

# Storm Water Management Program

for

**Missouri City, First Colony Municipal Utility District #9, Fort Bend County Municipal Utility District #26, Fort Bend County Municipal Utility District #42, Fort Bend County Municipal Utility District #46, Fort Bend County Municipal Utility District #47, Fort Bend County Municipal Utility District #48, Fort Bend County Municipal Utility District #49, Fort Bend County Municipal Utility District #115, Harris County Municipal Utility District #122, Harris County Water Control & Improvement District - Fondren Road, Meadowcreek Municipal Utility District, Palmer Plantation Municipal Utility District #1, Palmer Plantation Municipal Utility District #2, Thunderbird Utility District, and Quail Valley Utility District**

**TCB INC. Project No. 52802913**

**February 2008**

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**Fort Bend County, Texas  
Harris County, Texas**

**TCB INC. Project No. 52802913**

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# Acronyms/Definitions

BMP	Best Management Practice
CGP	Construction General Permit
Districts	Missouri City, First Colony Municipal Utility District #9, Fort Bend County Municipal Utility District #26, Fort Bend County Municipal Utility District #42, Fort Bend County Municipal Utility District #46, Fort Bend County Municipal Utility District #47, Fort Bend County Municipal Utility District #48, Fort Bend County Municipal Utility District #49, Fort Bend County Municipal Utility District #115, Harris County Municipal Utility District #122, Harris County Water Control & Improvement District - Fondren Road, Meadowcreek Municipal Utility District, Palmer Plantation Municipal Utility District #1, Palmer Plantation Municipal Utility District #2, Thunderbird Utility District, and Quail Valley Utility District
EPA	Environmental Protection Agency
Executive Director	Executive Director for the Texas Commission on Environmental Quality
ETJ	Extraterritorial Jurisdiction
HHW	Household Hazardous Waste
LID	Levee Improvement District
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MUD	Municipal Utility District
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PSA	Public Service Announcement
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
TCEQ	Texas Commission on Environmental Quality
The City	Missouri City
TPDES	Texas Pollutant Discharge Elimination System
U.S.	United States
WC&ID	Water Control and Improvement District
#	Number

# Preface

## Regulatory Background

Missouri City and the Districts are small Municipal Separate Storm Sewer System (MS4) operators that are located within an urbanized area as determined by the 2000 Decennial Census by the U.S. Census Bureau and are therefore eligible for coverage under TPDES General Permit No. TXR040000 (General Permit).

To the extent allowable under state and local law, small MS4 operators must develop and implement a Storm Water Management Program (SWMP) and submit a Notice of Intent (NOI) according to the requirements of Part III of TPDES General Permit No. TXR040000, for storm water discharges that reach Waters of the United States. Multiple MS4s with several operators must each develop and submit separate Notices of Intent (NOIs) and a SWMP which may be developed to meet the SWMP requirements in Part II.D.3 or Part III. Each MS4 operator will be issued a distinct permit number. The SWMP must clearly list the name and permit number (or copy of NOI, if permit number not yet issued) for each MS4 operator that contributes to the development and implementation of the SWMP and provide confirmation that the contributing MS4 operator has agreed to contribute. As a requirement of this General Permit, a copy of TPDES General Permit No. TXR040000 is included with this SWMP in *Appendix A*.

The SWMP must be developed to prevent pollution in storm water to the maximum extent practicable (MEP) and effectively prohibit illicit discharges to the system. Existing programs or best management practices (BMPs) may be used to fulfill the requirements of the General Permit. The SWMP must include a timeline that demonstrates a schedule for implementation of the program throughout the permit term. If changes to the program are needed, revisions are to be summarized in the Annual Report.

The MS4 operator must submit a concise annual report to the executive director within 90 days of the end of each permit year (by November 11). The annual report must address the previous permit year. The first permit year for annual reporting purposes shall begin on the date of permit issuance, and shall last for one year. Subsequent calendar years will begin on the anniversary date of the permit issuance and last for one year. The annual report permitting year is August 13 to August 12. The MS4 operator must also make a copy of the annual report readily available for review by Texas Commission on Environmental Quality (TCEQ) personnel upon request.

Year 1 of the permit shall run from August 13, 2007 through August 12, 2008. [Year 2 of the permit shall run from August 13, 2008 through August 12, 2009. Year 3 of the permit shall run from August 13, 2009 through August 12, 2010. Year 4 of the permit shall run from August 13, 2010 through August 12, 2011. Year 5 of the permit shall run from August 13, 2011 through August 12, 2012.] Should the TCEQ administratively continue the permit after August 13, 2012, each successive year of the permit shall commence on August 13 and end on August 12.

## Setting

Missouri City (the City) and the District covers an area of approximately 30.23 square miles. It is located in Fort Bend County and Harris County, in southeast Texas, 20 miles west of Houston. It currently has over 526 miles of streets maintained by the City and operates 19 city parks that cover approximately 646.6 acres. There are 11 additional City parks currently under development. Each District operates and maintains the storm sewer system within their respective Districts.

According to the 2000 Decennial Census, 19.78 square miles of Missouri City was determined to be urbanized. This SWMP will only pertain to this urbanized area. Missouri City is primarily a residential

community with supporting commercial businesses. Surrounding Fort Bend County land use in 1996 was 83 percent agricultural. *Exhibit 1* in *Appendix C* depicts the boundary and general service area of Missouri City and the Districts.

Terrain varies from level to gently rolling. The growing season is 296 days. Average annual rainfall is 45.3 inches. Temperatures range from a mean minimum of 41°F to a mean maximum of 93°F. Soils vary from rich alluvial soils to sandy loam and clay.

Surface water consists of rivers, bayous, creeks, and small lakes. Flow from bayous is generally sluggish due to the gently sloping topography. There are few springs that contribute significantly to base flow.

## **Organization and Legal Authority**

Missouri City was incorporated in 1956. It operates under a City Council/City Manager form of government. The City Council (which includes the mayor) makes policy and the City Manager carries out the policy in the day-to-day business of running the city. It became a Home Rule city by charter in 1974 and became a zoned city in 1981.

The urbanized portion of Missouri City and its extraterritorial jurisdiction (ETJ) primarily consists of master-planned communities, Municipal Utility Districts (MUDs), Water Control and Improvement District (WC&ID), or other special districts created and operating under the authority of the Texas Water Code. These districts are responsible for water, storm water, sanitary sewer, and waste management services for their districts. This includes operation of and maintenance and replacement of sanitary and storm sewer systems; and, for some districts, wastewater treatment plants. In addition, Missouri City owns its storm water infrastructure and is responsible for operation, maintenance, and replacement of its sanitary and storm sewer systems. Missouri City owns two wastewater treatment plants, which are both operated by separate contractors. Some less densely populated areas of the city have individual residential on-site sewage treatment systems.

## **Orders and Guidance**

Key City and District orders and guidelines that may be affected by this SWMP include:

- Contracts between Missouri City and its contractors
- Contracts between the Districts and their contractors
- Missouri City Ordinances
- Districts Rate Orders and Rules and Regulations

## **Construction and Development**

Missouri City and the Districts are responsible for plan review aspects within their jurisdiction. Construction projects are subject to the requirements of the TPDES Construction General Permit.

## **Inspection/Enforcement**

Missouri City and the Districts maintenance contractors report regulatory infractions as they are discovered during regular maintenance operations.

In Missouri City and the Districts, builders are required to install erosion control devices. The accumulation of any trash, sediment, dirt or any other debris or the washing of trash, sediment, dirt, and

all other debris into a drainage system is considered a violation. Builders are responsible for conducting regular inspections of their erosion control measures to ensure they are functioning properly.

## **SWMP Rationale**

This SWMP is designed to address storm water quality management issues typical of a growing residential community. Concerns specific to local watersheds were considered and specific BMPs were selected to effectively coordinate with existing activities and programs in the area.

## **SWMP Coverage**

This SWMP addresses the requirements of TPDES General Permit No. TXR040000. Multiple MS4s with several operators have participated in the development of this SWMP and are submitting separate NOIs and this jointly developed SWMP to meet the SWMP requirements in Part II.D.3 or Part III. for Missouri City and the following Districts: First Colony MUD #9, Fort Bend County MUDs #26, #42, #46, #47, #48, #49, and #115, Harris County MUD #122, Harris County WC&ID - Fondren Road, Meadowcreek MUD, Palmer Plantation MUD #1, Palmer Plantation MUD #2, Thunderbird Utility District, and Quail Valley Utility District. The requirements of this SWMP are only applicable to those portions of the applicants' MS4s that are located within urbanized areas. The SWMP includes copies of NOIs for Missouri City and these Districts in *Appendix B*.

Missouri City is the overall administrator for this SWMP. Each SWMP participant is responsible for compliance with the TPDES Phase II MS4 Permit and this SWMP for the facilities it operates. Each MS4 operator will be issued a distinct permit number.

