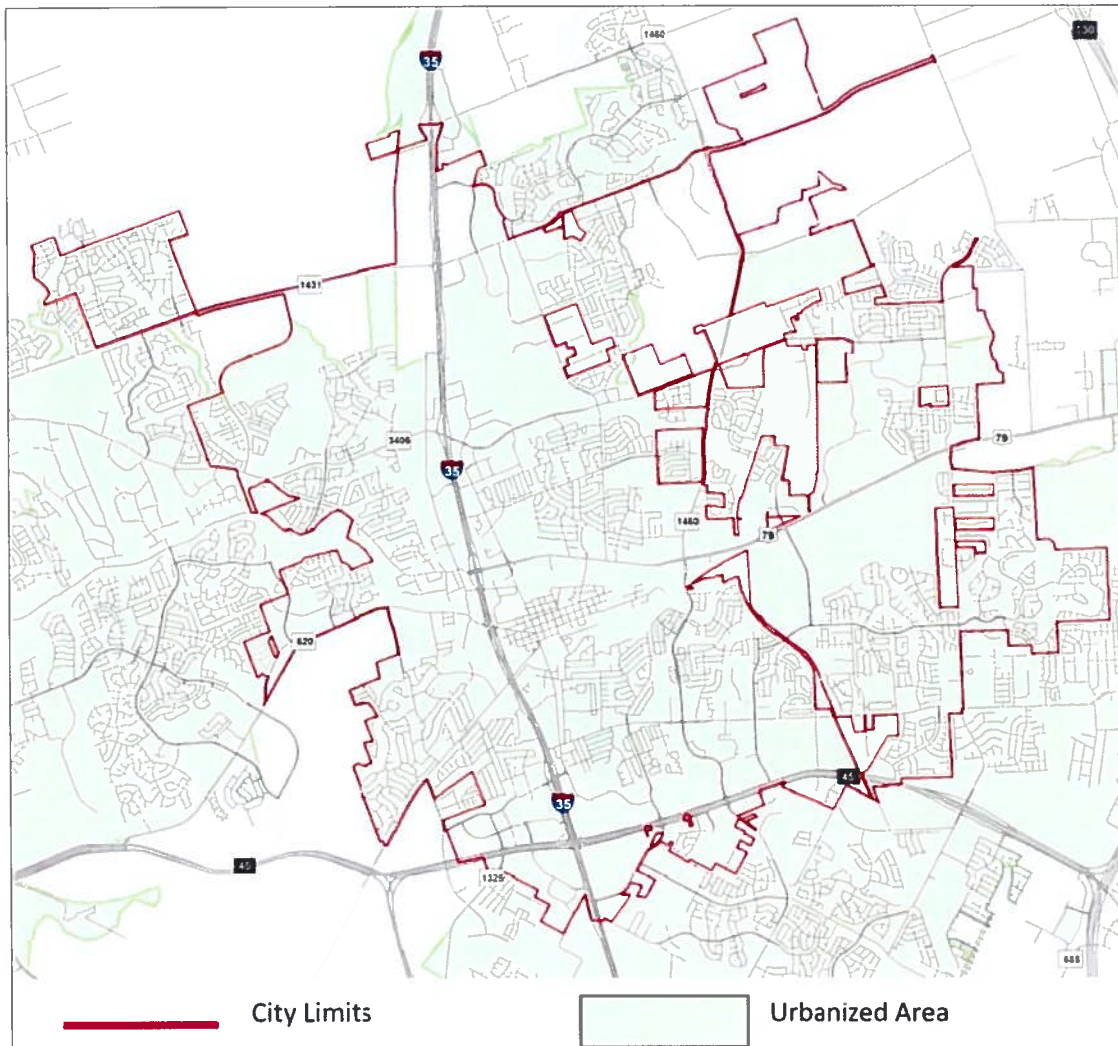
The City's SWMP follows many of the recommendations in the U.S. Environmental Protection Agency's (EPA) MS4 Permit Improvement Guide¹ especially where those recommendations align with community goals. In particular, the Guide emphasizes a focused education program to help the public "gain a greater understanding of stormwater management...which is likely to gain more support for the SWMP and increased compliance" with the associated regulations. The City's SWMP emphasizes education and proactive BMPs to facilitate voluntary compliance and minimize the amount of enforcement required to meet goals.

The Guide further recommends that the "public education and outreach program be tailored and targeted to specific water quality issues of concern in the relevant community". The SWMP focuses on the 'Big 3' – bacteria, floatables, and fertilizers. These three areas of emphasis were chosen based on our unique community profile while considering our most sensitive areas, our current water quality opportunities and associated challenges.

¹ MS4 Permit Improvement Guide-U.S. Environmental Protection Agency EPA 833-R-10-001 April 2010

The SWMP and associated Notice of Intent demonstrate the City's eligibility for small MS4 permit coverage per the TPDES General Permit TXR040000. With a census population of fewer than 100,000, the City is categorized as a Tier 3 MS4 operator. The General Permit provides coverage for MS4 discharges until the general permit expires on December 12, 2018.

City Limits and 2010 Census Urbanized Area

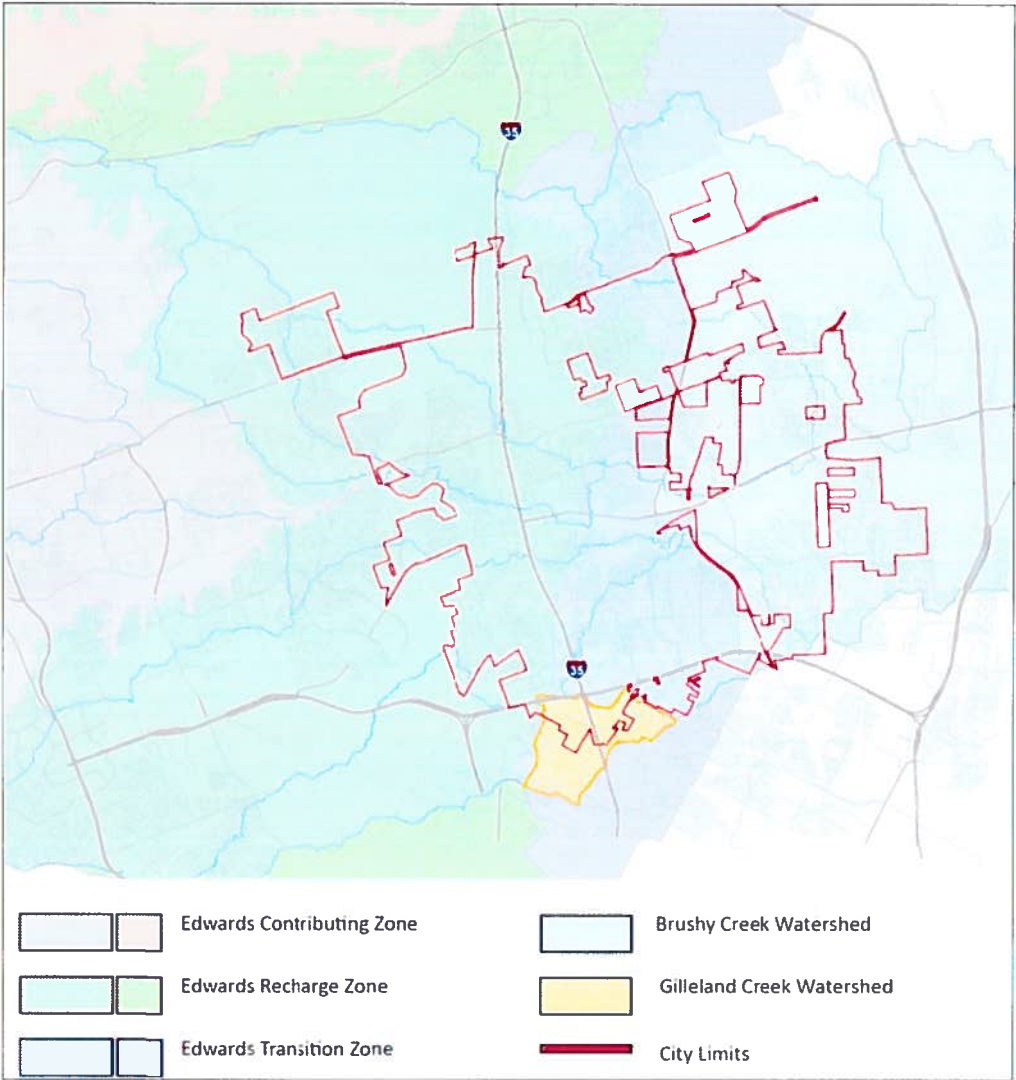


Round Rock Watersheds

The City is located approximately 20 miles north of Austin primarily within Williamson County with just a small area in Travis County to the south along Interstate Highway 35. The overwhelming majority of the City (98%) drains to classified segments of Brushy Creek in the

Brazos River Basin. The remainder of the City (2%) drains to Gilleland Creek which is in the Colorado River Basin.

