

2019

# Stormwater Management Program

For

# Harris-Fort Bend Counties Municipal Utility District No. 1

Revised June 2023

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## **Acronyms and Abbreviations**

**AU** - Assessment Unit

**AWBD** - Association of Water Board Directors

**BIG** - Bacteria Implementation Group

**BMP** - Best Management Practice

**BRA** - Brazos River Authority

**CRP** - Texas Clean Rivers Program

**DMR** - Discharge Monitoring Report

**DO** - Dissolved Oxygen

**EPA** - U.S. Environmental Protection Agency

*E. coli* - *Escherichia coli*

**ETJ** - Extra-Territorial Jurisdiction

**FOG** - Fats, Oils, and Grease

**GCWA** - Gulf Coast Water Authority

**GM** - Stormwater Guidance Manual

**H-GAC** - Houston-Galveston Area Council

**IDDE** - Illicit Discharge Detection and Elimination

**I-Plan** - Implementation Plan

**IA** - Implementation Activity

**IS** - Implementation Strategy

**LA** - Load Allocation

**LID** - Low Impact Development

**LIDs** - Levee Improvement Districts

**MCM** - Minimum Control Measures

**MEP** – Maximum Extent Practicable

**MGD** - Million Gallons per Day

**mL** - Milliliter

**MPN** - Most Probable Number

**MS4** – Small Municipal Separate Storm Sewer System

**MUD** - Municipal Utility District

**OSSF** - On-Site Sewage Facility

**SSO** - Sanitary Sewer Overflow

**SOPs** – Standard Operating Procedures

**SWCD** - Soil and Water Conservation District  
**SWMP** – Stormwater Management Program  
**TAC** - Texas Administrative Code  
**TCEQ** - Texas Commission on Environmental Quality  
**TMDL** - Total Maximum Daily Load  
**TPDES** - Texas Pollutant Discharge Elimination System  
**UA** - U.S. Census Bureau-designated Urbanized Area  
**UAMP**- Utility Asset Management Program  
**WLA** -Waste Load Allocation  
**WPP** - Watershed Protection Plan  
**WQMP** - Water Quality Management Plan  
**WWTF** - Wastewater Treatment Facility

## **Part I - General Permit Requirements**

### **Permit Overview**

The Texas Commission on Environmental Quality (TCEQ) issued the Texas Pollutant Discharge Elimination System (TPDES) General Permit Number TXR040000 (the permit) on January 24, 2019 with an effective date of January 24, 2019. This permit supersedes and replaces the TPDES General Permit No. TXR040000, issued December 13, 2013. The permit provides authorization for stormwater and certain non-stormwater discharges from Small Municipal Separate Storm Sewer Systems (MS4s) to surface waters of the State.

The underlying purpose of the permit is to require regulated MS4's to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of Section 402 of the Clean Water Act and Section 26.040 of the Texas Water Code.

In order to achieve these goals, the permit requires regulated MS4s to submit a Notice of Intent (NOI) and develop and manage a Stormwater Management Program (SWMP) for all stormwater discharges that reach waters of the United States, regardless of whether the discharge is conveyed through a separately operated storm sewer system. A MS4 Operator that implements their SWMP and the selected Best Management Practices (BMPs) in accordance with the permit, will be considered meeting the standard of reducing pollutants to the MEP, and will be deemed in compliance with the permit.

### **Regulated MS4 Operator(s)**

#### **Applicants**

District Name addresses:

Harris Fort Bend Counties Municipal Utility District No. 1  
c/o Schwartz, Page, & Harding, L.L.P.  
1300 Post Oak Blvd. Suite 1400  
Houston, TX 77056

Harris Fort Bend Counties MUD No. 1 (regulated MS4 Operator) is solely responsible for developing and implementing all elements of this SWMP.

### **Legal Authority**

The Regulated MS4 is a body politic and a political subdivision of the State of Texas created under the authority of Article XVI, Section 59 of the Texas Constitution and operating under and governed by the provisions of Chapters 49 and 54 of the Texas Water Code, as amended. The MS4 operator owns and operates a municipal separate storm sewer system and is considered a “Non-traditional Small MS4 Operator” as defined in the permit. TXR040000 defines the MS4 Operator as a Level 2 MS4 and is obligated to comply with all requirements, to develop rules and regulations, and to exert enforcement actions to require compliance with this SWMP. Such required compliance may be implemented by the incorporation of rules into the MS4 Operator’s Rate Order or the MS4 Operator’s adoption of rules and regulations via resolution of the MS4 Operator’s Board of Directors (which would serve the same function as an ordinance). Over the course of the permit term, the MS4 Operator will use its Stormwater Guidance Manual, which outlines procedures to inspect third party actions from contractors, builders, and other potential polluters within its jurisdiction and to ensure compliance with this SWMP.

