



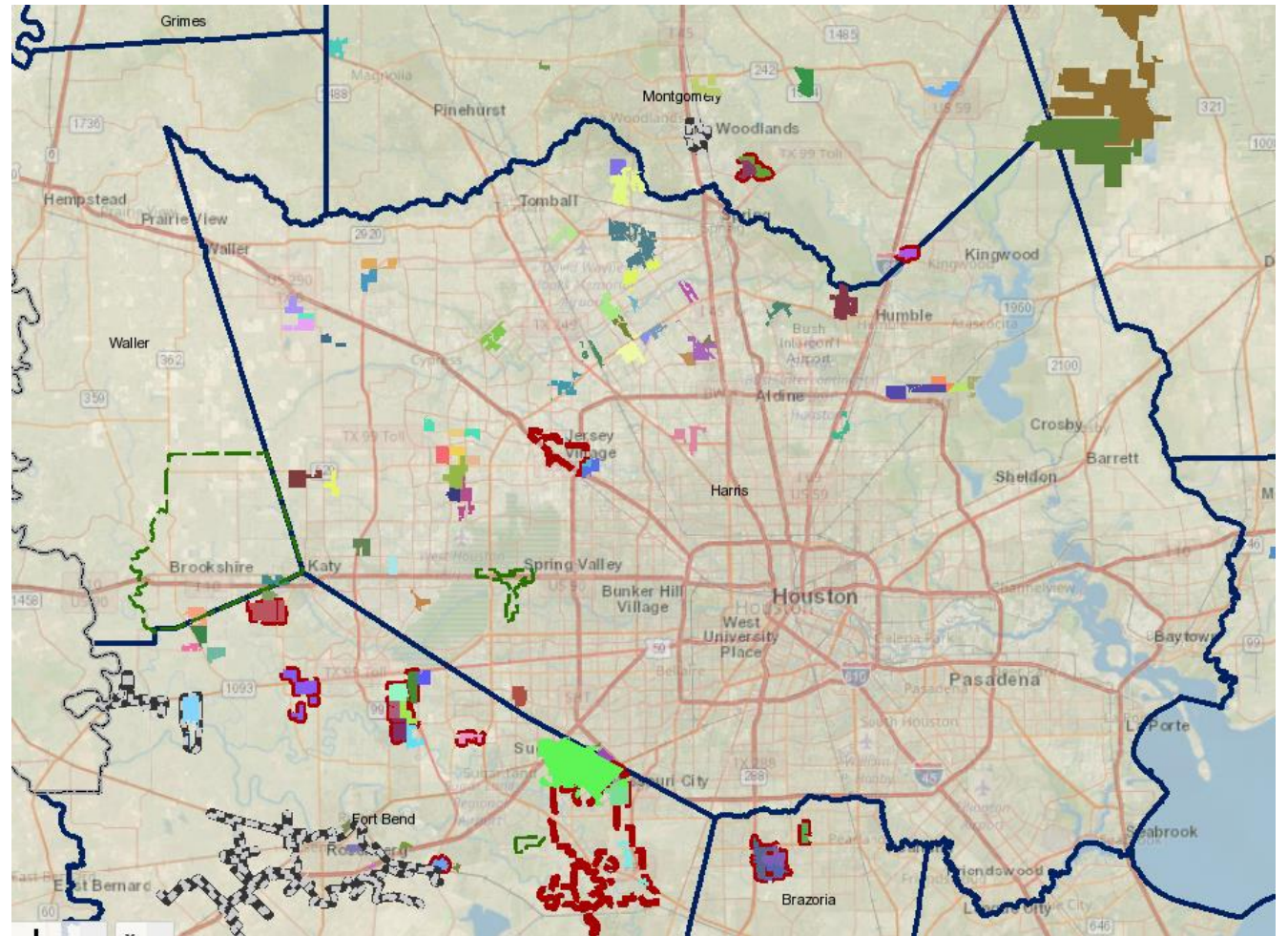
# PRACTICAL HOUSEKEEPING MEASURES FOR MUNICIPAL UTILITY DISTRICTS & SMALL CITIES

May 16, 2018



## JC's Phase II MS4s

- 16 MUDs in surrounding Fort Bend, Brazoria, and Montgomery Counties
- 2 MUD's in the Austin Area
- 2 Phase II Cities