City of Round Rock Watersheds and Edwards Aquifer



Often referred to as the Central Texas hill country, the City straddles both sides of the Balcones Escarpment and the abutting Balcones Fault Zone. Areas east of the escarpment are generally characterized as having black, fertile soils of the Blackland Prairie; while areas west of the escarpment generally consist of hilly, karst-like terrain with little topsoil. The western portion of the City is over the Edwards Aquifer Recharge Zone (EARZ) which is composed of karstic groundwater reservoirs.

The EARZ is an environmentally sensitive area that is regulated by the TCEQ according to the Edwards Aquifer Rule (EAR). The Rule and its requirements are in addition to the requirements of the MS4 General Permit. In compliance with the Rule, the City files Water Pollution Abatement Plans (WPAPs) for TCEQ approval and implements those WPAPs as directed. The City installs and maintains permanent structural and non-structural BMPs to meet the Rule requirements for reduction of suspended solids. Additionally, the City selected targeted BMPs within the SWMP to ensure protection of both surface and subsurface waters.

TMDL and Impaired Waterways

Introduction

Section 303(d) of the federal Clean Water Act requires States to identify waters that do not meet, or are not expected to meet, applicable water quality standards. For Texas, the standards for water quality are defined in the *Texas Water Quality Standards* (Chapter 307 of the Texas Administrative Code). TCEQ publishes a list of impaired waterways every two years; the list identifies which stream segments are impaired and identifies the pollutant of concern (POC). TCEQ coordinates Total Maximum Daily Loads (TMDLs) for impaired surface waters. Approval of the TMDL is followed by the development of an Implementation Plan (I-Plan) that includes control measures to reduce the POC.

The 2013 Phase II MS4 General Permit requires targeted BMPs when an MS4 drains to an impaired waterway. For bacteria impairment, the permit gives specific direction regarding those BMPs. Specifically, page 19 of the permit requires that *“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.”* Like most Texas water bodies, the classified segments that the City discharges to are impaired for bacteria.

For convenience, a summary of those targeted BMPs are listed below along with a reference to the full BMP description in the SWMP.

Bacteria Impairment - Perspective

In 2000, Texas adopted new bacteria criteria in the Surface Water Quality Standards for primary contact recreation use based on criteria developed by the US EPA in 1986² using epidemiological studies at public swimming beaches in lakes and on the coast. These criteria were designed to be protective of the swimming use, as part of a national effort to make our waters “fishable and swimmable”.

According to the 2010 Water Quality Assessment, approximately 300 water bodies were identified by the TCEQ as failing to support primary contact recreation because of high bacteria levels; however, much of the data indicating impairment was collected during high-flows when swimming is not safe and many of the water bodies listed either do not or cannot support primary contact recreation. Consequently, there is little confidence that the list indicates actual water quality impairments in need of corrective action.³

² U.S. EPA –Ambient Water Quality Criteria for Bacteria-1986.-44015-84-002

³ Water Environment Association of Texas- Bacteria Factsheet- June 2010

The Draft 2010 Texas Surface Water Quality Standards included a proposal to raise the *E.coli*. geometric mean criteria from 126 colonies/100ml to 206 colonies/100ml for primary contact recreation. Although EPA was willing to approve 206 colonies, ultimately the TCEQ choose to retain the geometric mean criteria at 126. If the criteria are revised in the future, there is a strong likelihood that Brushy Creek segments 1244_03 and 1244_04 would no longer be considered impaired and would be removed from the 303d list.

Brushy Creek - Bacteria Impairment

The overwhelming majority of the City (98%) drains to Segments 1244_03 and 1244_04 in Brushy Creek which are impaired for bacteria. TCEQ first identified the impairment for Brushy Creek in the 2006 Texas Water Quality Inventory and 303(d) List. Data the TCEQ analyzed from the assessment period from 1999-2004 showed slightly higher concentrations of *E.coli*. and fecal coliform bacteria. Since 2004, *E.coli*. bacteria levels in Brushy Creek have remained relatively stable (under 206 colonies/100ml) despite the City's rapid urbanization.

Selected Bacteria Impairment BMPs

As required by the TPDES General Permit, the City has selected the following BMPs to specifically target bacteria loading reductions.

Sanitary Sewer Systems

Overflows from sanitary collection systems are infrequent, but when they occur, they can be a significant source of *E. coli*. bacteria. Aging infrastructure in need of repair can also contribute to bacteria loadings. The City routinely inspects and repairs the sanitary sewer system in our most sensitive areas which are over the Edwards Aquifer. Other areas of the cities are inspected and repaired as necessary.

MCM #2 Illicit Discharge Detection and Elimination EARZ Leak Detection (Pg.30)

On-Site Sewage Facilities

On-Site Sewage Facilities (OSSFs) can be potential source of *E. coli*. bacteria. There are very few OSSF's within the City because population growth primarily began in the mid 1970's and new users are required to connect to the City's wastewater collection system. The WCCHD (Williamson County and Cities Health District) is the designated agent of the TCEQ overseeing OSSFs in our area. The City's role in monitoring these facilities is limited to enforcement of the Illicit Discharge ordinance. In the event the City receives a complaint or observes a problem with an OSSF, staff will coordinate with the WCCHD.

Illicit Discharges and Dumping

The public can be our greatest ally in preventing illicit discharges, including sanitary sewer overflows, which can contribute to increased *E.coli.* bacteria levels in the City's waterways. Educating the public on the proper disposal of fats, oils, and grease can reduce the potential for overflows. Providing a financial incentive to businesses can assist in bringing about amendments to long held company policies.

MCM #1 Public Education Outreach and Involvement

Cease the Grease (Pg.18)

MCM #2 Illicit Discharge Detection and Elimination

Grease Surcharge Program (Pg.31)

Animal Sources

Animals can be potential source of *E.coli.* bacteria. From March through November of each year, the City is home to a population of Mexican free-tailed bats who reside under the TXDOT operated IH35 bridge at McNeil Road. Other species native to the Round Rock area are feral hogs, ducks, possums, raccoons, turtles, etc.

There are no zoos within the City and there is minimal agricultural activity. Household pets are present in numbers consistent with a primarily urban landscape. During the previous permit term, pet waste stations were installed throughout City Parks.

MCM #1 Public Education Outreach and Involvement

Pet Waste Education Campaign (Pg.17)

Gilleland Creek - TMDL and I-Plan

Less than 2% of the City (the southernmost portion located in Travis County) drains to Gilleland Creek Segment 1428C. The TCEQ first identified the Gilleland Creek impairment for primary contact recreation use in the *2004 Texas Water Quality Inventory and 303(d) List*. Data the TCEQ analyzed from the assessment period of March 1, 1998 through February 28, 2003 showed high concentrations of *E.coli.* and fecal coliform bacteria.

Since then, a TMDL and I-Plan were approved. Only point sources were allotted an individual waste load allocation (WLA) in the I-Plan; thus, the City is part of an aggregate WLA. The small drainage area in Round Rock that drains to the Gilleland watershed is above the headwaters. The City will utilize monitoring data from the LCRA for the SWMP annual reports. The City was and will continue to be a participant in the I-Plan.

Selected TMDL BMP's

As required by the TPDES General Permit, the City has selected the following BMPs to specifically target bacteria loading reductions.

Sanitary Sewer Systems

Overflows from sanitary collection systems are infrequent, but when they occur, they can be a significant source of *E.coli.* bacteria. Aging infrastructure in need of repair can also contribute to bacteria loadings. Although not a component of the I-Plan, the City will proactively inspect and make any necessary repairs to the sanitary sewer in the Gilleland watershed this permit term.

MCM #2 Illicit Discharge Detection and Elimination

Gilleland Sewer Leak Detection (Pg.29)

On-Site Sewage Facilities

On-Site Sewage Facilities (OSSFs) can be potential source of *E.coli.* bacteria. There are very few OSSF's within the City because population growth primarily began in the mid 1970's and new users are required to connect to the City's wastewater collection system. The Transportation and Natural Resources department of Travis County and the City of Austin are the designated agents of the TCEQ overseeing OSSFs in the Gilleland Creek Watershed. As part of the I-Plan, Travis County has held several workshops to educate owners on the proper maintenance and inspection of OSSFs. The City's role in monitoring these facilities is limited to enforcement of the Illicit Discharge ordinance. In the event the City receives a complaint or observes a problem with an OSSF, staff will coordinate with Travis County.

Illicit Discharges and Dumping

The public can be our greatest ally in preventing illicit discharges, including sanitary sewer overflows, which can contribute to increased bacteria levels in the City's waterways. Educating the public on the proper disposal of fats, oils, and grease (FOG) can reduce the potential for overflows. Providing a financial incentive to businesses can assist in bringing about amendments to long held company policies.

MCM #1 Public Education Outreach and Involvement

Cease the Grease (Pg.18)

MCM #2 Illicit Discharge Detection and Elimination

Grease Surcharge Program (Pg.31)

Animal Sources

Animals can be potential source of *E.coli.* bacteria. From March through November of each year, the City is home to a population of Mexican free-tailed bats who reside under the TXDOT

operated IH35 bridge at McNeil Road. Other species native to the Round Rock area are feral hogs, ducks, possums, raccoons, turtles, etc.