## **SWMP Implementation Schedules**

The implementation schedules in the SWMP are proposed, based on available information. Where measurable goals are accomplished ahead of schedule, it will be reported in the Annual Report. In the event implementation schedule adjustments are needed, revisions to the SWMP will be made in accordance with the General Permit.

# Section 1 – Public Education and Outreach on Storm Water Impacts Minimum Control Measure

## 1.1 Permit Requirement (Part III.A.1.)

“A public education program must be developed and implemented to distribute educational materials to the community or conduct equivalent outreach activities that will be used to inform the public. The MS4 operator may determine the most appropriate sections of the population at which to direct the program. The MS4 operator must consider the following groups and the SWMP shall provide justification for any listed group that is not included in the program:

- residents;
- visitors;
- public service employees;
- businesses;
- commercial and industrial facilities; and
- construction site personnel.

The outreach must inform the public about the impacts that storm water run-off can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and steps that they can take to reduce pollutants in storm water runoff.

The MS4 operator must document activities conducted and materials used to fulfill this control measure. Documentation shall be detailed enough to demonstrate the amount of resources used to address each group. This documentation shall be retained in the annual reports required in Part IV.B.2 of this general permit.”

## 1.2 Existing Activities

### 1.2.1 Outreach

Missouri City currently operates a website (<http://www.missouricitytx.gov>) and a municipal (cable) television channel. The city develops and distributes numerous brochures providing information regarding city regulations, services, and programs. Developers in Missouri City and the Districts are required to install decals on storm drains with the message “Don’t Dump – Drains to Bayou” or a similar message.

### 1.2.2 Resource Education

The Missouri City Parks and Recreation Department operates 19 city parks with a total of approximately 646.6 acres. A number of these parks are associated with regional waterways or regional storm water management basins/lakes.

### **1.2.3 Litter Reduction**

Missouri City operates a drop-off recycling center for its residents. Some curbside recycling is also available through private solid waste contractors. Community service participants provide some litter pick-up in city parks.

### **1.2.4 Children and Youth**

Missouri City supports curriculum programs and activities in the Fort Bend ISD schools.

### **1.2.5 Business**

The Inspection Section of the Planning Department is the information center for codes and ordinances and provides information to residents on land use, setbacks, building code requirements, business occupancy, and health standards.

### **1.2.6 Public Employee Training**

General training consists of on-the-job training and attendance at seminars and workshops.

## **1.3 Program Implementation**

### **1.3.1 Storm Drain Decals by Developers**

Storm drain decals heighten public awareness about how most drainage systems are directly connected to receiving waters without any treatment. Missouri City currently requires developers within Missouri City and the Districts to install decals on storm drains in new developments. Storm drain decals contain the message “Don’t Dump – Drains to Bayou” or a similar message. The storm drain decal program will continue to be implemented.

#### *Measurable Goals*

- Adopt a requirement for developers to label storm drains in new communities.
- Continue storm drain decal program. Supply decals and instruction sheets.

#### *Rationale*

This is an established program that Missouri City will continue to implement. Storm drain decals heighten public awareness about how most drainage systems are directly connected to receiving waters without any treatment. This will help to inform the public about the impacts polluted storm water runoff can have on water quality and the hazards associated with illegal discharges and improper disposal of waste. Requirements for developers to label storm drains in new communities will be adopted into the city’s procedures as a measurable goal.

### **1.3.2 Storm Water Public Education Materials**

Missouri City and the Districts will develop or reprint and distribute storm water public education print materials on topics such as lawn and garden management, proper handling of household hazardous waste, littering, and commercial storm water impacts and waste management. Existing methods of distribution will be used, such as schools, libraries, neighborhood associations, mailers, city plan review and permitting processes, and District plan review processes.

*Measurable Goals*

- Evaluate and identify public education materials options and distribution methods in Permit Year 1.
- Based on evaluation conducted in Year 1, develop and provide appropriate public education materials in Permit Years 2 through 5.

*Rationale*

Use of public education materials is an effective means to reach a diverse group of people. This BMP will be used to inform the general public and specific target audiences, such as residents, visitors, public service employees, businesses, commercial and industrial facilities, and construction site personnel. Public education materials will address the impacts polluted storm water runoff can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and ways the public can minimize their impact on storm water quality. The measurable goals were selected to identify milestones in printing and distributing public education materials.

### **1.3.3 Website/Municipal Channel Storm Water Quality Message**

Missouri City currently operates a website and municipal channel. Missouri City will evaluate the use of public service announcements (PSAs) addressing issues affecting storm water quality such as littering, proper household hazardous waste disposal, proper used oil disposal, and other storm water quality issues. Based on the evaluation, if implemented, the PSAs will be played or shown on the city website and/or municipal channel. The website and municipal channel can be used to provide updates on upcoming events and volunteer opportunities.

*Measurable Goals*

- Placement of storm water quality information on the Missouri City website and/or municipal channel in Permit Years 1 through 5.

*Rationale*

Missouri City currently operates a website and municipal channel, which are used by local residents and businesses. Storm water quality PSAs, upcoming events, and/or volunteer opportunities will be evaluated for placement on these forms of media. The measurable goal was selected for implementation of the BMP.

## Section 2 – Public Involvement/Participation

### Minimum Control Measure

#### 2.1 Permit Requirement (Part III.A.2.)

##### Part III.A.2

“The MS4 operator must, at a minimum, comply with any state and local public notice requirements when implementing a public involvement/participation program. It is recommended that the program include provisions to allow all members of the public within the small MS4 the opportunity to participate in the storm water management program (SWMP) development and implementation. Correctional facilities will not be required to implement this Minimum Control Measure (MCM).”

##### Part II.D.12

“An applicant under this general permit must adhere to the following procedures:

- The applicant must submit the NOI and a SWMP to the executive director.
- 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 determination on the NOI and SWMP.
- The notice must include: The legal name of the MS4 operator; identify whether the NOI is for a new small MS4 or is a renewal of an existing operation; the address of the applicant; a brief summary of the information included in the NOI, such as the general location of the small MS4 and a description of the classified receiving waters that receive the discharges from the small MS4; the location and mailing address where the public may provide comments to the TCEQ; the public location where copies of the NOI and SWMP, as well as the executive director's general permit and fact sheet, may be reviewed; and if required by the executive director, the date, time, and location of the public meeting.
- This notice must be published at least once in the newspaper of largest circulation in the county where the small MS4 is located. If the small MS4 is located in multiple counties, the notice must be published at least once in the newspaper of largest circulation in the county containing the largest resident population. This notice shall provide opportunity for the public to submit comments on the NOI and SWMP. In addition, the notice shall allow the public to request a public meeting. A public meeting will be held if the TCEQ determines that there is significant public interest.
- The public comment period begins on the first date the notice is published and ends 30 days later, unless a public meeting is held. If a public meeting is held, the comment period will end at the closing of the public meeting. The public may submit written comments to the TCEQ Office of Chief Clerk during the comment period detailing how the NOI or SWMP for the small MS4 fails to meet the technical requirements or conditions of this general permit.
- If significant public interest exists, the executive director will direct the applicant to publish a notice of the public meeting and to hold the public meeting. The applicant must publish notice of a public meeting at least 30 days before the meeting and hold the public meeting in a county where the small MS4 is located. TCEQ staff will facilitate the meeting.
- If a public meeting is held, the applicant shall describe the contents of the NOI and SWMP. The applicant shall also provide maps and other data on the small MS4. The applicant shall provide a sign in sheet for attendees to register their names and addresses and furnish the sheet to the executive director. A public meeting held under this general permit is not an evidentiary proceeding.

- The applicant must file with the Chief Clerk a copy and an affidavit of the publication of notice(s) within 60 days of receiving the written instructions from the Office of Chief Clerk.
- The executive director, after considering public comment, shall approve, approve with conditions, or deny the NOI based on whether the NOI and SWMP meet the requirements of this general permit.
- Persons whose names and addresses appear legibly on the sign in sheet from the public meeting and persons who submitted written comments to the TCEQ will be notified by the TCEQ's Office of Chief Clerk of the executive director's decision regarding the authorization."

## **2.2 Existing Activities**

### **2.2.1 Volunteer Programs**

#### *Adopt-a-Spot*

Missouri City's parks and selected city roadways are available for adoption much like the Texas Department of Transportation's Adopt-A-Highway program. This program was created so that volunteer groups could adopt locations within the city to beautify and clean.

#### *Storm Drain Decals*

Missouri City currently provides storm drain decals for volunteer groups to apply to storm drains.

### **2.2.2 Stakeholder Meetings**

A local Storm Water Quality Stakeholders Group was formed in 2002.

Stakeholder meetings were held on the following dates:

- November 27, 2001
- February 26, 2002
- August 29, 2002
- January 7, 2003
- February 4, 2003
- May 1, 2003
- August 12, 2003
- August 10, 2004
- June 28, 2006
- December 10, 2007

## **2.3 Program Implementation**

### **2.3.1 Public Notice Requirements**

When implementing a public involvement/participation program, Missouri City and the Districts will comply with state and local public notice requirements. Following submission of the NOIs and SWMP and coordination with the TCEQ's Office of the Chief Clerk, Missouri City and the Districts will publish their

notices provided by TCEQ in the local newspaper of general circulation in the county of the availability of the SWMP for public review and comment and allow requests for a public meeting.