### **Location of the MS4 Operator**

The MS4 Operator’s boundaries lie wholly within the 2010 Census City of Houston Urbanized Area with the approximate center located at the following Latitude/Longitude: **29.758, -95.793**. See Location Map (**Appendix B**) for the MS4 Operator’s boundaries.

### **Resources**

Although financial resources are limited and the demand for funding is ever-increasing, the MS4 Operator will ensure its annual budget includes adequate financial resources for proper implementation of the SWMP. There will be a management team of consultants reporting to the MS4 Operator on a regular basis, to ensure that SWMP implementation stays on schedule and within the budget.

### **Reporting Year**

The MS4 Operator has elected to align its reporting year with the calendar year. The end of reporting year 1 is December 31<sup>st</sup>, 2019. The MS4 Operator will submit the annual report outlining the accomplishments under the SWMP within 90 days of December 31 of each year during this permit term.

## **Record Keeping**

The MS4 Operator will retain all records, a copy of the permit, and records of all data used to complete the NOI for the permit and satisfy the public participation requirements, for a period of at least three (3) years, or the remainder of the term of this general permit, whichever is longer. The MS4 Operator will submit the records to the executive director when specifically asked to do so. The SWMP will be retained at a location accessible to the TCEQ. The MS4 Operator will make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP will be made available within ten (10) working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act.

### **The SWMP and its contents can be viewed at the following address:**

Schwartz, Page & Harding, L.L.P.  
1300 Post Oak Blvd. Suite 1400  
Houston, TX 77056

Vogler & Spencer Engineering, Inc.  
777 N. Eldridge Parkway Suite 500  
Houston, TX 77079

## **Effluent Limitations**

Effluent limitations for stormwater runoff are narrative and not numerical, requiring implementation of best management practices to protect water quality to the maximum extent practicable (MEP). The BMPs chosen for each MCM in this SWMP take into consideration applicable effluent limitations and are in compliance with State of Texas rules and regulations.

## **Enforcement measures and Standard Operating Procedures**

The MS4 Operator has adopted standard operating procedures (SOPs) over the course of the previous permit term that outline how to respond to permit violations. These SOPs are included in the MS4 Operator's Stormwater Guidance Manual and will be reviewed and updated accordingly during this permit term.

## **Implementation**

The MS4 Operator has engaged a Stormwater Consultant to direct program implementation during the permit term. The Stormwater Consultant is responsible for coordinating SWMP related activities including development of BMPs, correspondence with the TCEQ, preparing the Annual Reports, and other activities, to comply with the permit conditions. The Stormwater Consultant is responsible for coordinating efforts, including those of other consultants, related to compliance with TPDES Permit No TXR040000. The Stormwater Consultant will set milestones and report



directly to the MS4 Operator on a regular basis to keep them apprised of the SWMP implementation progress. The following entities will assist in the implementation of the SWMP:

Attorney

Schwartz, Page & Harding, L.L.P.  
1300 Post Oak Blvd. Suite 1400  
Houston, TX 77056

Stormwater Consultant

Vogler & Spencer Engineering, Inc.  
777 N. Eldridge Parkway, Suite 500  
Houston, TX 77079

Engineer

Vogler & Spencer Engineering, Inc.  
777 N. Eldridge Parkway, Suite 500  
Houston, TX 77079

Operator

Inframark  
10431 Westmoor  
Richmond, TX 77407

**Public Notice Requirements**

From time to time, the MS4 Operator will be required to follow public notice guidelines during the permit term. The MS4 Operator will comply with public notice requirements when publishing the SWMP and applicable paperwork. After the MS4 Operator receives written instructions from the TCEQ's office of the chief clerk, a notice will be published of the executive director's preliminary determination on the NOI and SWMP. A copy of the press release and a copy of the notarized affidavit of the publication of notice will be sent to the TCEQ as outlined in the TXR040000. The MS4 Operator will follow all State and local requirements regarding public notices.

**Noncompliance Notification**

As required, the MS4 Operator will report any noncompliance which may endanger human health or safety or the environment within 24 hours to the TCEQ regional office. The MS4 Operator will also provide a written report to the appropriate TCEQ regional office and to the TCEQ Enforcement Division (MS-224) within five working days of becoming aware of the noncompliance. The written report will contain:

- A description of the noncompliance and its cause;
- The potential danger to human health or safety, or the environment;
- The period of noncompliance, including exact dates and times;
- If the noncompliance has not been corrected, the anticipated time it is expected to continue; and
- Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effect.