There are no zoos within the City and there is minimal agricultural activity. Household pets are present in numbers consistent with a primarily urban landscape. During the previous permit term, pet waste stations were installed throughout City Parks. One of the components of the I-Plan targets pet waste education and reduction.

MCM #1 Public Education Outreach and Involvement
Pet Waste Education Campaign (Pg.17)

Annual Reporting and Adaptive Management

As outlined in 40 CFR 122.34(g)(3), the SWMP includes measurable goals which assist in evaluating progress toward achieving goals and the appropriateness of selected control measures. The City has selected the fiscal year (October 1 to September 30) option for annual reporting since staff are already assessing programs and preparing reports for other purposes. Each annual report will be due on December 29th.

Comprehensive reporting provides an opportunity to evaluate the program and BMP effectiveness which informs the adaptive management process. Adaptive management is an iterative process that helps reduce uncertainty in natural resource management by incorporating new information into flexible management plans. The basic foundation of the adaptive management concept is the '*learn by doing*' experimentation process that allows managers to learn more about the complex environmental systems they are charged to protect. Walters (1986)⁴ described an approach to the adaptive management process as beginning "with the central tenet that management involves a continual learning process that cannot conveniently be separated into functions like 'research' and 'ongoing regulatory activities', and probably never converges to a state of blissful equilibrium involving full knowledge and optimum productivity".

City staff will continue to adjust, refocus, modify and replace control measures as necessary to ensure the program is effectively and efficiently moving toward the overall goal of protecting and improving water quality.

⁴ Walters, C. 1986. Adaptive management of renewable resources. Macmillan, New York.

MCM #1

Public Education Outreach and Involvement

Introduction

The Phase II Regulations require MS4 permittees to develop programs to educate the public about the impact of stormwater discharges on local waterways and the steps that citizens, businesses, and other organizations can take to reduce the contamination of stormwater. As the public gains a greater understanding of the benefits of stormwater management, an MS4 is likely to gain more support for the SWMP and increased compliance with the applicable regulatory requirements as the public understands how their actions influences water quality. Education and awareness programs help change human behavior with respect to reducing the amount of pollution generated from stormwater sources within the MS4 system. In addition to education, encouraging public participation in local stormwater programs can lead to program improvement as well as enabling people to identify and report a pollution-causing activity, such as spotting an illicit discharge.⁵

Summary

During the previous permit term, the City began educating the public about stormwater quality issues using a variety of methods such as brochures, website information, blogs, printed materials, and PSA's. During the new permit term, the City will continue outreach and involvement efforts by developing a comprehensive outreach campaign targeting our Big 3 - Bacteria, Floatables, and Fertilizer. Public employee and construction community education are addressed under Good housekeeping and Construction and Post Construction BMPs, respectively.

⁵City staff relied on the MS4 Permit Improvement Guide for many of the introductory concepts, U.S. Environmental Protection Agency- EPA 833-R-10-001-April 2010

Public Notice for SWMP Development

The City will comply with public notice requirements when implementing the SWMP. These requirements will be met through local newspaper and the City's website.

After the applicant receives written instructions from the TCEQ's Office of Chief Clerk, the applicant must publish notice of the executive director's preliminary decision on the NOI and SWMP.

Pg.26

Departments: Stormwater, Communications

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	No goals scheduled for year one. <u>Reporting Data:</u> NA
Permit Year 2 Oct 2014-Sept 2015	Publish public notice as required upon notification from TCEQ and maintain records of publication. <u>Reporting Data:</u> Date and method of notice.

Attitude Survey

Surveys of how the public perceives stormwater management can foster better planning and management of programs. The results of these attitude surveys can enlighten both managers and the public on pollution sources, stormwater effects and control options. Public attitude surveys can also reveal issues important to stakeholders and provide data to program managers about appropriate steps to take and misconceptions to dispel.

All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

Pg.31

Departments: Stormwater, Communications

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Conduct attitude survey to assess the public’s present knowledge. Utilize survey results in outreach campaign development. <u>Reporting Data:</u> Survey completed.
Permit Year 2 Oct 2014-Sept 2015	Update survey based on new outreach campaign and priority issues. <u>Reporting Data:</u> Survey updated
Permit Year 3 Oct 2015-Sept 2016	Conduct survey with updates. <u>Reporting Data:</u> Survey complete
Permit Year 4 Oct 2016-Sept 2017	Analyze past survey results and revise outreach materials as necessary. <u>Reporting Data:</u> Outreach materials updated
Permit Year 5 Oct 2017-Dec 2018	Conduct end of permit survey and analyze responses. <u>Reporting Data:</u> Survey complete

Public Outreach and Education Campaign Development

Enhanced community awareness of the City’s high priority issues will preserve water quality and can help reduce the amount of the Big 3 (bacteria, floatables and fertilizer) found in the waterways.

All permittees shall develop, implement, and maintain a comprehensive stormwater education and outreach program to educate public employees, businesses, and the general public of hazards associated with the illegal discharges and improper disposal of waste and about the impact that stormwater discharges can have on local waterways, as well as the steps that the public can take to reduce pollutants in stormwater.

Pg.31

Departments: Stormwater, Communications

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Conduct attitude survey to assess the public’s present knowledge. Begin campaign development. <u>Reporting Data:</u> Survey completed.
Permit Year 2 Oct 2014-Sept 2015	Develop a public education and outreach campaign focused on the reduction of the Big 3 - bacteria, floatables and fertilizer. Also, develop implementation procedures and schedule. <u>Reporting Data:</u> Campaign outlined, procedures and schedule developed
Permit Year 3 Oct 2015-Sept 2016	Begin implementing education campaign. <u>Reporting Data:</u> Methods utilized and distribution statistics
Permit Year 4 Oct 2016-Sept 2017	Full implementation of campaign. <u>Reporting Data:</u> Methods utilized and distribution statistics
Permit Year 5 Oct 2017-Dec 2018	Continue educational campaign. <u>Reporting Data:</u> Methods utilized and distribution statistics

Pet Waste Education Campaign- Bacteria Impairment

Many of the City parks include waterways, which drain to Brushy Creek. A public education campaign on pet waste will be developed and implemented to reduce any bacteria loading from pet waste.

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.

Pg.19

Departments: PARD, Stormwater, Communications

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Begin researching pet waste education both locally and nationally. Determine which methods to incorporate into the campaign. <u>Reporting Data:</u> Methods selected for campaign.
Permit Year 2 Oct 2014-Sept 2015	Develop schedule and implementation plan for campaign. <u>Reporting Data:</u> Plan complete
Permit Year 3 Oct 2015-Sept 2016	Begin implementing education campaign. <u>Reporting Data:</u> Methods utilized and distribution statistics
Permit Year 4 Oct 2016-Sept 2017	Full implementation of campaign. <u>Reporting Data:</u> Methods utilized and distribution statistics
Permit Year 5 Oct 2017-Dec 2018	Continue educational campaign. <u>Reporting Data:</u> Methods utilized and distribution statistics

Cease the Grease- Bacteria Impairment

A Public Education Outreach and Involvement campaign will be developed and implemented to reduce any bacteria loading from sanitary overflows. Educating customers on the proper disposal of fats, oils and grease can lead to behavioral changes and eliminate one of the greatest causes of residential sewer backups.

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.

Pg. 19

Departments: Wastewater Line Maintenance, Environmental Services, Communications, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Evaluate current city and surrounding community efforts and determine best course of action considering outreach levels, impacts, and costs. <u>Reporting Data:</u> Evaluation complete
Permit Year 2 Oct 2014-Sept 2015	Outline education and outreach plan. Begin implementation. <u>Reporting Data:</u> Plan complete, number and distribution statistics
Permit Year 3 Oct 2015-Sept 2016	Continue implementation. <u>Reporting Data:</u> Distribution statistics
Permit Year 4 Oct 2016-Sept 2017	Continue implementation. <u>Reporting Data:</u> Distribution statistics
Permit Year 5 Oct 2017-Dec 2018	Continue implementation. <u>Reporting Data:</u> Distribution statistics

Event Participation

The City will continue to sponsor or co-sponsor special events such as Earth Day, Arbor Day, Neighborhood Clean Ups, HHW collection day, and Park Clean Ups. These programs provide opportunities for various resident and business groups to volunteer and learn how to enhance and protect environmental resources. Stormwater will continue to provide supplemental materials as appropriate to make the connection between these events and water quality.

If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities;

Pg.32

Departments: PARD, Neighborhood Services, Environmental Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue to sponsor special events that encourage public involvement and enhance water quality. Continue to provide educational materials as appropriate. <u>Reporting Data:</u> Special events held and related data
Permit Year 2 Oct 2014-Sept 2015	Continue to sponsor special events that encourage public involvement and enhance water quality. Continue to provide educational materials as appropriate. <u>Reporting Data:</u> Special events held and related data
Permit Year 3 Oct 2015-Sept 2016	Continue to sponsor special events that encourage public involvement and enhance water quality. Continue to provide educational materials as appropriate. <u>Reporting Data:</u> Special events held and related data
Permit Year 4 Oct 2016-Sept 2017	Continue to sponsor special events that encourage public involvement and enhance water quality. Continue to provide educational materials as appropriate. <u>Reporting Data:</u> Special events held and related data

Inlet Markers

The City installs inlet markers with “Drains to Creek” to promote citizen’s awareness of the storm drain system. Volunteers also install inlet markers as service projects involving the community in stormwater activities.