*Measurable Goals*

- Publish public notice in local newspaper as required by TCEQ in Permit Year 1.
- If required, publish notice of public meeting in the local newspaper in Permit Year 1.
- If required, hold public meeting in Permit Year 1.

*Rationale*

This BMP was selected for compliance with state and local public notice requirements. The measurable goals identify some of the methods of notice that will be used.

### **2.3.2 Storm Drain Decals By Volunteers**

Storm drain decals heighten public awareness about how most drainage systems are directly connected to receiving waters without any treatment. Missouri City provides storm drain decals with the message “Don’t Dump – Drains to Bayou” or a similar message. These decals can be applied by volunteer groups in areas of the city that have not been covered by the developer’s decals or where decals have come off.

*Measurable Goals*

- Identify areas where decals need to be installed in Permit Year 1.
- Supply decals, kits, and instruction sheets, track number of drains marked in Permit Year 1 through 5.

*Rationale*

This is an established program that Missouri City will continue to implement. The city provides storm drain decals for volunteer groups to apply to storm drains. This BMP allows volunteer groups the opportunity to aid in the implementation of the Storm Water Management Program by helping to inform the public about the impacts polluted storm water runoff can have on water quality. The measurable goals identify milestones for this BMP.

### **2.3.3 Make Presentations on Storm Water Management Program**

Implementation of the SWMP will be facilitated by familiarizing City Council, district staff and Board members, district operators, the regulated community, and the public on the requirements of the program. Missouri City and the Districts will organize presentations to help get the information out for discussion and input.

*Measurable Goals*

- Conduct presentations to the City Council, district staff and Board members, district operators, the regulated community, and the public in Permit Year 2, as appropriate.
- If a public meeting is requested, make presentations to interested parties in Permit Year 2.

*Rationale*

Missouri City and the Districts will organize presentations to help familiarize City Council, district staff and Board members, district operators, the regulated community, and the public with the requirements of the program. This BMP will provide information on storm water quality and allow the constituents within the MS4 area the opportunity to aid in the development and implementation of the SWMP. The measurable goals identify presentations to be conducted during Permit Year 2.

### **2.3.4 Form Stakeholders Group**

Missouri City and the Districts will form a Stakeholders Group, hold meetings, and obtain input on the development and implementation of the SWMP.

*Measurable Goals*

- Hold meetings to involve the City, Districts, developers, businesses, and other stakeholders in the BMP development process at least once per year throughout the permit term.

*Rationale*

Missouri City and the Districts will form a Stakeholders Group to obtain input on the development and implementation of the SWMP. The measurable goals identify meetings to be conducted during the development process.

### **2.3.5 Volunteer Opportunities: Adopt-A-Stream and Adopt-A-Watershed Programs**

Missouri City has existing Adopt-A-Road and Adopt-A-Park programs. Missouri City and the Districts will organize similar volunteer opportunities in the community for storm water quality improvement such as Adopt-A-Stream and Adopt-A-Watershed programs.

*Measurable Goals:*

- Evaluate volunteer opportunities in Permit Year 1.
- Develop volunteer opportunities program in Permit Year 2.
- Provide training events for volunteers in Permit Years 2 through 5.
- Implement one trash cleanup per year in Permit Years 2 through 5.

*Rationale*

Missouri City currently has other volunteer programs that will be used as a format to organize similar volunteer opportunities in the community for storm water quality improvement.

This BMP will allow volunteer groups the opportunity to aid in the implementation of the storm water management program. The measurable goals identify milestones for the development of this BMP and goals for volunteer participation.

# Section 3 – Illicit Discharge Detection and Elimination Minimum Control Measure

## 3.1 Permit Requirement (Part III.A.3.)

### Illicit Discharges

“A section within the SWMP must be developed to establish a program to detect and eliminate illicit discharges to the small MS4. The SWMP must include the manner and process to be used to effectively prohibit illicit discharges. To the extent allowable under state and local law, an ordinance or other regulatory mechanism must be utilized to prohibit and eliminate illicit discharges. Elements must include:

- Detection - The SWMP must list the techniques used for detecting illicit discharges; and
- Elimination - The SWMP must include appropriate actions and, to the extent allowable under state and local law, establish enforcement procedures for removing the source of an illicit discharge.”

### Allowable Non-Storm Water Discharges

“Non-storm water flows listed in Part II.B and Part VI.B do not need to be considered by the MS4 operator as an illicit discharge requiring elimination unless the operator of the small MS4 or the executive director identifies the flow as a significant source of pollutants to the small MS4. In lieu of considering non-storm water sources on a case-by-case basis, the MS4 operator may develop a list of common and incidental non-storm water discharges that will not be addressed as illicit discharges requiring elimination. If developed, the listed sources must not be reasonably expected to be significant sources of pollutants either because of the nature of the discharge or the conditions that are established by the MS4 operator prior to accepting the discharge to the small MS4. If this list is developed, then all local controls and conditions established for these listed discharges must be described in the SWMP and any changes to the SWMP must be included in the annual report described in Part IV.B.2 of this general permit, and must meet the requirements of Part II.D.3 of the general permit.”

### Storm Sewer Map

“A map of the storm sewer system must be developed and must include the following:

- The location of all outfalls;
- The names and locations of all waters of the U.S. that receive discharges from the outfalls; and
- Any additional information needed by the permittee to implement its SWMP.

The SWMP must include the source of information used to develop the storm sewer map, including how the outfalls are verified and how the map will be regularly updated.”

## 3.2 Existing Activities

### 3.2.1 Mapping

Missouri City requires developers to provide Geographic Information System (GIS) compatible electronic files of commercial and residential development drawings. These files include storm drainage system features. These files are being integrated into an overall Missouri City and Districts drainage system map.

### 3.2.2 Inspections and Enforcement

Missouri City provides inspections for construction activities, food establishments, residential housing, and changes of occupancy. Missouri City's Public Works Department investigates drainage, street, and other infrastructure problems when requested by citizens. The City's Code Enforcement Division enforces zoning laws, city codes, and state and local health codes. The Districts provide inspections for activities and facilities within their Districts.

## 3.3 Program Implementation

### 3.3.1 Illicit Discharge Ordinance/Regulatory Mechanism

Missouri City and the Districts will develop a regulatory mechanism or modify existing regulatory mechanisms to address illicit discharges to the MS4. The regulatory mechanism will prohibit illicit discharges and connections, non-storm water discharges that significantly contribute pollutants to the MS4, and illegal dumping. It will include appropriate enforcement procedures and actions and will establish legal authority to carry out inspection surveillance and monitoring procedures necessary to ensure compliance with the ordinance or other regulatory mechanism. The ordinance or other regulatory mechanism will also identify a list of occasional incidental non-storm water discharges, if any, that will not be addressed as illicit discharges.

#### *Measurable Goals*

- Evaluate options to create ordinance/regulatory mechanism in Permit Year 1.
- Develop draft ordinance/regulatory mechanism in Permit Year 2.
- Conduct City staff, District consultant, and public review, as appropriate, and collect comments on draft ordinance/regulatory mechanism in Permit Year 2.
- Finalize ordinance/regulatory mechanism in Permit Year 2.
- Adopt ordinance/regulatory mechanism in Permit Year 3.
- Implement ordinance/regulatory mechanism in Permit Year 3 through 5.

#### *Rationale*

Missouri City and the Districts will develop an ordinance or regulatory mechanism or modify existing regulatory mechanisms to effectively prohibit illicit discharges to the MS4. The measurable goals identify the steps in the development of a regulatory mechanism or modification of existing regulatory mechanism to achieve this BMP.

### 3.3.2 Storm Drainage System Map

Missouri City requires developers to provide GIS-compatible electronic files of commercial and residential development drawings. These files will be integrated into an overall Missouri City and Districts storm drainage system map.

Missouri City and the Districts will develop a map of the storm drainage system that shows the Waters of the United States and the location of major storm sewer pipes, ditches, and other conveyances owned or operated by the City and the Districts within the SWMP coverage, as well as any additional information needed by the City to implement this BMP. The map will also show the locations of major outfalls to the Waters of the United States.

#### *Measurable Goals*

- Develop baseline storm drainage system map for City and District systems, using existing information in Permit Year 2.
- Complete integration of developer-provided drainage information into the city drainage map in Permit Year 2.
- Field verify, identify, locate, and map additional drainage features for City System in Permit Year 2.
- Coordinate participating District drainage system mapping information in Permit Year 2.
- Field verify, identify, locate, and map additional drainage features for District Systems in Permit Year 2
- Complete integration of District-provided drainage information into the City drainage map in Permit Year 3.
- Finalize Storm Drainage System Map in Permit Year 3.

#### *Rationale*

Missouri City is currently developing a storm drainage system map. The measurable goals identify the steps in the development of the map based on District-provided information and from identification and mapping by the City and the Districts.