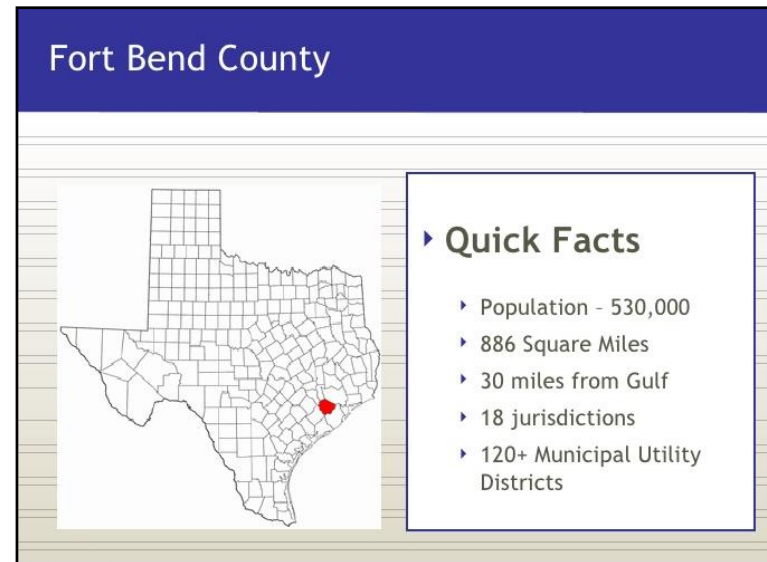




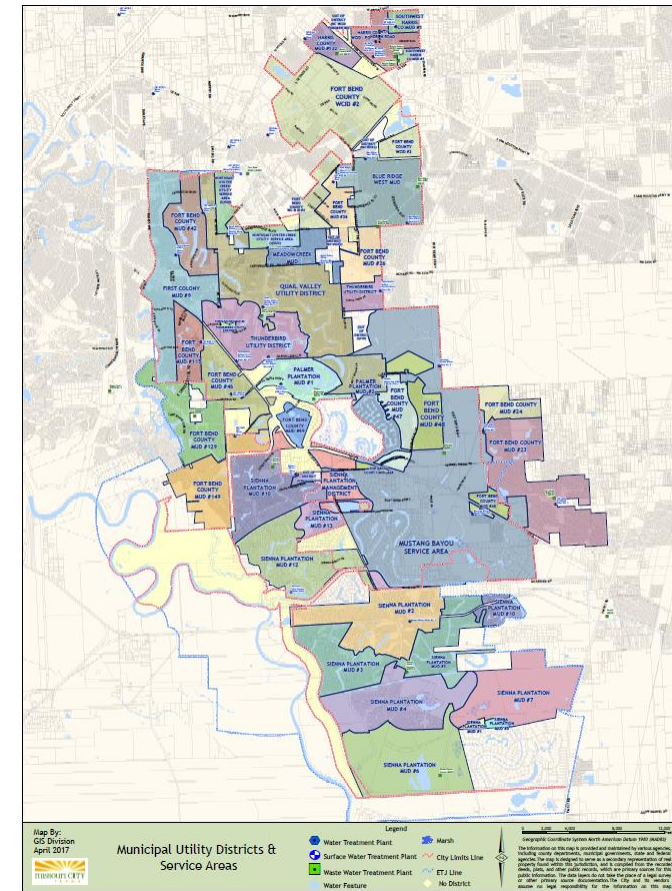
# Phase II MS4 Permit

## MUDs and Smaller Cities

- Have limited manpower
- Resources are restricted
- Budgets are constrained
- Enforcement ability is limited
- Require cost-effective solutions
- Provide practical options
- Innovative implementation measures



From 2009



# MUD vs. Cities

## MUD Facilities

- Water Plants
- Wastewater Treatment Plants and Lift Stations
- Generators and Fuel Storage
- Storm Sewer Systems
  - Detention/Retention Ponds
  - Inlets/Pipes/Outlets/Culverts
  - Drainage Swales/Channels
  - Pumps
  - Permanent Structural Controls




## City Facilities

- Streets and ROW
- Parks and Natural Areas
- Maintenance Yards
- Stockpile Areas
- Fleet and Washing Facilities
- Water Plants
- Wastewater Treatment Plants and Lift Stations
- Generators and Fuel Storage
- Storm Sewer Systems

# Common Best Management Practices

- Public Education Campaign
  - Utility bill inserts
  - Storm drain marking
  - Recycling program
- Legal Mechanism to Enforce Regulations
  - City Ordinance vs. MUD Rate Order
- Construction Inspections
- Good Housekeeping Practices
  - Street sweeping
  - Spill response kits
  - Operations and maintenance inspections
  - Training

**Texas Commission on Environmental Quality**  
P.O. Box 13087, Austin, Texas 78711-3087



GENERAL PERMIT TO DISCHARGE UNDER THE  
TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of  
402 of the Clean Water Act  
and Chapter 26 of the Texas Water Code

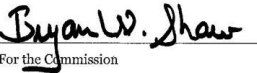
This permit supersedes and replaces  
TPDES General Permit No. TXR040000, issued August 13, 2007

Small Municipal Separate Storm Sewer Systems  
located in the state of Texas  
may discharge directly to surface water in the state

only according to requirements and conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, five years after the permit effective date.