If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer “Adopt-A-Highway” programs, and educational activities;

Pg. 32

Departments: Stormwater, Drainage Operations

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue annual installation of inlet markers. Update GIS Layer as appropriate. <u>Reporting Data:</u> Number of inlet markers installed.
Permit Year 2 Oct 2014-Sept 2015	Continue annual installation of inlet markers. Update GIS Layer as appropriate. <u>Reporting Data:</u> Number of inlet markers installed.
Permit Year 3 Oct 2015-Sept 2016	Continue annual installation of inlet markers. Update GIS Layer as appropriate. <u>Reporting Data:</u> Number of inlet markers installed.
Permit Year 4 Oct 2016-Sept 2017	Continue annual installation of inlet markers. Update GIS Layer as appropriate. <u>Reporting Data:</u> Number of inlet markers installed.
Permit Year 5 Oct 2017-Dec 2018	Continue annual installation of inlet markers. Update GIS Layer as appropriate. <u>Reporting Data:</u> Number of inlet markers installed.

Household Hazardous Waste Collection

The City collects pesticides, herbicides, fertilizers, poisons, pool chemicals, cleaners, paint, polishes, varnishes, solvents, mercury, and automotive products in residential quantities from Round Rock residents. Collection events encourage proper disposal, keep materials from entering waterways, and get residents involved in water quality efforts.

If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities;

Pg. 32

Departments: Environmental Services, Communications

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Continue to collect Household Hazardous Waste from residents on designated dates. Continue to advertise these events. <u>Reporting Data:</u> Advertising methods and number of participants.
Permit Year 2 Oct 2014-Sept 2015	Continue to collect Household Hazardous Waste from residents on designated dates. Continue to advertise these events. <u>Reporting Data:</u> Advertising methods and number of participants.
Permit Year 3 Oct 2015-Sept 2016	Continue to collect Household Hazardous Waste from residents on designated dates. Continue to advertise these events. <u>Reporting Data:</u> Advertising methods and number of participants.
Permit Year 4 Oct 2016-Sept 2017	Continue to collect Household Hazardous Waste from residents on designated dates. Continue to advertise these events. <u>Reporting Data:</u> Advertising methods and number of participants.
Permit Year 5 Oct 2017-Dec 2018	Continue to collect Household Hazardous Waste from residents on designated dates. Continue to advertise these events. <u>Reporting Data:</u> Advertising methods and number of participants.

Brush Recycling & Mulch Program

Brush recycling program encourages the proper disposal of tree and shrubbery waste keeping the materials from entering the waterways. The brush is then recycled into mulch which is provided to residents for landscaping areas which reduces erosion and increases infiltration.

If feasible, create opportunities for citizens to participate in the implementation of control measures, such as stream clean-ups, storm drain stenciling, volunteer monitoring, volunteer "Adopt-A-Highway" programs, and educational activities;

Pg.32

Departments: PARD

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue brush recycling program. <u>Reporting Data:</u> Amount of brush collected. Amount of mulch dispersed.
Permit Year 2 Oct 2014-Sept 2015	Continue brush recycling program. <u>Reporting Data:</u> Amount of brush collected. Amount of mulch dispersed.
Permit Year 3 Oct 2015-Sept 2016	Continue brush recycling program. <u>Reporting Data:</u> Amount of brush collected. Amount of mulch dispersed.
Permit Year 4 Oct 2016-Sept 2017	Continue brush recycling program. <u>Reporting Data:</u> Amount of brush collected. Amount of mulch dispersed.
Permit Year 5 Oct 2017-Dec 2018	Continue brush recycling program. <u>Reporting Data:</u> Amount of brush collected. Amount of mulch dispersed.

MCM #2

Illicit Discharge, Detection and Elimination

Introduction

Phase II stormwater management programs are required to address illicit discharges into the MS4 system. An illicit discharge is defined as any discharge to a municipal separate storm sewer system that is not composed entirely of stormwater, except allowable discharges pursuant to the TPDES general permit. In addition to requiring permittee to have the legal authority to prohibit non-stormwater and discharges from entering storm drains, MS4 permits must also require the development of an Illicit Discharge Detection Elimination (IDDE) program.

In order to trace the origin of a suspected illicit discharge or connection, the permittee must have an updated map of the storm drain system and a formal plan of how to locate illicit discharges and how to respond to them once they are located or reported. The permittee must provide a mechanism for public reporting of illicit discharges and spills. Proper investigation and enforcement procedures must be in place to eliminate the sources of the discharges, as well. In order for the permittee to adequately detect and eliminate sources of illicit discharges, field staff must be properly trained to recognize and report the discharges to the appropriate parties.⁶

OSSF

On-Site Sewage Facilities (OSSFs) can be potential source of *E. coli* bacteria. There are very few OSSFs within the City because population growth primarily began in the mid 1970's and new users are required to connect to the City's wastewater collection system. The WCCHD (Williamson County and Cities Health District) is the designated agent of the TCEQ overseeing OSSFs in our area. The City's role in monitoring these facilities is limited to enforcement of the Illicit Discharge ordinance. In the event the City receives a complaint or observes a problem with an OSSF, staff will coordinate with the WCCHD.

Summary

During the previous permit term, the City adopted an Illicit Discharge ordinance, set up a reporting hotline, and began training employees and responding to complaints. During this permit term, the City will document and revise, as necessary, the processes and procedures for illicit discharges including investigation and enforcement, implement the follow-up investigation for illicit discharges, and continue training employees.

⁶ City staff relied on the MS4 Permit Improvement Guide for many of the introductory concepts, U.S. Environmental Protection Agency- EPA 833-R-10-001-April 2010

Illicit Discharge Ordinance Review

During the previous permit term, the City adopted an illicit discharge ordinance in order to be in compliance with the TCEQ’s MS4 General Permit and to protect local water quality. This permit term, the City will review and amend its illicit discharge ordinance as necessary in order to be in compliance with TCEQ’s current General Permit.

Within two years from the permit effective date, the permittee shall review and revise, if needed, its relevant ordinance(s) or other regulatory mechanism(s) that provide the permittee with adequate legal authority to control pollutant discharges into and from its small MS4 in order to meet the requirements of the general permit.

Pg.29

Departments: Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Review existing ordinance and begin drafting amendments as necessary. <u>Reporting Data:</u> Review complete
Permit Year 2 Oct 2014-Sept 2015	Finalize any amendments and adopt as necessary. <u>Reporting Data:</u> Amendments adopted or current ordinance determined compliant.

IDDE Procedures

The City will document and revise as necessary its' procedures for responding to illicit discharges and spills.

All permittees shall develop and maintain on site procedures for responding to illicit discharges and spills. Pg.33

Permittees who operate level 3 and 4 small MS4 shall upon being notified that the discharge has been eliminated, conduct a follow-up investigation or field screening, consistent with Part III.B.2.(e)(2), to verify that the discharge has been eliminated. Pg. 34

Departments: Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Document current procedures and review against new permit requirements. <u>Reporting Data:</u> Current procedures documented
Permit Year 2 Oct 2014-Sept 2015	Update and implement updated procedures for responding to illicit discharges. <u>Reporting Data:</u> Implementation of updated procedures complete.
Permit Year 3 Oct 2015-Sept 2016	No goals for year three. <u>Reporting Data:</u> NA
Permit Year 4 Oct 2016-Sept 2017	Review procedures and amend if necessary. <u>Reporting Data:</u> Review completed.
Permit Year 5 Oct 2017-Dec 2018	No goals for year five. <u>Reporting Data:</u> NA

IDDE - Reporting Hotline

Continue refinement and enhancement of IDDE procedures including: citizen complaint hotline, investigation, and resolution.

Public Reporting of Illicit Discharges and Spills

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

Pg.33

Departments: Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue citizen complaint hotline and employee reporting. Develop written procedures for documentation of complaints through resolution. <u>Reporting Data:</u> Number of complaints and reports resolved.
Permit Year 2 Oct 2014-Sept 2015	Continue citizen complaint hotline and employee reporting. Implement procedures developed in PY01. Continue to investigate citizen complaint and staff reports. Document any complaints through to resolution. <u>Reporting Data:</u> Number of complaints and reports resolved.
Permit Year 3 Oct 2015-Sept 2016	Continue citizen complaint hotline and employee reporting. Review procedures and refine as necessary. Continue to investigate citizen complaint and staff reports. Document any complaints through to resolution. <u>Reporting Data:</u> Number of complaints and reports resolved.
Permit Year 4 Oct 2016-Sept 2017	Continue citizen complaint hotline and employee reporting. Continue to investigate citizen complaint and staff reports. Document any complaints through to resolution. <u>Reporting Data:</u> Number of complaints and reports resolved.
Permit Year 5 Oct 2017-Dec 2018	Continue citizen complaint hotline and employee reporting. Continue to investigate citizen complaint and staff reports. Document any complaints through to resolution. <u>Reporting Data:</u> Number of complaints and reports resolved.