## **Part II – Stormwater Management Program**

### **Overview of SWMP and Minimum Control Measures**

The underlying purpose of the permit is to require regulated small MS4s to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of Section 402 of the Clean Water Act and Section 26.040 of the Texas Water Code. In order to achieve these goals, the MS4 is required to develop and manage a Stormwater Management Program for all stormwater discharges that reach waters of the United States, regardless of whether the discharge is conveyed through a separately operated storm sewer system.

The MS4 Operator has included the following Minimum Control Measures (MCMs) and the selected Best Management Practices (BMPs) in accordance with the permit in order to meet the standard of reducing pollutants to the maximum extent practicable (MEP).

## **MCM 1.0 Public Education, Outreach and Involvement**

### *Summary/Rationale*

Public education is an important aspect of the overall nation-wide stormwater program. A public education, outreach, and involvement program has been developed in the MS4 Operator's Stormwater Guidance Manual to inform the public about the impacts that pollution in stormwater runoff can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and ways to minimize the impact on stormwater quality. Educational materials will continue to be developed for residents, visitors, MS4 operator consultants, businesses, commercial and industrial facilities, and construction site personnel. The MS4 Operator's public education, outreach, and involvement program will continue using existing, as well as new, educational materials to inform residents, visitors, MS4 operator consultants, businesses, commercial and industrial facilities, and construction site personnel about the SWMP. A public involvement/participation program has also been developed and will be updated as necessary to include opportunities for a wide variety of constituents within the MS4 Operator's boundaries to participate in the SWMP development and implementation. The MS4 Operator will continue to document the activities conducted as part of this MCM. These records, along with any changes made to the BMPs or the corresponding implementation schedule, will be communicated in the annual report.

### **1.1 Education and Involvement - MS4 Operator Consultants**

#### *Description*

The training program is directed at applicable MS4 Operator consultants and other parties responsible for municipal operations subject to the IDDE program, pollution prevention/good housekeeping, construction stormwater runoff control program, and post construction stormwater management. Training sessions will continue to be used to educate these parties on the requirements of TXR040000, concentrating on issues that were important to the MS4 Operator during the previous permit term, as well as the goals of the MS4 Operator's SWMP.

*Implementation Schedule*

- Year 1: MS4 Operator consultants, consultants who regularly attend District Board meetings, and members of the public in attendance at District Board meetings, will be educated on the Public Education, Outreach and Involvement goals of the SWMP during two regular meetings in the calendar year.

BMP/Activity	Quantifiable Target/Objective	Deadline
Training & Education	Hold 2 training sessions per year	July 23, 2019

- Years 2-5: MS4 Operator consultants, consultants who regularly attend District Board meetings, and members of the public in attendance at District Board meetings, will be educated on the Public Education, Outreach and Involvement goals of the SWMP during two regular meetings in the calendar year.

BMP/Activity	Quantifiable Target/Objective	Deadline
Training & Education	Hold 2 training sessions per year	December 31 of each permit year

End of Permit Term Goal: All MS4 Operator consultants and members of the public who were in attendance at regular board meetings will be educated on the Public Education, Outreach and Involvement goals of the SWMP and the requirements of TXR040000.

*Measurable Evaluation Criteria*

- Meeting agenda
- Number of training sessions held
- Training material distributed at meetings
- Minutes of the meeting

**1.2 Stormwater Website**

*Description*

The MS4 operator will continue to use the stormwater website, CleanBayous.org, as the central location of its SWMP information. Public documents, including the SWMP and the Stormwater Guidance Manual (GM) will be available for download. The website will showcase education materials, as well as announce relevant public participation opportunities. The website will continue to specifically target required groups including residents, visitors, MS4 operator consultants, businesses, commercial and industrial facilities, and construction site personnel. Visitors will be able to report illicit discharge and illegal dumping through this website, as well as reference informative material relative to the SWMP and GM. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Ensure the MS4 Operator’s most recent, approved annual report is available on the website (the new NOI, SWMP, and GM will also be uploaded if approved in year 1).

BMP/Activity	Quantifiable Target/Objective	Deadline
Upload annual report, new SWMP & GM	Website updated	December 31, 2019

- Years 2-5: Make public education material available on website. Ensure the most recently approved annual report, NOI, SWMP, and GM are available on website. Monitor and respond to complaints submitted through website’s illicit discharge complaint module.