EFFECTIVE DATE: DEC 13 2013  
ISSUED DATE: DEC 13 2013

  
For the Commission

# Public Education, Outreach & Involvement

- Utility bill inserts (can change focus annually)
- Storm drain marking by volunteers
- Recycling program
- Utilize website, if available
- Team up with HOAs/community organizations
- Partner with large organizations for environmental events

**STORM WATER EDUCATION**

Stormwater is precipitation that does not soak into the ground, but instead runs off the surface. As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt and other pollutants. Stormwater flows directly into storm sewer systems and water bodies such as lakes, streams, rivers, wetlands, or coastal waters. In most cases, whatever enters a storm sewer system is discharged untreated into the water bodies we use for swimming, fishing, and drinking water supply.

**KEEP OUR STORM DRAINS CLEAR OF TRASH & DEBRIS**


When grass clipping, leaves, or other debris are washed or dumped into our storm sewer inlets, drainage can be delayed or blocked. To prevent this, sweep up grass clippings from paved surfaces and dispose of them properly. Compost or mulch yard waste when possible. Rake leaves regularly so they remain out of the streets and gutters. Use pesticides and fertilizers sparingly so excess chemicals do not wash into the storm drain and pollute water bodies. Ensure all trash and recyclables are properly secured and disposed. Performing these standard practices will help keep the storm sewer clean from pollutants and help prevent flooding.

**STORM DRAINS ARE FOR RAIN WATER ONLY**

By practicing healthy household habits, homeowners can keep common pollutants off the ground and out of the storm sewer system. Clean up spilled fluids with absorbent materials and don't rinse into a nearby storm drain. Recycle used oil and other automotive fluids at service stations. When walking your pet, pick up pet waste and dispose of it properly. Whenever possible, drain your pool or spa into the sanitary sewer system. Adopt these healthy household habits and help protect our water bodies.

If you observe pollution violations:  
**CALL: (281) 367 - 5511**

**MUNICIPAL OPERATIONS & CONSULTING**



**STORMWATER RUNOFF ENDS UP IN LOCAL STREAMS, CREEKS, RIVERS AND LAKES.**

Courtesy MCDENR

**J.C. JONES | CARTER**





# Legal Mechanism for Regulations

## City Ordinance

vs.

## MUD Rate Order

### ARTICLE V. - REGULATION OF DISCHARGES TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM

#### DIVISION 1. - GENERAL

##### Sec. 30-201. - Purpose.

The purpose of this article is to provide for the health, safety and general welfare of the citizens of the city through the regulation of discharges to the municipal separate storm sewer system (MS4) as required by federal and state law. This article establishes methods for controlling the discharge of pollutants into the municipal separate storm sewer system in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) and Texas Pollutant Discharge Elimination System (TPDES) permit process. The objectives of this article are:

- (1) To regulate the discharge of pollutants to the municipal separate storm sewer system by any discharger.
- (2) To prohibit illicit connections and illicit discharges to the municipal separate storm sewer system.
- (3) To establish legal authority to carry out all inspections, surveillance and monitoring procedures necessary to ensure compliance with this article.

(Code 1999, § 30-201; Ord. No. O-09-31, § 1, 9-21-2009)

##### Sec. 30-202. - Applicability.

This article shall apply to all discharges entering the municipal separate storm sewer system.

(Code 1999, § 30-202; Ord. No. O-09-31, § 1, 9-21-2009)

##### Sec. 30-203. - Responsibility for administration.

The administrator shall administer, implement and enforce the provisions of this article.

(Code 1999, § 30-203; Ord. No. O-09-31, § 1, 9-21-2009)

##### Sec. 30-204. - Standards.

The standards set forth herein and promulgated pursuant to this article are minimum standards; therefore, this article does not intend or imply that compliance by any person will ensure that there will be no contamination, pollution, or unauthorized discharge of pollutants.

(Code 1999, § 30-204; Ord. No. O-09-31, § 1, 9-21-2009)

##### Sec. 30-205. - Definitions.

In this article:

*Administrator* means the employee of the city designated by the city manager.