Staff Training (IDDE)

Ensure O&M staff is trained regularly on recognizing and reporting illicit discharges.

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained on site and made available for review by the TCEQ.

Pg.33

Departments: Water and Wastewater Line Maintenance, Transportation, PARD, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	No goals for permit year one. Training completed previous year.
Permit Year 2 Oct 2014-Sept 2015	Coordinate with O&M staff to ensure staff receives the appropriate training at least every two years. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 3 Oct 2015-Sept 2016	Review and revise training material as appropriate. <u>Reporting Data:</u> Review complete
Permit Year 4 Oct 2016-Sept 2017	Coordinate with O&M staff to ensure staff receives the appropriate training at least every two years. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 5 Oct 2017-Dec 2018	No goals for permit year five.

MS4 Mapping

The City has developed and maintains a map of the storm drainage system including the location of all outfalls and surface waters that receive discharges from the outfalls.

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

- *The location of all small MS4 outfalls that are operated by the permittee and that discharge into waters of the U.S.;*
- *The location and name of all surface waters receiving discharges from the small MS4 outfalls;*
- *Priority areas identified under Part III.B.2. (e)(1) If applicable.*

Pg.33

Departments: Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Update the City’s storm drain map as needed with new, altered, and newly discovered storm drain features. <u>Reporting Data:</u> Annual update completed.
Permit Year 2 Oct 2014-Sept 2015	Update the City’s storm drain map as needed with new, altered, and newly discovered storm drain features. <u>Reporting Data:</u> Annual update completed.
Permit Year 3 Oct 2015-Sept 2016	Update the City’s storm drain map as needed with new, altered, and newly discovered storm drain features. <u>Reporting Data:</u> Annual update completed.
Permit Year 4 Oct 2016-Sept 2017	Update the City’s storm drain map as needed with new, altered, and newly discovered storm drain features. <u>Reporting Data:</u> Annual update completed.
Permit Year 5 Oct 2017-Dec 2018	Update the City’s storm drain map as needed with new, altered, and newly discovered storm drain features. <u>Reporting Data:</u> Annual update completed.

Gilleland Sewer Leak Detection-TMDL

Identify and eliminate any sanitary sewer leaks within the Gilleland Creek drainage basin to reduce the potential for *E.coli*. bacteria discharge.

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.

Pg.19

Departments: Utility Engineering, Wastewater Line Maintenance

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Identify limits of City system within the Gilleland Creek basin, develop a project, and schedule for identifying potential system leaks. <u>Reporting Data:</u> Analysis complete
Permit Year 2 Oct 2014-Sept 2015	Perform investigation of wastewater system identified in PY1. Document any necessary repairs. <u>Reporting Data:</u> Progress made
Permit Year 3 Oct 2015-Sept 2016	Perform identified repairs of wastewater system identified in PY2. <u>Reporting Data:</u> Progress made and repair statistics
Permit Year 4 Oct 2016-Sept 2017	Continue to perform identified repairs of wastewater system identified in PY2. <u>Reporting Data:</u> Progress made and repair statistics
Permit Year 5 Oct 2017-Dec 2018	Complete any remaining repairs. <u>Reporting Data:</u> Repairs completed

EARZ Leak Detection-Bacteria Impairment

Identify and eliminate any sanitary sewer leaks within the most sensitive areas (EARZ) to reduce the potential for bacteria discharge. Sanitary sewer lines within the EARZ will be evaluated every 5 years.

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.

Pg.19

Departments: Utility Engineering and Wastewater Line Maintenance

Annual Goals	
Permit Year 1 Dec 2014-Sept 2014	Continue the annual sanitary sewer leak determination and elimination program. <u>Reporting Data:</u> Number of leaks identified. Linear feet repaired.
Permit Year 2 Oct 2014-Sept 2015	Continue the annual sanitary sewer leak determination and elimination program. <u>Reporting Data:</u> Number of leaks identified. Linear feet repaired.
Permit Year 3 Oct 2015-Sept 2016	Continue the annual sanitary sewer leak determination and elimination program. <u>Reporting Data:</u> Number of leaks identified. Linear feet repaired.
Permit Year 4 Oct 2016-Sept 2017	Continue the annual sanitary sewer leak determination and elimination program. <u>Reporting Data:</u> Number of leaks identified. Linear feet repaired.
Permit Year 5 Oct 2017-Dec 2018	Continue the annual sanitary sewer leak determination and elimination program. <u>Reporting Data:</u> Number of leaks identified. Linear feet repaired.

Grease Surcharge Program-TMDL/Bacteria Impairment

Continue inspections, education, monitoring and enforcement targeted at reducing the level of fats, oils, and grease that enter the City's sanitary sewer system to minimize E.coli. bacteria levels in area waterways from sanitary overflows. The City monitors all non-residential users' wastewater discharges. Users whose wastewater exceeds standards receive a surcharge. Educational material is available from the City on how to reduce these levels and reduce their fee. This program provides a financial incentive to use best practices to prevent overflows.

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.

Pg.19

Departments: Environmental Services

Annual Goals	
Permit Year 1 Dec 2014-Sept 2014	Continue education, monitoring and enforcement program. <u>Reporting Data:</u> Number of facilities monitored.
Permit Year 2 Oct 2014-Sept 2015	Continue education, monitoring and enforcement program. <u>Reporting Data:</u> Number of facilities monitored.
Permit Year 3 Oct 2015-Sept 2016	Continue education, monitoring and enforcement program. <u>Reporting Data:</u> Number of facilities monitored.
Permit Year 4 Oct- 2016-Sept 2017	Continue education, monitoring and enforcement program. <u>Reporting Data:</u> Number of facilities monitored.
Permit Year 5 Oct-2017-Dec 2018	Continue education, monitoring and enforcement program. <u>Reporting Data:</u> Number of facilities monitored.

Household Hazardous Waste Collection

The City collects pesticides, herbicides, fertilizers, poisons, pool chemicals, cleaners, paint, polishes, varnishes, solvents, mercury, and automotive products in residential quantities from Round Rock residents providing proper disposal opportunities for residents.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP.

Pg.32

Departments: Environmental Services

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Continue to collect Household Hazardous Waste from residents on designated dates. <u>Reporting Data:</u> Amount of material collected
Permit Year 2 Oct 2014-Sept 2015	Continue to collect Household Hazardous Waste from residents on designated dates. <u>Reporting Data:</u> Amount of material collected
Permit Year 3 Oct 2015-Sept 2016	Continue to collect Household Hazardous Waste from residents on designated dates. <u>Reporting Data:</u> Amount of material collected
Permit Year 4 Oct 2016-Sept 2017	Continue to collect Household Hazardous Waste from residents on designated dates. <u>Reporting Data:</u> Amount of material collected
Permit Year 5 Oct 2017-Dec 2018	Continue to collect Household Hazardous Waste from residents on designated dates. <u>Reporting Data:</u> Amount of material collected

Oil Recycling Stations

The City collects used oil from Round Rock residents at several locations throughout the City providing proper disposal opportunities for residents.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP.

Pg.32

Departments: Environmental Services

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Continue to collect used oil at stations throughout the City. <u>Reporting Data:</u> Amount of material collected
Permit Year 2 Oct 2014-Sept 2015	Continue to collect used oil at stations throughout the City. <u>Reporting Data:</u> Amount of material collected
Permit Year 3 Oct 2015-Sept 2016	Continue to collect used oil at stations throughout the City. <u>Reporting Data:</u> Amount of material collected
Permit Year 4 Oct 2016-Sept 2017	Continue to collect used oil at stations throughout the City. <u>Reporting Data:</u> Amount of material collected
Permit Year 5 Goal Oct 2017-Dec 2018	Continue to collect used oil at stations throughout the City. <u>Reporting Data:</u> Amount of material collected

Recycling

The City operates a drop off recycling center and offers curbside recycling providing proper disposal opportunities for residents.

Existing permittees must assess program elements that were described in the previous permit, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the MS4 to the MEP.

Pg.32

Departments: Utilities and Environmental Services

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Continue to operate the drop off recycling center. <u>Reporting Data:</u> Amount of material collected
Permit Year 2 Oct 2014-Sept 2015	Continue to operate the drop off recycling center. <u>Reporting Data:</u> Amount of material collected
Permit Year 3 Oct 2015-Sept 2016	Continue to operate the drop off recycling center. <u>Reporting Data:</u> Amount of material collected
Permit Year 4 Oct 2016-Sept 2017	Continue to operate the drop off recycling center. <u>Reporting Data:</u> Amount of material collected
Permit Year 5 Goal Oct 2017-Dec 2018	Continue to operate the drop off recycling center. <u>Reporting Data:</u> Amount of material collected

MCM #3

Construction Site Stormwater Runoff Control

Introduction

MS4 permittees must ensure that construction site operators select and implement appropriate erosion and sediment control measures to reduce or eliminate the impacts to receiving waters. The permit can require that permittees develop their own standards and specifications, but often it is preferable to require the permittees to utilize existing guidance that is approved by the permitting authority.