### 3.3.3 Database / List of Businesses

Missouri City maintains a database of businesses in their municipality. This database will assist in the distribution of public education materials and will potentially aid in the investigation to identify businesses that may be contributing illicit discharges.

#### *Measurable Goals*

- Continue to maintain and update database of businesses throughout the Permit Term.

#### *Rationale*

Missouri City is currently maintaining a database of businesses in the area. The Districts will aid in maintaining and updating this database. This BMP will aid the City and the Districts in the detection and elimination of illicit discharges by identifying businesses that may be contributing illicit discharges to the MS4. The measurable goal helps keep the database current.

### 3.3.4 Septic System Identification and Inspection

New septic systems will be inspected for proper installation. In response to complaints, Missouri City and the Districts will investigate areas where septic systems are suspected of not functioning properly. The systems will be evaluated for indicators of improper septic system operation using tracer characteristics or other parameters. Follow-up investigations will be conducted where possible impacts from septic systems are indicated. Missouri City and the Districts will identify and require or facilitate repair of septic systems that are failing to treat wastewater properly.

#### *Measurable Goals*

- Develop process to evaluate new septic systems for potential storm water quality impacts in Permit Year 1.
- Evaluate new septic systems for potential storm water quality impacts during inspections in Permit Years 2 through 5.
- Investigate areas with septic systems in response to complaints in Permit Years 2 through 5.

#### *Rationale*

Missouri City is currently performing other inspection and enforcement programs. Missouri City and the Districts have septic systems operating within their jurisdictions. These can potentially impact storm water quality if not operating properly. The measurable goals selected will allow for inspections of new septic systems and time to develop the illicit discharge investigation methodology and evaluation of potential problem septic systems during the permit term.

### 3.3.5 Illicit Discharge Detection and Elimination Program

The illicit discharge detection and elimination programs will include one or more of the following:

- Provide contact information for reporting illicit discharges or dumping.
- Respond to complaints and suspected illicit discharges identified during performance of routine operations.
- Develop program to shadow other field activities to screen for illicit discharges and develop follow-up procedures.

Due to the limited legal authority of the Districts, follow up procedures may include notification of the District(s) in which the discharge is located and/or notification of the TCEQ.

#### *Measurable Goals*

- Respond to complaints received in Permit Years 1 through 5.
- Implement routine inspection program in Permit Years 1 through 5.
- Develop Illicit Discharge Screening Program protocol in Permit Year 2.
- Screen 33 percent of outfalls per year in Permit Years 3, 4, and 5.

*Rationale*

Missouri City and the Districts are currently performing other inspection and enforcement programs. This BMP will be based on these programs to develop an illicit discharge detection and elimination program. The measurable goals will quantify the performance of the program.

**3.3.6 Household Hazardous Waste Collection Event**

Fort Bend County holds collection events to collect household hazardous waste (HHW). The City and the Districts will help publicize or promote participation in the Fort Bend County HHW events.

*Measurable Goals*

- Publicize Fort Bend County's HHW collection events in Permit Years 1 through 5.

*Rationale*

Missouri City and the Districts will coordinate with Fort Bend County to publicize their HHW collection program. This BMP will help reduce the number of illicit discharges by giving other means to dispose of hazardous materials and waste. The measurable goal selected will raise public awareness about the collection event and allow the City and the Districts to support the established program.

# Section 4 – Construction Site Storm Water Runoff Control Minimum Control Measure

## 4.1 Permit Requirement (Part III.A.4.)

“The MS4 operator, to the extent allowable under State and local law, must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre or if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more of land. The MS4 operator is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from sites where the construction site operator has obtained a waiver from permit requirements under NPDES or TPDES construction permitting requirements based on a low potential for erosion.

The program must include the development and implementation of, at a minimum, an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under state and local law.

Requirements for construction site contractors to, at a minimum:

- implement appropriate erosion and sediment control BMPs; and
- control waste such as discarded building materials, concrete truck washout water, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

The MS4 operator must develop procedures for:

- site plan review which incorporate consideration of potential water quality impacts;
- receipt and consideration of information submitted by the public; and
- site inspection and enforcement of control measures to the extent allowable under state and local law.”

## 4.2 Existing Activities

### 4.2.1 Plan Review

Missouri City’s Engineering Section of the Department of Public Works reviews engineering construction site plans and the Districts employ District Engineers to review site plans. Missouri City conducts pre-construction meetings with contractors to inform them of requirements and answer questions.

### 4.2.2 Inspections

Missouri City’s Engineering Section of the Department of Public Works inspects for the effectiveness of erosion and sediment controls. The City’s Inspection Section of the Planning Department performs construction inspections for all building, plumbing, electrical, mechanical, and major construction improvement permits. Builders/Contractors are responsible for conducting regular inspections of their erosion control measures to ensure they are functioning properly, in accordance with the TPDES Construction General Permit No. TXR150000.

### **4.2.3 City Construction Projects**

Missouri City's Engineering Department coordinates city construction and planning activities. It develops and administers city-funded projects and inspects public improvements.

### **4.3.4 District Construction Projects**

For the Districts, District Engineers coordinate District construction and planning activities, develops and administers District-funded projects, and inspects public improvements. District construction projects comply with the TPDES Construction General Permit No. TXR150000, as applicable.

## **4.3 Program Implementation**

### **4.3.1 Construction Site Storm Water Runoff Control Ordinance/Order**

Missouri City and the Districts will develop an ordinance/order or modify existing regulatory mechanism to require erosion and sediment controls, as well as sanctions, to ensure compliance. The ordinance/order or regulatory mechanism will allow the City and the Districts to develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to 1 acre or for a construction activity that is part of a larger common plan of development or sale that would disturb 1 acre or more.

#### *Measurable Goals*

- Evaluate existing ordinances/orders or regulatory mechanisms which may require modification in Permit Year 1.
- Develop draft ordinance/order and/or modification in Permit Year 2.
- Conduct City staff, District consultant, and public review, as appropriate, and collect comments on draft regulatory mechanism in Permit Year 2.
- Finalize regulatory mechanism in Permit Year 2.
- Adopt regulatory mechanism in Permit Year 3.
- Implement regulatory mechanism in Permit Year 3 through 5.

#### *Rationale*

Missouri City and the Districts will develop an ordinance/order or modify existing regulatory mechanism to require erosion and sediment controls, as well as sanctions, to ensure compliance. The measurable goals identify the steps in the development of an ordinance/order or modification of existing regulatory mechanism to achieve this BMP.

### **4.3.2 Site Plan Review Program**

Missouri City and the Districts will develop procedures for engineering construction site plan reviews that incorporate consideration of potential water quality impacts of construction activities. City staff will evaluate the current site plan review process to address storm water quality impacts. Drainageways and potential impacts of activities are evaluated in a pre-construction site visit. For the Districts, operators will be required to submit a copy of their NOI and Storm Water Pollution Prevention Plan (SWPPP) to the District Engineer.

*Measurable Goals*

- Evaluate current plan review process for storm water quality in Permit Year 1.
- Develop criteria checklists and begin review of submitted SWPPP in Permit Year 2.
- Conduct pre-construction site visits to 50 percent of construction projects in Permit Year 3.
- Conduct pre-construction site visits to 100 percent of construction projects in Permit Years 4 and 5.

*Rationale*

Missouri City and the Districts currently have site plan review processes, which will be evaluated and revised to address consideration of potential storm water quality impacts of construction activities. The measurable goals identify steps in the development and implementation of this BMP.

### **4.3.3 Construction Site Inspection Program**

Missouri City and the Districts will develop procedures for a construction site inspection program and enforcement of controls. District Engineers will develop procedures for a construction site inspection program. Violations of the TPDES Construction General Permit No. TXR150000 will be reported to the applicable District(s) and, if necessary, may also be reported to the TCEQ for enforcement.

*Measurable Goals*

- Attend training program for construction site inspections in Permit Year 1, if available.
- Evaluate inspection plan in Permit Year 1.
- Develop inspection plan and procedure checklists in Permit Year 2.
- Inspect 100 percent of construction sites in Permit Years 3, 4, and 5.

*Rationale*

Missouri City and the Districts are currently performing other inspection and enforcement programs. This BMP will be coordinated with the existing programs to include construction site inspection and enforcement of control measures. The measurable goals selected will allow time to develop the program and begin implementation of the inspection program.

### **4.3.4 Reporting Hotline**

Missouri City and the Districts will develop procedures for receipt and consideration of information submitted by the public regarding construction site storm water controls.

*Measurable Goals*

- Set up storm water construction reporting hotline in Permit Year 2.
- Publicize reporting hotline in Permit Year 2.
- Respond to all hotline reports in Permit Years 3 through 5.

*Rationale*

Missouri City and the Districts will develop a reporting hotline. This BMP will allow the City and the Districts to receive and consider information submitted by the public regarding construction site storm

water controls. The measurable goals selected will allow time to develop and implement the inspection program.