*Best management practices (BMPs)* means schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances and other management practices designed to prevent or reduce the discharge of pollutants. BMPs include treatment requirements and operating

### AMENDED RATE ORDER AND REGULATIONS GOVERNING WATER AND SANITARY SEWER LINES AND CONNECTIONS

WHEREAS, Fort Bend County Municipal Utility District No. 143 (the "District") is constructing and will own a water, sanitary sewer and storm sewer and drainage system (the "System") designed to serve present and future inhabitants within the District; and

WHEREAS, the Board of Directors deems it necessary to amend its Rate Order and Regulations Governing Water and Sanitary Sewer Lines and Connections ("Rate Order"); Now, Therefore,

BE IT ORDERED BY THE BOARD OF DIRECTORS OF FORT BEND COUNTY MUNICIPAL UTILITY DISTRICT NO. 143 THAT:

Section 1: Definitions. The following words or phrases shall have the meanings indicated below:

A. "Single Family Residential User" - means a user of the District's System that consists of one residence designed for use and occupancy by a single family unit.

B. "Non-Single Family Residential User" - means any user of the District's System other than a Single Family Residential User including, but not limited to, commercial establishments, churches, and schools.

C. Multi-Family User - means any user of the District's water and sewer system including, but not limited to, apartments and multi-family dwelling units. Each unit shall be considered a single family residential connection.

D. "Irrigation User" - means any user of the District's water and sewer system that is a user of the District's System only for purposes of irrigation in public areas.

E. "Non-Taxable User" - means a user that is exempt from ad valorem taxation by the District under the Property Tax Code, including, but not limited to, schools and churches.

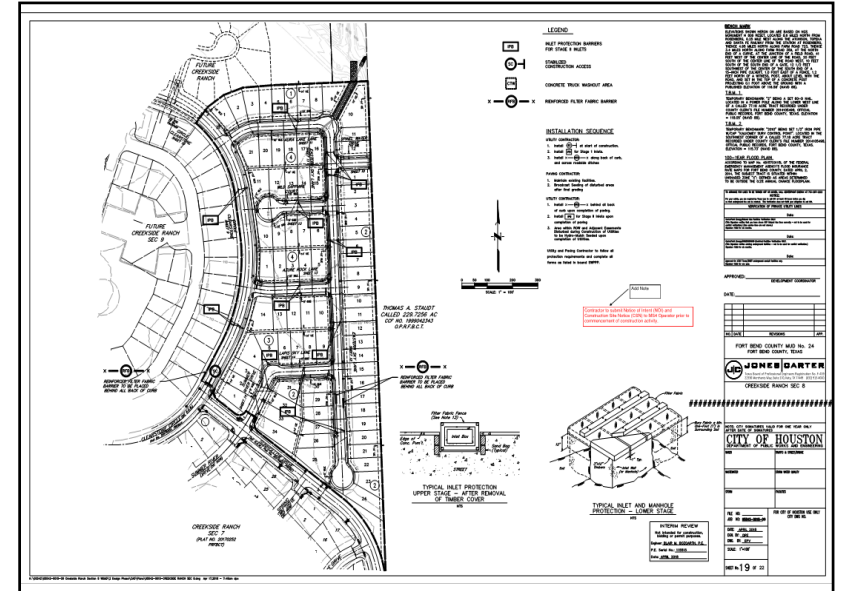
#### Section 2: Tap and Inspection Fees

A. Single Family Residential User Water Tap. Prior to connection to the District's water system, a tap fee in the amount shown in Exhibit "A" shall be paid to the District to cover the cost of making said connection and the cost of providing the water meter. Connections to the District's water system shall not be allowed prior to an approved sewer inspection, and all such connections shall be inspected by the District's operator or its subcontractor.

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# Construction Inspections for MUDs

- Review SWP3 sheets
  - Complete SWP3 checklist
- Schedule on-site initial and final inspections
- Schedule on-site monthly homebuilder inspections
  - Submit report with photos of deficiencies to DE
  - The MUD may assess a violation





# Good Housekeeping Practices

## Street Sweeping

- MUDs will usually contract the work to a 3<sup>rd</sup> party
- Smaller cities may have street sweeper (if budget allows)
- Performed during non-peak times
  - Before or after events/parades
- Document the amount of miles that were swept (information is given in AR)



# Good Housekeeping Practices

## Operation and Maintenance Activities

- Maintain a spill response kit at all major facilities
  - Ensure District/City employees know how to use it
- Developed a Spill Prevention & Emergency Response Plan
  - Dictates the steps to take in case a minor, moderate, or severe spill occurs
  - Provides contact information to be notified
  - List closest ER or urgent care
  - Gives 3<sup>rd</sup> party information in case the spill cannot be contained by District/City employees