The permittee must establish review procedures for construction site plans to determine potential water quality impacts and ensure the proposed controls are adequate. These procedures must include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. In addition, the permit must include requirements for inspection and enforcement of erosion and sediment control measures once construction begins. Educational materials for construction site operators can be useful in achieving cooperative compliance and minimize the necessity of enforcement actions.⁷

Summary

During the previous permit term, the City amended its Temporary Erosion Control Standard Construction Details, adopted an Illicit Discharge Ordinance, updated plan review and inspection procedures, trained inspectors, and developed educational material for site operators. During this permit term, previous program elements will be continued and enhanced, an inventory will be established and procedures documented and revised as necessary.

⁷ City staff relied on the MS4 Permit Improvement Guide for many of the introductory concepts, U.S. Environmental Protection Agency- EPA 833-R-10-001-April 2010

Construction Site Complaint Hotline

City will continue the citizen complaint hotline for construction sites. City will continue to investigate complaints, record findings and any follow up actions.

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

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Departments: Development Services, Construction Inspection, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Develop written procedures for responding to construction complaints. Continue to investigate complaints as they are received. <u>Reporting Data:</u> Number of complaints received and resolved.
Permit Year 2 Oct 2014-Sept 2015	Continue to investigate complaints as they are received. <u>Reporting Data:</u> Number of complaints received and resolved.
Permit Year 3 Oct 2015-Sept 2016	Continue to investigate complaints as they are received. <u>Reporting Data:</u> Number of complaints received and resolved.
Permit Year 4 Oct 2016-Sept 2017	Continue to investigate complaints as they are received. <u>Reporting Data:</u> Number of complaints received and resolved.
Permit Year 5 Oct 2017-Dec 2018	Continue to investigate complaints as they are received. <u>Reporting Data:</u> Number of complaints received and resolved.

Plan Review and Site Inventory-Development

Review development and redevelopment projects to ensure designs are compliant with CGP, the EAR and City ordinances. Maintain inventory of all active projects within the City Limits.

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 Part III.B.3.(a) or in the TPDES CGP, TXR150000. The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the CGP, TXR150000. Permittees who operate level 3 and 4 small MS4s shall maintain an inventory of all permitted active public and private construction sites, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale.

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Departments: Development Services

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue CGP and EAR compliance and current project inventory methods. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 2 Oct 2014-Sept 2015	Document procedures for plan review and inventory. Implement updated plan review and inventory for all projects. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 3 Oct 2015-Sept 2016	Continue plan review and inventory for all projects. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 4 Oct 2016-Sept 2017	Continue plan review and inventory for all projects. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 5 Oct 2017-Dec 2018	Continue plan review and inventory for all projects. <u>Reporting Data:</u> Number of projects permitted.

Construction Site Inspection – Development

Inspect construction site BMPs for compliance with CGP and City ordinances, report findings to site operator and verify recommendations are implemented to minimize release of pollutants to the MS4. Document all project inspections and compliance activities.

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.
4. Provide a written or electronic inspection report.

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Departments: Construction Inspection, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Document procedures for inspecting site BMPs, reporting inspection activities and enforcing regulations. Continue inspecting sites for compliance. <u>Reporting Data:</u> Procedures documented. Number of sites inspected. Number of Warnings issued.
Permit Year 2 Oct 2014-Sept 2015	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.
Permit Year 3 Oct 2015-Sept 2016	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.
Permit Year 4 Oct 2016-Sept 2017	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.
Permit Year 5 Oct 2017-Dec 2018	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.

Staff Training-Development

Ensure staff is trained regularly on the CGP, City ordinances and associated procedures required for construction sites to minimize release of pollutants to the MS4.

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.

Pg.38

Departments: Development Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Coordinate with staff that missed previous training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.
Permit Year 2 Oct 2014-Sept 2015	Coordinate with staff to ensure all staff receives the appropriate training. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 3 Oct 2015-Sept 2016	Coordinate with staff that missed previous training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.
Permit Year 4 Oct 2016-Sept 2017	Coordinate with staff to ensure all staff receives the appropriate training. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 5 Oct 2017-Dec 2018	Coordinate with staff that missed previous training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.

Staff Training – Construction Inspection

Ensure construction inspection staff is trained regularly on the CGP, City ordinances and associated procedures required for construction sites inspections to minimize release of pollutants to the MS4.

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.

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Departments: Construction Inspection, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Coordinate with Construction Inspection staff that missed previous training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.
Permit Year 2 Oct 2014-Sept 2015	Coordinate with Construction Inspection staff to ensure all staff receives the appropriate training. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 3 Oct 2015-Sept 2016	Coordinate with Construction Inspection staff that missed previous training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.
Permit Year 4 Oct 2016-Sept 2017	Coordinate with Construction Inspection staff to ensure all staff receives the appropriate training. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 5 Oct 2017-Dec 2018	Coordinate with Construction Inspection staff that missed previous training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.

Plan Review and Site Inventory - Capital Improvement Program

Review CIP projects to ensure designs are compliant with the CGP, the EAR and City ordinances. Maintain CIP inventory of all active projects within the City Limits.

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 Part III.B.3.(a) or in the TPDES CGP, TXR150000. The permittee may require and accept a plan, such as a SWP3, that has been developed pursuant to the CGP, TXR150000. Permittees who operate level 3 and 4 small MS4s shall maintain an inventory of all permitted active public and private construction sites, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale.

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Departments: Utilities Engineering, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue CGP and EAR compliance and current project inventory methods. <u>Reporting Data:</u> Number of projects permitted. Number of new WPAPs.
Permit Year 2 Oct 2014-Sept 2015	Document procedures for plan review and inventory. Implement updated plan review and inventory for all CIP projects. <u>Reporting Data:</u> Number of projects permitted. Number of new WPAPs. Status of updated process Implementation.
Permit Year 3 Oct 2015-Sept 2016	Continue plan review and inventory for all CIP projects. <u>Reporting Data:</u> Number of projects permitted. Number of new WPAPs.
Permit Year 4 Oct 2016-Sept 2017	Continue plan review and inventory for all CIP projects. <u>Reporting Data:</u> Number of projects permitted. Number of new WPAPs.
Permit Year 5 Oct 2017-Dec 2018	Continue plan review and inventory for all CIP projects. <u>Reporting Data:</u> Number of projects permitted. Number of new WPAPs.

Construction Site Inspection - Capital Improvement Program

Inspect construction site BMPs for compliance with the CGP and City ordinances, report findings to site operator and verify recommendations are implemented to minimize release of pollutants to the MS4. Document all project inspections and compliance activities.

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.
4. Provide a written or electronic inspection report.

Pg.38

Departments: Construction Inspection, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Document procedures for inspecting site BMPs, reporting inspection activities and enforcing regulations. Continue inspecting sites for compliance. <u>Reporting Data:</u> Procedures documented. Number of sites inspected. Number of Warnings issued.
Permit Year 2 Oct 2014-Sept 2015	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.
Permit Year 3 Oct 2015-Sept 2016	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.
Permit Year 4 Oct 2016-Sept 2017	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.
Permit Year 5 Oct 2017-Dec 2018	Continue inspecting sites for compliance. <u>Reporting Data:</u> Number of sites inspected. Number of Warnings issued.

Staff Training - CIP staff

Ensure CIP staff is trained regularly on the CGP, City ordinances and associated procedures required for construction sites to minimize release of pollutants to the MS4.

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.

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Departments: Utilities Engineering, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Coordinate with CIP staff that missed previous CIP training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.
Permit Year 2 Oct 2014-Sept 2015	Coordinate with CIP staff to ensure all staff receives the appropriate training. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 3 Oct 2015-Sept 2016	Coordinate with CIP staff that missed previous CIP training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.
Permit Year 4 Oct 2016-Sept 2017	Coordinate with CIP staff to ensure all staff receives the appropriate training. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 5 Oct 2017-Dec 2018	Coordinate with CIP staff that missed previous CIP training and ensure staff receives the appropriate training. <u>Reporting Data:</u> Number of additional employees receiving training.

MCM #4

Post Construction Stormwater Management in New and Redevelopment

Introduction

Permittees are required to address new development and significant redevelopment in their SWMPs through controls to reduce pollutants in stormwater discharges after construction is completed.

The Phase II regulations require regulated small MS4 operators to develop, implement, and enforce a program to address stormwater discharges from new development and redevelopment sites that disturb greater than or equal to one acre to the MS4 (including projects that disturb less than one acre that are part of a larger common plan of development or sale). The regulations also require that the MS4 ensure that control measures are installed and implemented that prevent or minimize water quality impacts.

As part of these Phase II requirements, the MS4 must:

- Develop and implement approaches to addressing post-construction stormwater discharges that include a combination of structural and/or non-structural controls;
- Adopt adequate legal authority to enable the MS4 to address post-construction stormwater discharges from new development and redeveloped sites; and
- Ensure adequate long-term operation and maintenance of applicable post-construction control measures.⁸

Summary

During the previous permit term, the City adopted an Illicit Discharge Ordinance, updated plan review and inspection procedures, trained inspectors, responded to complaints, and assisted the TCEQ with permanent BMP compliance issues. During this permit term, previous program elements will be continued and enhanced, and procedures documented and revised as necessary.