#### **4.3.5 Guidance Manual**

Missouri City and the Districts will adopt the National Association of Home Builders' (NAHB's) *Guide for Builders and Developers* or the City of Houston and Harris County's *Storm Water Management Handbook for Construction Activities* or other manual that provides guidance on compliance with the construction general permit.

##### *Measurable Goals*

- Adopt guidance manual / handbook in Permit Year 2.
- Distribute or otherwise provide access to guidance manual / handbook to contractors applying for construction permits in Permit Years 2 through 5.

##### *Rationale*

Missouri City and the Districts will adopt a guidance handbook to address storm water requirements for construction site contractors. The measurable goals identify steps in the adopting and distribution of a guidance handbook.

#### **4.3.6 Good Housekeeping Education**

Missouri City and the Districts will promote good housekeeping education for construction site operation as part of the pre-construction meetings with contractors. Brochures will be prepared for distribution to contractors.

##### *Measurable Goals*

- Develop or use existing print brochures in Permit Year 2.
- Print and distribute brochure on good housekeeping, waste controls, storm water pollution minimization, and TPDES Construction General Permit No. TXR150000 compliance during plan review in Permit Years 2 through 5.

##### *Rationale*

Missouri City and the Districts will promote good housekeeping education for construction site contractors by providing information on issues such as control of waste, concrete truck washout water, chemicals, litter, and sanitary waste. The measurable goals were selected to identify milestones in printing and distributing educational materials to construction site personnel.

#### **4.3.7 Construction Site Operations Storm Water Training**

Missouri City will conduct pre-construction meetings with contractors regarding construction projects in the city. These meetings will include training for site operators on storm water pollution minimization and compliance with the storm water construction general permit.

##### *Measurable Goals*

- Develop and print brochures regarding construction general permit compliance in Permit Year 2.
- Distribute brochure on construction general permit compliance in Permit Years 3 through 5.

*Rationale*

Missouri City and the Districts currently conduct pre-construction meetings with contractors. This BMP incorporates storm water construction general permit compliance training in those meetings. The measurable goals selected will allow time to develop and implement the training.

# Section 5 — Post-Construction Storm Water Management in New Development and Redevelopment Minimum Control Measure

## 5.1 Permit Requirement (Part III.A.5.)

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

- Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community;
- Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under state and local law; and
- Ensure adequate long-term operation and maintenance of BMPs.”

## 5.2 Existing Activities

### 5.2.1 Plan Review

Missouri City’s Planning Department administers land use regulations. It reviews all subdivision plat applications and rezoning requests and provides recommendations to the City’s Planning and Zoning Commission. It reviews and approves all proposed building, site, and sign permits. For the Districts, developers are required to submit plans to the District Engineer for review.

### 5.2.2 Inspections

Public improvements are inspected by the City’s Engineering Department. The Code Enforcement and Inspections Sections of the Planning Department provide residential, change of occupancy, zoning, city code, and health code inspections.

### 5.2.3 Structural Controls

Missouri City has an extensive and well-established system of regional storm water management facilities in ten major watersheds. These facilities already have incorporated some design features that are accepted BMPs for storm water quality treatment, such as vegetated swales, wet ponds, and constructed wetlands.

## 5.3 Program Implementation

### 5.3.1 Create an Ordinance / Regulatory Mechanism

Missouri City and the Districts will develop an ordinance or modify an existing ordinance or other regulatory mechanism to address management of post-construction runoff from new development and

redevelopment. The regulation will allow the City to develop, implement, and enforce a program to address storm water runoff to the MS4 from new development and redevelopment projects that disturb one acre or more, including projects less than one acre that are part of a larger common plan of development or sale that will result in the disturbance of one or more acres.

*Measurable Goals*

- Evaluate existing ordinances and/or regulatory mechanisms that might require modification in Permit Year 1.
- Develop draft ordinance and/or modification of a regulatory mechanism in Permit Year 2.
- Conduct City staff, District consultant, and public review, as appropriate, and collect comments on draft ordinance or regulatory mechanism in Permit Year 2.
- Finalize ordinance or regulatory mechanism in Permit Year 2.
- Adopt ordinance or regulatory mechanism in Permit Year 3.
- Implement ordinance or regulatory mechanism in Permit Year 3 through 5.

*Rationale*

Missouri City and the Districts will develop an ordinance or modify existing ordinances or regulatory mechanism to require management of post-construction storm water runoff from new development and redevelopment projects. The measurable goals identify the steps in the development of an ordinance or modification of existing ordinances to achieve this BMP.

### **5.3.2 Evaluate Regional Storm Water Management System Facilities**

The watersheds will be evaluated for storm water quality management functions. Missouri City has an extensive and well-established system of regional storm water management facilities in ten major watersheds. These facilities have already incorporated some design features that are accepted BMPs for storm water quality treatment, such as vegetated swales, wet ponds, and constructed wetlands. Existing City and District facilities will be identified. Where feasible, recommendations will be made for improvements to the storm water facilities that will enhance their storm water quality management capabilities. Missouri City and the Districts will incorporate storm water quality features into designs of future storm water drainage facilities. Storm water quality strategy considerations will be added to the requirements for regional drainage system development and/or developer-provided drainage features.

*Measurable Goals*

- Evaluate regional storm water management system facilities in Permit Year 2.
- Develop an evaluation report for the storm water management system evaluation in Permit Year 3.
- Incorporate storm water quality considerations into designs of future storm water drainage facilities in Permit Years 3 through 5.

*Rationale*

Missouri City has several regional drainage impoundments, which will be evaluated for feasibility to retrofit with storm water quality features. Existing City and District regional facilities will be identified. This BMP will help to identify regional structural BMPs appropriate for the community. The measurable goal identifies a report of the evaluation of the regional drainage facilities. Missouri City and the Districts will include storm water quality considerations in the criteria for regional drainage system development and/or

developer-provided drainage features. The measurable goals address the addition of storm water quality considerations for regional drainage system development.

### **5.3.3 Long-Term Inspection and Maintenance Plan Requirement for Storm Water Structural Controls**

Missouri City and the Districts will revise the plan review process to require developers of commercial and residential property to submit plans and provisions for long-term inspection and maintenance of any structural controls implemented to maintain storm water quality. Maintaining proper long-term functioning of structural controls reduces the potential impact of storm water runoff.

#### *Measurable Goals*

- Review and update existing procedure/checklist to review development plans for provision of long-term inspection and maintenance in Permit Year 2.
- Implement procedure/checklist to review development plans for provision of long-term inspection and maintenance in Permit Year 3 through 5.

#### *Rationale*

Missouri City and the Districts will revise the plan review process to require developers of commercial and residential property to submit plans and provisions for long-term inspection and maintenance of any structural controls implemented to maintain storm water quality. This BMP will help to ensure adequate long-term operation and maintenance of BMPs. The measurable goal identifies the implementation of this BMP.

### **5.3.4 Review / Revise Development Review Procedures**

Missouri City and the Districts will evaluate their development review procedures to address post-construction controls for new development and redevelopment in areas where needed. Incorporating the review of storm water quality features into the plan review process ensures that storm water quality objectives are addressed at an early stage of the development.

#### *Measurable Goals*

- Review existing procedures in Permit Year 1.
- Update existing procedures in Permit Year 2.
- Implement updated procedures in Permit Years 3 through 5.

#### *Rationale*

Missouri City and the Districts will evaluate the development review procedures to address post-construction storm water management. This BMP will ensure that storm water quality objectives are addressed at an early stage of the development. The measurable goals identify milestones in the development and implementation of this BMP.

### **5.3.5 Inspection of Completed Projects**

Inspectors will check completed projects for proper construction of permanent structural controls in compliance with approved plans. The proper construction of permanent controls is necessary for the success of the long-term functionality of the facilities.

*Measurable Goals*

- Develop inspection checklist in Permit Year 2.
- Check all completed projects for implementation of structural controls in Permit Years 3 through 5.

*Rationale*

Missouri City and the Districts are currently performing other inspection and enforcement programs. This BMP will be coordinated with the existing programs to include inspection of completed projects for proper construction of permanent structural controls. The measurable goals identify the two phases in the development of this program.

### **5.3.6 Community Outreach (Developers, Neighborhood Associations)**

Missouri City and the Districts will conduct an outreach program and prepare informational outreach materials for the development community. Outreach programs increase public awareness about storm water quality issues. Part of the outreach program will include public meetings held in conjunction with development of the ordinance.

*Measurable Goals*

- Evaluate informational materials in Permit Year 1.
- Develop materials in Permit Year 2.
- Distribute materials in Permit Years 3 through 5.

*Rationale*

Missouri City and the Districts will conduct an outreach program and prepare informational outreach materials for the development community that will facilitate understanding of the MS4 permit requirements for storm water runoff from new development and redevelopment. The measurable goals identify steps in the development of community outreach.

### **5.3.7 Encourage Low Impact Designs**

Missouri City and the Districts will encourage development design criteria to allow low impact designs for storm water quality where these alternatives do not conflict with other code requirements. These design alternatives strive to maintain pre-development conditions, so that downstream structural controls are not necessary.