**Spill Prevention & Emergency Response Plan**  
FORT BEND COUNTY M.U.D. NO. 143  
c/o FSG INFORMATION SYSTEMS LP  
3200 SOUTHWEST FWY STE 3200  
HOUSTON, TX 77027-7537  
(713) 860-6400

**On-Site Contact Information**

**24-Hour Emergency Contact(s)**

Greg Camp (Regulatory Compliance Manager) Environmental Development Partners, LLC Office: (832) 467-1599 Alternate: (281) 902-0966 Email: Gcamp@edpwater.com	Breah D. Campbell (District Operator) Environmental Development Partners, LLC Office: (832) 467-1599 Alternate: (281) 902-0983 Email: BCampbell@edpwater.com
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**Secondary Emergency Contact(s)**

Bradley Jenkins, P.E. (District Engineer)  
Jones Carter  
Office: (281) 363-4039  
Email: Bjenkins@jonescarter.com

**County Assistance**

Fort Bend County Emergency Management Office  
Office: (281) 342-6185

**Waste Disposal Contractor Contact Information**

**Moderate Spill Response**

Environmental Development Partners, LLC (EDP)  
17495 Village Green Drive  
Houston, Texas 77040  
Office: (832) 467-1599

**Severe Spill Response (Emergency)**

Safety Kleen  
1580 Industrial Road  
Missouri City, TX 77459  
Office: (281) 208-6500    Emergency: (1-800) 468-1760

**Emergency Response Contact Information**

Fire/Paramedics/Police: 911  
Non-Emergency Line: (281) 341-4665  
Fort Bend County Health Department: (281) 424-6494  
City of Richmond Public Works Department: (281) 342-0559  
TCEQ Regional Office 12: (713) 767-3500  
TCEQ 24-Hour Spill Hotline: (800) 832-8224

**Local Emergency Medical Facility**

First Choice Emergency Room  
8111 West Grand Parkway South  
Richmond, TX 77407  
(832) 759-5000

**Nearest Hospital**

Memorial Hermann Katy Hospital  
23900 Katy Freeway  
Katy, TX 77494  
(281) 644-7000



# Good Housekeeping Practices

## Operation and Maintenance Inspections

- Inspections & Assessments on Facilities
- Inventory of Facilities & Storm Water Structural Controls
- Sanitary Sewer System Evaluation
- List of Potential Problem Areas



MUNICIPAL FACILITIES  
MS4 SWMP Annual Inspection Form

In following the TPDES General Permit TXR040000, all permittees shall develop and implement an operation and maintenance program for municipal activities at municipally owned areas. This form shall assist with the implementation of this program.

Location: \_\_\_\_\_  
Date: \_\_\_\_\_  
Name of Inspector: \_\_\_\_\_

YES	NO	NA	Description
			<i>Proper disposal of all waste materials</i>
			<i>Waste bins are placed in a covered area or have a plastic liner for confinement</i>
			<i>All materials and chemicals are stored in a covered area to the maximum extent possible (or are covered with a tarp or have secondary containment)</i>
			<i>Procedures in case of an illicit discharge are readily available</i>
			<i>Structural components of the facilities are in good working condition and not contributing to adverse storm water runoff (excessive rust, chipping paint, etc.)</i>
			<i>No standing water is visible</i>
			<i>Are storm drains/inlets free of debris</i>
			<i>Storm water adequately drains from the facility</i>
			<i>Spill response kits are available and maintained</i>
			<i>List of potential pollutants are provided and updated as needed</i>

Comments



# Good Housekeeping Practices

## Training Program

- Train and inform personnel
  - District Operator
  - JC field project representative
  - JC District Engineer
  - Appropriate city staff
- In Person or Via Webinar
  - Webinar may be recorded for future viewing



# Roles and Responsibilities

Jones | Carter  
Program Administrator

- Oversees Program
- Day to day tasks
- Technical Resource (QC/QA)
- Compliance with SWMP
- Develop Annual Report

MUD Board of  
Directors/City Council  
Assist with Program  
Administration

- Assess Rules/Restrictions/Violations and Fines
- Signatory Requirements
- Overall permit responsibility
- Fiscal responsibility

MUD District  
Operator/City  
Employees  
Program Operator

- Daily Program Administration
- Routine Field Inspections
- Implement O&M BMPs
- Perform Inspections
- Respond to Complaints
- Address Illicit Discharges

# Contact Information

**QUESTIONS????**



**Michael P. Gurka, P.E.**

[MGurka@jonescarter.com](mailto:MGurka@jonescarter.com)

713-777-5337