⁸ City staff relied on the MS4 Permit Improvement Guide for many of the introductory concepts, U.S. Environmental Protection Agency- EPA 833-R-10-001-April 2010

Legal Authority

The City regulates stormwater discharges from all development and redevelopment projects. To minimize erosion impacts and protect water quality, the City regulates the flow rate of smaller more frequent storms (2-year) and the discharge and in-stream velocities. For flood protection, the City requires projects to detain flows from larger storms (10 and 25-year) to pre-developed rates; regulations do allow for limited participation in a regional detention ‘fee-in-lieu’ program. Program participation requests must be supported by an engineering analysis that demonstrates and certifies to “no identifiable adverse impacts”. Additionally, the City protects its most sensitive streams and watersheds by supporting the TCEQ in its implementation and enforcement of the Edwards Aquifer Rule which requires installation of permanent structural and non-structural BMPs on projects. During the permit term, the City will amend regulations as necessary for compliance with the updated permit.

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...The program may utilize an offsite mitigation and payment in lieu of components to address this requirement. All permittees shall use, to the extent allowable ..., an ordinance...to address post-construction runoff from new...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.

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Departments: Development Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Begin review of existing ordinances and enforcement programs. <u>Reporting Data:</u> NA
Permit Year 2 Oct 2014-Sept 2015	Draft any proposed ordinance amendments and begin public outreach. <u>Reporting Data:</u> Status of proposed amendments
Permit Year 3 Oct 2015-Sept 2016	Adopt and implement amendments revising processes as needed. <u>Reporting Data:</u> Status of implementation
Permit Year 4 Oct 2016-Sept 2017	Evaluate revised processes and amend as necessary. <u>Reporting Data:</u> Document any changes

Permanent BMPs Plan Review- CIP

Review CIP projects to ensure designs are compliant with City ordinances and policies as updated for the 2013-2018 MS4 General Permit.

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. 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.

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Departments: Utilities Engineering, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue current plan review methods. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 2 Oct 2014-Sept 2015	Update and document revised plan review procedures as required for compliance with the current MS4 General Permit. Implement updated plan review for all CIP projects. <u>Reporting Data:</u> Number of projects permitted. Status of updated process implementation.
Permit Year 3 Oct 2015-Sept 2016	Continue plan review for all CIP projects. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 4 Oct 2016-Sept 2017	Continue plan review for all CIP projects. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 5 Oct 2017-Dec 2018	Continue plan review for all CIP projects. <u>Reporting Data:</u> Number of projects permitted.

Permanent BMPs Plan Review - Development and Redevelopment

Review projects to ensure designs are compliant with City ordinances and policies as updated for the current MS4 General Permit.

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. 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.

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Departments: Development Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue current plan review procedures. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 2 Oct 2014-Sept 2015	Continue current plan review procedures. Update plan review procedures as required for any ordinance changes and start outreach and education. <u>Reporting Data:</u> Number of projects permitted.
Permit Year 3 Oct 2015-Sept 2016	Document revised procedures for plan review. Implement updated plan review for all projects. <u>Reporting Data:</u> Number of projects permitted. Status of update review procedures.
Permit Year 4 Oct 2016-Sept 2017	Continue plan review <u>Reporting Data:</u> Number of projects permitted.
Permit Year 5 Oct 2017-Dec 2018	Continue plan review <u>Reporting Data:</u> Number of projects permitted.

Post Construction Site Inspection

Inspect permanent BMPs for compliance with plans, City ordinances, and practices. Document all project inspections and compliance activities.

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.
4. Provide a written or electronic inspection report.

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Departments: Inspection Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue current inspection process. <u>Reporting Data:</u> NA
Permit Year 2 Oct 2014-Sept 2015	Document and implement revised inspection process for CIP Projects. Start outreach and education for modified Development and Redevelopment inspection process. <u>Reporting Data:</u> Documentation and implementation status for CIP projects.
Permit Year 3 Oct 2015-Sept 2016	Document and implement revised inspection process for Development and Redevelopment projects. Continue revised inspection processes for CIP projects. <u>Reporting Data:</u> Documentation and implementation status for development
Permit Year 4 Oct 2016-Sept 2017	Continue revised inspection processes for CIP, Development, and Redevelopment projects. <u>Reporting Data:</u> NA
Permit Year 5 Oct 2017-Dec 2018	Continue revised inspection processes for CIP, Development, and Redevelopment projects. <u>Reporting Data:</u> NA

Long Term O&M - Permanent BMPs Permittee Owned

The City will continue to maintain city-owned water quality and detention facilities.

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. See Part III.B.5*

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Departments: Drainage Operations, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue regular maintenance and record keeping of City owned permanent BMPs. <u>Reporting Data:</u> Statistics reporting under Structural Control Maintenance in Good Housekeeping.
Permit Year 2 Oct 2014-Sept 2015	Review current maintenance standards and plans. Revise standards as necessary. Continue regular maintenance and record keeping of City owned permanent BMPs. <u>Reporting Data:</u> Review complete. Revisions as necessary complete. Statistics reporting under Structural Control Maintenance in Good Housekeeping.
Permit Year 3 Oct 2015-Sept 2016	Continue regular maintenance and record keeping of City owned permanent BMPs. <u>Reporting Data:</u> Statistics reporting under Structural Control Maintenance in Good Housekeeping.
Permit Year 4 Oct 2016-Sept 2017	Continue regular maintenance and record keeping of City owned permanent BMPs. <u>Reporting Data:</u> Statistics reporting under Structural Control Maintenance in Good Housekeeping.
Permit Year 5 Oct 2017-Dec 2018	Continue regular maintenance and record keeping of City owned permanent BMPs. <u>Reporting Data:</u> Statistics reporting under Structural Control Maintenance in Good Housekeeping.

Long Term O&M and Enforcement - Permanent BMPs Privately Owned

The City will continue to respond to maintenance complaints regarding permanent BMPs and will assist TCEQ as appropriate to enforce the EAR regulations. Privately owned permanent BMPs will be maintained by their owners and the maintenance plans will be filed with the county.

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 requirements 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.

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Departments: Development Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue to respond to maintenance issues as they arise. <u>Reporting Data:</u> Status of cases investigated and resolved
Permit Year 2 Oct 2014-Sept 2015	Continue to respond to maintenance issues as they arise. <u>Reporting Data:</u> Status of cases investigated and resolved
Permit Year 3 Oct 2015-Sept 2016	Revise and implement development processes to ensure recordation of maintenance plans with the County, <u>Reporting Data:</u> Status of implementation
Permit Year 4 Oct 2016-Sept 2017	Continue to respond to maintenance issues as they arise. <u>Reporting Data:</u> Status of cases investigated and resolved
Permit Year 5 Oct 2017-Dec 2018	Continue to respond to maintenance issues as they arise. <u>Reporting Data:</u> Status of cases investigated and resolved

MCM #5

Good Housekeeping

Introduction

The TPDES General Permit requires the operator of a regulated MS4 community to develop a program to:

- Prevent or reduce the amount of stormwater pollution generated by municipal operations and conveyed into receiving waters.
- Train employees on how to incorporate pollution prevention/good housekeeping techniques into municipal operations.
- Identify appropriate control measures and measurable goals for preventing or reducing the amount of stormwater pollution generated by municipal operations.

The first step is to evaluate and assess the areas and municipal facilities that it controls in order to determine which activities may have a negative impact on water quality and to find solutions for these activities. The simplest solution is to limit the number of activities that are conducted outside and exposed to stormwater.

Storm drain systems need maintenance to ensure that structures within the storm drain do not become sources of pollution. Regular maintenance of catch basins prevents the accumulation of pollutants that are later released during rain events as well as blockages, backups, and flooding.

System mapping and regular maintenance are key to a successful pollution prevention program. It is also important for material that is collected to be disposed of in a responsible manner. Employee training to carry out these pollution prevention measures is a required component of the program. Specific pollution prevention requirements related to pollutant-generating activities such as landscaping techniques and operating and maintaining public streets, should also be considered. For example, typical pollutants associated with street repair and maintenance includes heavy metals, chlorides, hydrocarbons, concrete dust, sand, deicers, sediment, and trash. Training and educating staff is important to ensure that everyone is knowledgeable in the most effective approaches to minimize pollutant discharges from municipal facilities and activities.⁹

Summary

During the previous permit term, the City performed structural control maintenance, street sweeping, and vehicle maintenance and began training employees. Spill Prevention and Response Plans were also implemented at appropriate facilities. This permit term, the City will continue previous program elements, amend contract language, and enhance its facility mapping.

⁹ City staff relied on the MS4 Permit Improvement Guide for many of the introductory concepts, U.S. Environmental Protection Agency- EPA 833-R-10-001-April 2010

Permittee Owned Facility Map and Inventory

The City will continue to update the City's storm system map as new features are added or discovered. Additionally the City will develop a map of City owned facilities and storm water controls as described in Part III, Section B of the TPDES General Permit.