*Measurable Goals*

- Evaluate design standards for potential modifications to allow alternative designs, such as low impact design(s), in Permit Years 1 through 5.

*Rationale*

By encouraging developers to maintain pre-development conditions, impacts of the project on storm water quality are minimized. The measurable goal identifies the modification of the design standards.

# Section 6 — Pollution Prevention/Good Housekeeping for Municipal Operations

## Minimum Control Measure

### 6.1 Permit Requirement (Part III.A.6.)

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

#### Good Housekeeping and Best Management Practices (BMPs)

“Housekeeping measures and BMPs (which may include new or existing structural or non-structural controls) must be identified and either continued or implemented with the goal of preventing or reducing pollutant runoff from municipal operations. Examples of municipal operations and municipally owned areas include, but are not limited to:

- park and open space maintenance;
- street, road, or highway maintenance;
- fleet and building maintenance;
- storm water system maintenance;
- new construction and land disturbances;
- municipal parking lots;
- vehicle and equipment maintenance and storage yards;
- waste transfer stations; and
- salt/sand storage locations.”

#### Training

“A training program must be developed for all employees responsible for municipal operations subject to the pollution prevention/good housekeeping program. The training program must include training materials directed at preventing and reducing storm water pollution from municipal operations. Materials may be developed, or obtained from the EPA, states, or other organizations and sources. Examples or descriptions of training materials being used must be included in the SWMP.”

#### Structural Control Maintenance

“If BMPs include structural controls, maintenance of the controls must be performed at a frequency determined by the MS4 operator and consistent with maintaining the effectiveness of the BMP. The SWMP must list all of the following:

- maintenance activities;
- maintenance schedules; and
- long-term inspection procedures for controls used to reduce floatables and other pollutants.”

## **Disposal of Waste**

"Waste removed from the small MS4 and waste that is collected as a result of maintenance of storm water structural controls must be properly disposed. A section within the SWMP must be developed to include procedures for the proper disposal of waste, including:

- dredge spoil;
- accumulated sediments; and
- floatables."

## **Municipal Operations and Industrial Activities**

"The SWMP must include a list of all:

- municipal operations that are subject to the operation, maintenance, or training program developed under the conditions of this section; and

municipally owned or operated industrial activities that are subject to TPDES industrial storm water regulations."

## **6.2 Existing Activities**

### **6.2.1 Street Sweeping**

Missouri City currently performs street sweeping on a regular basis.

### **6.2.2 Fleet Maintenance**

All preventive maintenance and repairs of City vehicles, heavy equipment, and tools are performed by the Fleet Maintenance Division of the Public Works Department. These maintenance activities are performed at the City Service Center. Repairs may be performed in the field, as needed.

### **6.2.3 Infrastructure Maintenance**

The Streets, Drainage and Traffic Division of the Public Works Department provide preventive maintenance of City-owned streets, bridges, and traffic control devices. The Parks and Recreation Department mows the City rights-of-way on a regular basis. The Districts maintain the storm water drainage systems and District facilities within their respective Districts.

### **6.2.4 Municipal Operations and Industrial Activities**

Missouri City and the Districts have the following types of operations and industrial activities that are subject to the TPDES industrial storm water regulations:

- Missouri City Service Center
- Missouri City Wastewater Treatment Plant
- Districts Wastewater Treatment Plants
- Districts Water Treatment Plants
- Districts Maintenance Facilities
- Parks

- Drainage System

*Measurable Goals*

Missouri City and the Districts will update the SWMP to include a list of the specific Missouri City and District facilities that are subject to the TPDES industrial storm water regulations in Permit Year 2.

*Rationale*

The measurable goal to update the SWMP implements a permit requirement for municipal operations and industrial activities during the first two years.

## **6.3 Program Implementation**

### **6.3.1 Structural Control Maintenance**

As part of the evaluation of the existing regional storm water management system, an inventory of existing City-managed structural controls and District-operated structural controls will be established. An inspection and maintenance schedule will be established for these structural controls to promote their effective operation for storm water quality treatment, where applicable.

*Measurable Goals*

- Review and evaluate existing structural control maintenance procedures in Permit Years 1.
- Develop inventory of City and District structural controls in Permit Year 2.
- Develop inspection and maintenance schedule in Permit Year 3.
- Implement inspection and maintenance program in Permit Years 4 and 5.

*Rationale*

Missouri City and the Districts are currently performing other inspection and maintenance programs. Coordination with local Districts will be required to develop an inventory and maintenance schedule for the drainage system. The measurable goals selected will allow time to develop and implement the program, which will address maintenance activities, maintenance schedules, and long-term inspection procedures.

### **6.3.2 Waste Disposal**

Missouri City and the Districts will establish a procedure for proper disposal of wastes including dredge spoil, accumulated sediments, and floatables removed from the MS4, removed from structural controls, or collected as a result of municipal operations and maintenance activities. Continue the City's "Use It or Lose It" program to remove non-useable materials from City and District facilities.

*Measurable Goals*

- Evaluate Missouri City and District facilities for proper waste disposal practices in Permit Year 1.
- Develop storm water waste management procedure in Permit Year 2.
- Train employees on proper storm water waste management procedures in Permit Year 2.
- Review and inspect Missouri City and District facilities for proper waste disposal in Permit Years 2 through 5.

*Rationale*

Missouri City and the Districts will develop procedures for the proper disposal of waste. The measurable goals selected identify the development and implementation of the program.

### **6.3.3 Municipal Employee Training**

Missouri City will develop and provide employee training to prevent and reduce storm water pollution from activities such as park maintenance, fleet and building maintenance, new construction land disturbance, and storm water system maintenance. The Districts contract out all services which would require pollution prevention and good housekeeping. The Districts will provide copies of the permit and SWMP and require training for District contractors to prevent and reduce storm water pollution from municipal-type activities. Training programs ensure that storm water quality programs are properly implemented and BMPs are properly installed and maintained.

*Measurable Goals*

- Provide training materials for Missouri City and District Boards of Directors and contractors in Permit Year 2.
- Require training to prevent and reduce storm water pollution from activities related to municipal operations in Permit Years 2 through 5.

*Rationale*

Training of municipal employees and contractors will minimize impacts of municipal operations on storm water quality. The measurable goals selected will allow for the development of training materials and implementation of the training program early in the permit implementation.

### **6.3.4 Street Sweeping**

Missouri City employs street sweepers on a regular basis to minimize the migration of dirt, debris, and other pollutants from streets to receiving waters. Collected materials are properly disposed. Sweeping frequency is be prioritized by areas with highest pollution potential.

*Measurable Goals*

- Continue to identify priority areas for street sweeping in Permit Years 1 through 5.
- Evaluate need for additional equipment or contract services in Permit Years 1 through 5.

*Rationale*

Missouri City currently operates two street sweepers within the City and Districts. This program will be expanded to employ street sweepers on a regular basis to minimize the migration of dirt, debris, and other pollutants to receiving waters. The measurable goals identify steps in the development of this BMP.

### **6.3.5 Litter Control**

Missouri City and the Districts will implement a scheduled program for removal of litter from municipal and public facilities, streets, parking areas, and other District-controlled property by the District contractors.

*Measurable Goals*

- Require litter control at municipal operations sites in Permit Year 1.
- Continue programs to collect litter from parks, public facilities, parking lots, and other District-controlled property on a regular basis in Permit Years 1 through 5.

*Rationale*

This program will employ litter control requirements to minimize the migration of floatables and pollutants to receiving waters. This BMP works in conjunction with public participation volunteer opportunities such as Adopt-A-Stream programs. The measurable goals identify steps in the implementation and continuation of this BMP.

### **6.3.6 Vehicle and Equipment Washing**

Missouri City has a new wash facility that was recently built as part of the capital improvements for the City's Service Center facility. This system has been designed to recycle and/or discharge the wash water to the sanitary sewer system.

*Measurable Goals*

- Continue washing of Missouri City municipal vehicles and equipment at existing wash facility in Permit Years 1 through 5.

*Rationale*

Missouri City currently uses a new vehicle and equipment washing facility that complies with non-storm water discharge requirements by recycling and/or discharging to the sanitary sewer. The measurable goals identify milestones in the continued use of a vehicle and equipment washing facility.

### **6.3.7 Evaluate Existing Regional Drainage Facilities**

Missouri City and the Districts have a number of existing regional drainage facilities. These facilities will be evaluated for pollution prevention and good housekeeping measures.

*Measurable Goals*

- Compile list of City and District regional drainage facilities in Permit Year 1.
- Evaluate pollution prevention / good housekeeping at City and District regional drainage facilities in Permit Year 2.

*Rationale*

Missouri City and the Districts have several regional drainage facilities, which will be evaluated for pollution prevention and good housekeeping measures. The measurable goals identify evaluation of the regional drainage measures.

### **6.3.8 Spill Prevention and Response**

Missouri City and the Districts will develop procedures and acquire equipment for containment and timely response to spills from municipal operations. The Districts will require contractors to have adequate spill

kits available at facilities they operate and comply with spill prevention and response requirements as appropriate.

*Measurable Goals*

- Develop procedures and train employees for Municipal Operations in Permit Year 1.
- Evaluate and acquire containment and response equipment, as appropriate, in Permit Year 2, as appropriate.
- Require contractors to include requirements for spill kits and comply with spill prevention and response requirements, when applicable, in Permit Years 1 through 5.
- Implement spill prevention and response procedure in Permit Years 1 through 5.

*Rationale*

Preventing spills from entering the MS4 reduces storm water quality impacts. The measurable goals address the implementation of this BMP.

### **6.3.9 Facility Inspection Program**

Missouri City and the Districts will formalize municipal facility inspection procedures that potentially affect storm water quality. This will include routine inspection of facilities and equipment operated by the City and those operated by the Districts and inspection of storm water quality facilities.

*Measurable Goals*

- Continue to require municipal facilities inspections in Permit Years 1 through 5.
- Missouri City and the Districts will review inspection records annually in Permit Years 1 through 5.

*Rationale*

Timely inspection of municipal operations can minimize the discharge of pollutants to the MS4. Inspection of storm water quality facilities ensures their proper operation. The measurable goals address the development and implementation of this BMP.

### **6.3.10 Service Center Stockpile Area**

Missouri City will install filter fabric fencing around the retaining structure for stockpiled road repair materials to minimize sediment or other stockpile material from entering storm water municipal runoff.

*Measurable Goals*

- Install filter fabric in Permit Year 1.
- Inspect and replace, if necessary, filter fabric fencing around stockpile in Permit Years 2, 3, 4, & 5.

*Rationale*

Stockpiles are currently maintained in three-sided bins constructed of timbers. The bins are surrounded by grassy vegetation. The filter fabric will assist in retention of sediments from the stockpiled materials on-site.

## Section 7 — MS4 Operators Contributing to the Development and Implementation of the SWMP

Responsible Entity	Entity Representative	Contribution
Missouri City	Missouri City	Develop and implement BMPs identified in the SWMP
First Colony MUD #9	Costello Inc.	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #26	Saliger Engineering Corporation	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #42	Dannenbaum Engineering	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #46	Century Engineering Inc.	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #47	Landdev Engineers	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #48	Jones & Carter	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #49	LJA Engineering	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Fort Bend County MUD #115	Costello Inc.	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Harris County MUD #122	Jones & Carter	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Harris County WC&ID - Fondren Road	A&S Engineering	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Meadowcreek MUD	Saliger Engineering	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP

Palmer Plantation MUD #1	LJA Engineering	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Palmer Plantation MUD #2	LJA Engineering	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Thunderbird Utility District	Saliger Engineering Corporation	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP
Quail Valley Utility District	Saliger Engineering Corporation	Coordinate with Missouri City to develop and implement BMPs identified in the SWMP

The responsible entities identified above confirm that, as contributing MS4 operators, they will comply with the TPDES Phase II MS4 General Permit in the development and implementation of the SWMP. The contribution of each entity is identified above.

**Appendix A**

**Copy of TPDES General Permit No. TXR040000**

## **Appendix B**

### **Notice of Intent and TCEQ Response**

## **Appendix C**

### **Exhibits**

## **Appendix D**

### **Storm Water Management Program Implementation Schedule**

<b>Storm Water Management Program Implementation Schedule</b>								
Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
1. Public Education and Outreach on Storm Water Impacts	1.3.1 Storm Drain Decals by Developers	Adopt a requirement for developers to label storm drains in new communities.	Missouri City		X			
		Continue storm drain decal program. Supply decals and instruction sheets.	Missouri City		X	X	X	X
1. Public Education and Outreach on Storm Water Impacts	1.3.2 Storm Water Public Education Print Materials	Evaluate and identify public education material options and distribution methods.	Missouri City	X				
		Develop or otherwise provide Public Education print materials	Missouri City and Districts		X	X	X	x
		Ongoing development and distribution of print materials			X	X	X	X
1. Public Education and Outreach on Storm Water Impacts	1.3.3 Website/Municipal Channel Storm Water Quality Messages	Develop and place messages on the City website or municipal channel	Missouri City	X				
		Continue and/or update storm water messages on the City website or municipal channel			X	X	X	X

<b>Storm Water Management Program Implementation Schedule</b>								
Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
2. Public Involvement/Participation	2.3.1 Public Notice Requirements – Permit application	Public Notice in local newspaper, as required by TCEQ.	Missouri City and Districts	X				
2. Public Involvement/Participation	2.3.1 Public Notice Requirements – Public Meeting <i>(if needed)</i>	If TCEQ determines significant public interest exists, a Public Meeting will be held. A potential second publish of notice for the public meeting, if required.	Missouri City and Districts	X				
2. Public Involvement/Participation	2.3.2 Storm Drain Decals by Volunteers	Identify areas where decals need to be installed.	Missouri City	X				
2. Public Involvement/Participation	2.3.2 Storm Drain Decals by Volunteers	Supply decals, kits, and instruction sheets, track number of drains marked.	Missouri City	X	X	X	X	X
2. Public Involvement/Participation	2.3.3 Make Presentations on Storm Water Management Program	Presentation during SWMP development and in Permit Year 2.	Missouri City		X			
2. Public Involvement/Participation	2.3.4 Form Stakeholders Group	Meetings during SWMP development and implementation.	Missouri City	X	X	X	X	X
2. Public Involvement/Participation	2.3.5 Volunteer Opportunities	Evaluate volunteer opportunities.	Missouri City	X				

### Storm Water Management Program Implementation Schedule

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
		Develop volunteer opportunities program.	Missouri City		X			
		Provide volunteer training events.	Missouri City		X	X	X	X
		Implement one volunteer trash cleanup event per year.	Missouri City		X	X	X	X
3. Illicit Discharge Detection and Elimination	3.3.1 Illicit Discharge Ordinance/Order	Evaluate existing regulatory mechanisms and options.	Missouri City and Districts	X				
		Develop draft regulatory mechanism and/or modification.			X			
		Review and comment on draft by City and Districts.			X			
		Incorporate City and District comments.			X			
		Conduct public review and collect comments on draft regulatory mechanism, as appropriate.			X			
		Finalize regulatory mechanism.			X			
		Adoption by City Council/District Boards.				X		

### Storm Water Management Program Implementation Schedule

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)					
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012	
		Implement ordinance / regulatory mechanism.			X	X	X		
3. Illicit Discharge Detection and Elimination	3.3.2 Storm Drainage System Mapping	Develop baseline City and District Storm Drainage System Map, using existing information.	Missouri City and Districts (coordinated by City)		X				
		Complete integration of develop-provided drainage information into the City drainage map.			X				
		Field verify, identify, locate, and map additional drainage features (City System).			X				
		Coordinate District Drainage System Mapping Information.			X				
		Field verify, identify, locate, and map additional drainage features (District Systems)			X				

### Storm Water Management Program Implementation Schedule

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
		Complete integration of District-provided drainage information into the storm drainage system map			X			
		Finalize map			X			
3. Illicit Discharge Detection and Elimination	3.3.3 Database / List of Businesses	Continue development of database / list of businesses. Update database / list of businesses annually	Missouri City and Districts (coordinated by City)	X	X	X	X	X
3. Illicit Discharge Detection and Elimination	3.3.4 Septic System identification and Inspection	Develop process to evaluate new septic systems.	Missouri City	X				
		Evaluate new septic systems.	Missouri City		X	X	X	X
		Investigate areas with septic systems in response to complaints.			X	X	X	X
3. Illicit Discharge Detection and Elimination	3.3.5 Illicit Discharge Detection and Elimination Program	Respond to complaints.	Missouri City and Districts	X	X	X	X	X
		Implement routine inspection program.		X	X	X	X	X
		Develop screening protocol.			X			
		Implement screening, inspection or detection program.				X	X	X

### Storm Water Management Program Implementation Schedule

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
		Screen 33 percent of outfalls per year				X	X	X
3. Illicit Discharge Detection and Elimination	3.3.6 Household Hazardous Waste Collection Event	Publicize Fort Bend County's HHW collection events on City's website.	Missouri City	X	X	X	X	X
4. Construction Site Storm Water Runoff Control	4.3.1 Construction Site Storm Water Runoff Control Ordinance/Order	Evaluate existing regulatory mechanisms that might require modification.	Missouri City and Districts	X				
		Develop draft regulatory mechanisms and/or modification.			X			
		Review and comment on draft by City and/or District.			X			
		Incorporate City and/or District comments.			X			
		Conduct public review and collect comments on draft regulatory mechanisms, as appropriate.			X			
		Finalize regulatory mechanisms.			X			
		Adoption by City Council/Board Districts.				X		