Permittees who operate level 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.
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Departments: Stormwater

Annual Goals	
Permit Year 1 Dec 2013 –Sept 2014	Continue to update the City's storm system map. Develop layer and attributes of the permittee owned facilities and controls inventory. <u>Reporting Data:</u> Report Progress on developing framework of the new inventory.
Permit Year 2 Oct 2014-Sept 2015	Continue to update the City's storm system map and implement the facility and control inventory. <u>Reporting Data:</u> Report status of implementation of facility and control inventory.
Permit Year 3 Oct 2015-Sept 2016	Continue to update the City's storm system map and the facility and control inventory. <u>Reporting Data:</u> NA
Permit Year 4 Oct 2016-Sept 2017	Continue to update the City's storm system map and the facility and control inventory. <u>Reporting Data:</u> NA
Permit Year 5 Oct 2017-Dec 2018	Continue to update the City's storm system map and the facility and control inventory. <u>Reporting Data:</u> NA

Contractor Requirements and Oversight

Ensure all city contractors perform maintenance activities using appropriate control measures and standard operating procedures (SOPs) to minimize the release of pollutants to the MS4.

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 IIIB.5. (2)-(6). All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be developed before the end of the permit term and maintained on site and made available for inspection by TCEQ.

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Departments: Purchasing, Utility Operations, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Develop standard contract language requiring City contractors to use appropriate control measures and SOPs to minimize the release of pollutants to the MS4. <u>Reporting Data:</u> Contract Language created.
Permit Year 2 Oct 2014-Sept 2015	Add standard language to all applicable new or renewed contracts. Develop and implement oversight for contracts. <u>Reporting Data:</u> Number of new or renewed contracts.
Permit Year 3 Oct 2015-Sept 2016	Add standard language to all applicable new or renewed contracts. Implement oversight for contracts. <u>Reporting Data:</u> Number of new or renewed contracts.
Permit Year 4 Oct 2016-Sept 2017	Add standard language to all applicable new or renewed contracts. Implement oversight for contracts. <u>Reporting Data:</u> Number of new or renewed contracts.
Permit Year 5 Oct 2017-Dec 2018	Add standard language to all applicable new or renewed contracts. Implement oversight for contracts. <u>Reporting Data:</u> Number of new or renewed contracts.

Operation and Maintenance Activity SOPs

Evaluate current procedures and develop SOPs for high-risk maintenance activities to minimize release of pollutants to the MS4.

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

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Departments: Utility Operations, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	No activities scheduled for permit year one. <u>Reporting Data:</u> NA
Permit Year 2 Oct 2014-Sept 2015	Begin identification and assessment of O&M Activities that will require SOPs. <u>Reporting Data:</u> Progress of assessment.
Permit Year 3 Oct 2015-Sept 2016	Finish assessment of O&M activities. <u>Reporting Data:</u> Assessment complete. Number of needed SOPs identified.
Permit Year 4 Oct 2016-Sept 2017	Prepare 50% of identified SOPs <u>Reporting Data:</u> Number of SOPs created. Number of SOPs implemented.
Permit Year 5 Oct 2017-Dec 2018	Prepare remaining identified SOPs <u>Reporting Data:</u> Number of SOPs created. Number of SOPs implemented.

High Priority Facilities SOPs

Develop facility specific SOPs and perform annual inspections for high-risk facilities to minimize release of pollutants to the MS4.

Permittees who operate level 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part III.B.5. (c)(4) B. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:

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Departments: Utility Operations, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Assess City owned facilities to determine which ones have a high potential to release pollutants to the MS4. <u>Reporting Data:</u> Assessment completed. Number of facilities identified as high-priority.
Permit Year 2 Oct 2014-Sept 2015	Prepare SOPs for 25% of identified high priority facilities. <u>Reporting Data:</u> Number of SOPs created. Number of SOPs implemented.
Permit Year 3 Oct 2015-Sept 2016	Prepare SOPs for second 25% of identified high priority facilities. Implement PY2 created SOPs. <u>Reporting Data:</u> Number of SOPs created. Number of SOPs implemented.
Permit Year 4 Oct 2016-Sept 2017	Prepare SOPs for third 25% of identified high priority facilities. Implement PY3 created SOPs. Begin bi-annual inspections of high-priority facilities. <u>Reporting Data:</u> Number of SOPs created. Number of SOPs implemented. Number of facilities inspected.
Permit Year 5 Oct 2017-Dec 2018	Prepare SOPs for fourth 25% of identified high priority facilities. Implement PY4 created SOPs. Continue bi-annual inspections of high-priority facilities. <u>Reporting Data:</u> Number of SOPs created. Number of SOPs implemented. Number of facilities inspected.

Staff Training Good Housekeeping

Ensure O&M staff is trained regularly on the pollution prevention and good housekeeping practices to minimize release of pollutants to the MS4.

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 inspection by TCEQ when requested.

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Departments: Utility Operations, Transportation, PARD, General Services, Stormwater

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	No goals for permit year one. Training completed previous year.
Permit Year 2 Oct 2014-Sept 2015	Coordinate with O&M staff to ensure staff receives the appropriate training at least every two years. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 3 Oct 2015-Sept 2016	Review and revise training material as appropriate. <u>Reporting Data:</u> Review complete
Permit Year 4 Oct 2016-Sept 2017	Coordinate with O&M staff to ensure staff receives the appropriate training at least every two years. <u>Reporting Data:</u> Number of employees receiving training.
Permit Year 5 Oct 2017-Dec 2018	No goals for permit year five.

Street Sweeping

Perform regular street sweeping of public streets and high priority facilities to minimize the release of pollutants from roadways and parking lots to the MS4. Ensure proper disposal of trash, debris, and other stormwater pollutants collected during the street sweeping.

Permittees who operate level 3 or 4 small MS4s shall implement an O&M program that includes, if feasible and practicable, 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. 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.

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Departments: Transportation

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Continue sweeping public streets and facilities. Document disposal procedure. <u>Reporting Data:</u> Number of curb miles swept. Number parking lots swept.
Permit Year 2 Oct 2014-Sept 2015	Continue sweeping public streets and facilities. <u>Reporting Data:</u> Number of curb miles swept. Number parking lots swept.
Permit Year 3 Oct 2015-Sept 2016	Continue sweeping public streets and facilities. <u>Reporting Data:</u> Number of curb miles swept. Number parking lots swept.
Permit Year 4 Oct 2016-Sept 2017	Continue sweeping public streets and facilities. <u>Reporting Data:</u> Number of curb miles swept. Number parking lots swept.
Permit Year 5 Oct 2017-Dec 2018	Continue sweeping public streets and facilities. <u>Reporting Data:</u> Number of curb miles swept. Number parking lots swept.

Structural Control Maintenance

The City's structural control maintenance program includes inlet cleaning and permanent BMP maintenance targeted at reducing the level of pollutants discharged to the MS4.

Permittees who operate level 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the maximum extent practicable the collection of pollutants in catch basins and other surface drainage structures.

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Departments: Drainage Operations

Annual Goals	
Permit Year 1 Dec 2013-Sept 2014	Continue annual maintenance program. <u>Reporting Data:</u> Number of controls cleaned. Yards of material removed.
Permit Year 2 Oct 2014-Sept 2015	Continue annual maintenance program. <u>Reporting Data:</u> Number of controls cleaned. Yards of material removed.
Permit Year 3 Oct 2015-Sept 2016	Continue annual maintenance program. <u>Reporting Data:</u> Number of controls cleaned. Yards of material removed.
Permit Year 4 Oct 2016-Sept 2017	Continue annual maintenance program. <u>Reporting Data:</u> Number of inlets controls. Yards of material removed.
Permit Year 5 Oct 2017-Dec 2018	Continue annual maintenance program. <u>Reporting Data:</u> Number of inlets controls. Yards of material removed.

Acronyms

303d	Refers to Section 303d of the CWA requiring a listing of impaired waters
BMP:	Best Management Practice
CGP:	Construction General Permit
CFR:	Code of Federal Regulations
CWA:	Clean Water Act
DACS:	City of Round Rock's Design and Construction Standards
EAR:	Edwards Aquifer Rule
EARZ:	Edwards Aquifer Recharge Zone
ETJ:	Extraterritorial Jurisdiction
EPA:	Environmental Protection Agency
GIS:	Geographic Information System
Hazmat:	Hazardous Materials
HHW:	Household Hazardous Waste
I-Plan:	Implementation Plan associated with a TMDL
MCM:	Minimum Control Measure
MEP:	Maximum Extent Practicable
MS4:	Municipal Separate Storm Sewer System
NPDES:	National Pollution Discharge Elimination System
NOC:	Notice of Change
NOI:	Notice of Intent
NOT:	Notice of Termination
PARD:	Parks and Recreation Department
PSA:	Public Service Announcements
ROW:	Right of Way
SOP:	Standard Operating Procedure
SPRP:	Spill Prevention and Response Plan
SWMP:	Storm Water Management Program
SWP3:	Storm Water Pollution Prevention Plan
TAC:	Texas Administrative Code
TCEQ:	Texas Commission on Environmental Quality
TMDL:	Total Maximum Daily Load
TPDES:	Texas Pollution Discharge Elimination System
TXDOT:	Texas Department of Transportation
WCCHD:	Williamson County and Cities Health District
WPAP:	Water Pollution Abatement Plan