**Storm Water Management Program Implementation Schedule**

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
		Implement regulatory mechanisms.			X	X	X	
4. Construction Site Storm Water Runoff Control	4.3.2 Site Plan Review Program	Evaluate current plan review process for storm water quality.	Missouri City and Districts	X				
		Develop criteria checklists.			X			
		Pre-construction site visits to 50% of projects.				X		
		Pre-construction site visits to 100% of projects.					X	X
4. Construction Site Storm Water Runoff Control	4.3.3 Construction Site Inspection Program	Attend training program for construction site inspections, if available.	Missouri City and Districts	X				
		Evaluate inspection plan.		X				
		Develop / update inspection plan and procedure checklists.			X			
		Inspect 100% of construction sites.				X	X	X

### Storm Water Management Program Implementation Schedule

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
				4. Construction Site Storm Water Runoff Control	4.3.4 Reporting Hotline	Set up and publicize reporting hotline.	Missouri City and Districts	
		Continue operation of the hotline and respond to hotline reports.				X	X	X
4. Construction Site Storm Water Runoff Control	4.3.5 Guidance Manual / Handbook	Adopt guidance manual / handbook.	Missouri City and Districts		X			
		Distribute or otherwise provide access to guidance manual / handbook to contractors applying for construction permits.		X	X	X	X	
4. Construction Site Storm Water Runoff Control	4.3.6 Good Housekeeping Education	Develop or use existing brochures / educational materials.	Missouri City and Districts		X			
		Distribute materials on good housekeeping for construction sites during plan review		X	X	X	X	
4. Construction Site Storm Water Runoff Control	4.3.7 Construction Site Operations Storm Water Training	Develop materials on construction general permit compliance.	Missouri City and Districts		X			

<b>Storm Water Management Program Implementation Schedule</b>								
<b>Minimum Control Measure</b>	<b>BMP</b>	<b>Activity</b>	<b>Responsible Entity</b>	<b>Date Due (by Aug. 12<sup>th</sup> for each year)</b>				
				<b>YR 1 2008</b>	<b>YR 2 2009</b>	<b>YR 3 2010</b>	<b>YR 4 2011</b>	<b>YR 5 2012</b>
		Distribute materials on construction general permit compliance.				X	X	X
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.1 Post-Construction Storm Water Management in New Development and Redevelopment Ordinance / Regulatory Mechanism	Evaluate existing ordinances / regulatory mechanism that might require modification.	Missouri City and Districts	X				
		Develop draft ordinance / regulatory mechanism and/or modification.			X			
		Review and comment on draft by City staff and District consultants.			X			
		Conduct public review, as appropriate.			X			
		Finalize ordinance / regulatory mechanism.			X			
		Adoption by City Council Districts.				X		
		Implement ordinance / regulatory mechanism.				X	X	X

### Storm Water Management Program Implementation Schedule

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.2 Evaluate Regional Storm Water Management System Facilities	Evaluate regional storm water management system facilities	Missouri City		X			
		Develop report on regional storm water system facilities evaluation.				X		
		Incorporate storm water quality to considerations for regional drainage system development	Missouri City and Districts			X	X	X
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.3 Long-Term Inspection and Maintenance Plan Requirement for Storm Water Structural Controls	Review/update development plans for long-term inspection and maintenance. Review existing procedures.	Missouri City and Districts		X			
		Update or develop and implement Procedure/Checklist				X	X	X
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.4 Revise Development Review Procedures	Review existing procedures	Missouri City and Districts	X				
		Update existing procedures			X			
		Begin and continue implementation of updated procedures				X	X	X

<b>Storm Water Management Program Implementation Schedule</b>								
<b>Minimum Control Measure</b>	<b>BMP</b>	<b>Activity</b>	<b>Responsible Entity</b>	<b>Date Due (by Aug. 12<sup>th</sup> for each year)</b>				
				<b>YR 1 2008</b>	<b>YR 2 2009</b>	<b>YR 3 2010</b>	<b>YR 4 2011</b>	<b>YR 5 2012</b>
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.5 Inspection of Completed Projects	Develop inspection checklist.	Missouri City		X			
		Check all completed projects for implementation.	Missouri City and Districts			X	X	X
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.6 Community Outreach (Developers, Neighborhood Associations)	Evaluate informational materials.	Missouri City and Districts	X				
		Develop materials.			X			
		Distribute materials.				X	X	X
5. Post-Construction Storm Water Management in New Development and Redevelopment	5.3.7 Encourage Low Storm Water Quality Impact Designs	Evaluate City design standards to allow design alternatives, such as low impact design(s).	Missouri City	X	X	X	X	X

<b>Storm Water Management Program Implementation Schedule</b>								
<b>Minimum Control Measure</b>	<b>BMP</b>	<b>Activity</b>	<b>Responsible Entity</b>	<b>Date Due (by Aug. 12<sup>th</sup> for each year)</b>				
				<b>YR 1 2008</b>	<b>YR 2 2009</b>	<b>YR 3 2010</b>	<b>YR 4 2011</b>	<b>YR 5 2012</b>
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.2.4 Municipal Operations and Industrial Activities	Develop list of municipally owned or operated industrial activities and update SWMP.	Missouri City and Districts		X			
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.1 Structural Control Maintenance	Review and evaluate existing structural control maintenance procedures.	Missouri City and Districts	X				
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.1 Structural Control Maintenance	Develop inventory of City and District structural controls.	Missouri City and Districts		X			
		Develop inspection and maintenance schedule.				X		
		Begin and continue implementation of the inspection and maintenance program.					X	X

<b>Storm Water Management Program Implementation Schedule</b>								
Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.2 Waste Disposal	Evaluate Missouri City and District facilities for proper waste disposal practices.	Missouri City and Districts	X				
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.2 Waste Disposal	Develop storm water waste management procedure.	Missouri City and Districts		X			
		Train employees on proper storm water waste management procedures.			X			
		Review and inspect District facilities for proper waste disposal. Continue "Use It or Lose It" program to remove non-useable materials at City and District facilities.			X	X	X	X
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.3 Municipal Employee Training	Develop and provide municipal employee training materials.	Missouri City and Districts		X			
		Require training of municipal employees and District consultants.			X	X	X	X
6. Pollution Prevention/Good	6.3.4 Street Sweeping	Continue to identify priority areas for street sweeping	Missouri City	X	X	X	X	X

<b>Storm Water Management Program Implementation Schedule</b>								
<b>Minimum Control Measure</b>	<b>BMP</b>	<b>Activity</b>	<b>Responsible Entity</b>	<b>Date Due (by Aug. 12<sup>th</sup> for each year)</b>				
				<b>YR 1 2008</b>	<b>YR 2 2009</b>	<b>YR 3 2010</b>	<b>YR 4 2011</b>	<b>YR 5 2012</b>
Housekeeping for Municipal Operations		Evaluate need for additional equipment or contract services		X	X	X	X	X
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.5 Litter Control	Require litter control at municipal operations.	Missouri City and Districts	X				
		Begin and continue implementation of litter collection (at service center and 12 times per year at parks, public facilities, and parking lots)		X	X	X	X	X
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.6 Vehicle and Equipment Washing	Continue washing of municipal vehicles and equipment at existing wash facility	Missouri City	X	X	X	X	X
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.7 Evaluate Existing Regional Drainage Impoundments	Compile list of City and District regional drainage facilities.	Missouri City and Districts	X				
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.7 Evaluate Existing Regional Drainage Impoundments	Evaluate regional drainage system for pollution prevention / good housekeeping.	Missouri City and Districts		X			

**Storm Water Management Program Implementation Schedule**

Minimum Control Measure	BMP	Activity	Responsible Entity	Date Due (by Aug. 12 <sup>th</sup> for each year)				
				YR 1 2008	YR 2 2009	YR 3 2010	YR 4 2011	YR 5 2012
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.8 Spill Prevention and Response	Develop procedures and train employees for Municipal Operations	Missouri City and Districts	X				
		Evaluate and acquire containment and response equipment, as appropriate.			X			
		Require contractors to comply with spill prevention and response requirements, when applicable.		X	X	X	X	X
		Implement spill prevention and response procedure		X	X	X	X	X
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.9 Facility Inspection Program	Continue to require municipal facilities inspections.	Missouri City and Districts	X	X	X	X	X
		Review inspection records annually.		X	X	X	X	X
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.10 Service Center Stockpile Area	Install filter fabric	Missouri City	X				
6. Pollution Prevention/Good Housekeeping for Municipal Operations	6.3.10 Service Center Stockpile Area	Inspect and replace filter fabric fencing around stockpile, if necessary	Missouri City		X	X	X	X

<b>Storm Water Management Program Implementation Schedule</b>									
<b>Minimum Control Measure</b>	<b>BMP</b>	<b>Activity</b>	<b>Responsible Entity</b>	<b>Date Due (by Aug. 12<sup>th</sup> for each year)</b>					
				<b>YR 1 2008</b>	<b>YR 2 2009</b>	<b>YR 3 2010</b>	<b>YR 4 2011</b>	<b>YR 5 2012</b>	
Recordkeeping and Reporting	Annual Report	Prepare and submit annual report by Nov 11	Missouri City and Districts	X	X	X	X	X	