BMP/Activity	Quantifiable Target/Objective	Deadline
Respond to public complaints on website	Respond to 100% of complaints	3 business days
Upload annual report, new SWMP & GM	Website updated	December 31 of each permit year
Upload educational material	Website updated	December 31 of each permit year

- End of Permit Term Goal: Website will showcase educational materials, receive and track complaints, announce public participation events, as well as the NOI/SWMP/GM, and the most recent annual report.

*Measurable Evaluation Criteria*

- Number of reports/complaints
- Amount of educational items and regulatory items uploaded to website

**1.3 General Public Education & Involvement**

*Description*

The public education and involvement program will continue to be used to inform the public about the impacts that pollution in stormwater run-off can have on water quality, hazards associated with illegal/illicit discharges and improper disposal of waste, and ways to minimize the impact on stormwater quality. This educational effort will continue to recommend methods to the MS4 Operator customers as to how they can identify and reduce pollution/ illicit discharges. When available, this program will convey participation opportunities for MS4 Operator’s customers. Educational material will continue to address lawn maintenance, household hazardous waste, commercial stormwater impacts, and other sources of pollution. This education effort will continue to recommend methods to the MS4 Operator customers as to how they can identify and reduce pollution/ illicit discharges. Material will be posted on CleanBayous.org for

public viewing. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Ensure the MS4 Operator’s most recently approved annual report is available on the website. The new SWMP and Stormwater Guidance Manual (GM) will also be uploaded if approved in year 1.

BMP/Activity	Quantifiable Target/Objective	Deadline
Upload annual report, new SWMP & GM	Website updated annually	December 31, 2019

- Years 2-5: Approve design for the educational material, in the form of a utility bill insert (UBI), to be distributed in annual mailing to all District customers. Perform 1 mailing to MS4 Operator customers. Post on website.

BMP/Activity	Quantifiable Target/Objective	Deadline
Presentation of educational material options at District board meeting	Approve design for educational material	April 30 of each permit year
Mail approved UBI to all District customers	Mail all District customers annually in one mail out	December 31 of each permit year
Post educational material on website	Website updated annually	December 31 of each permit year

- End of Permit Term Goal: All registered customers within the MS4 Operator’s jurisdiction will receive educational material annually. Updated educational information and the SWMP and GM will be available on the website.

*Measurable Evaluation Criteria*

- Educational material approved annually
- Educational material distributed annually
- Educational material posted on website annually

**1.4 Community Involvement**

*Description*

The Community Involvement program will be continued to provide opportunities for District customers to participate in the SWMP development and implementation. Since the District does not have paid staff, the Community Involvement Program will also be presented to District consultants at two regularly scheduled Board meetings to allow an opportunity for feedback concerning this program.

*Implementation Schedule*

- Year 1: Include agenda item at MS4 Operator’s regular monthly meetings for public discussion of stormwater related issues.

BMP/Activity	Quantifiable Target/Objective	Deadline
Hold monthly Board of Directors meeting	Hear feedback from customers and District consultants on public involvement opportunities	December 31, 2019

- Years 2-5: Include agenda item at MS4 Operator’s regular monthly meetings for public discussion of stormwater related issues.

BMP/Activity	Quantifiable Target/Objective	Deadline
Hold monthly Board of Directors meeting	Hear feedback from customers and District consultants on public involvement opportunities	December 31 of each permit year

- End of Permit Term Goal: The public will be afforded opportunities to provide feedback relative to stormwater quality issues.

*Measurable Evaluation Criteria*

- Monthly meeting agendas
- Customers in attendance to discuss stormwater quality-related issues
- Number of public involvement opportunities presented and discussed

**Interim Milestone for MCM 1.0**

By the end of year 2, the website will be updated with the MS4 Operator’s SWMP, GM, and most recently approved annual report for public viewing. By the end of year 3, MS4 Operator and consultants will have received six training sessions relative to the SWMP.

**MCM 2.0 Illicit Discharge Detection and Elimination (IDDE)**

*Summary/Rationale*

Illicit discharges are a major source of pollution in the nation’s waterways. The MS4 Operator currently has a Stormwater Guidance Manual in effect. This Manual outlines detection and elimination techniques and procedures. To the extent allowable under State and local law, a regulatory mechanism has been established to prohibit and eliminate illicit discharges. In conjunction with the regulatory mechanisms, appropriate actions and enforcement procedures for removing the source of an illicit discharge will continue to be reviewed, updated and implemented. A comprehensive map of the conveyance system, including the locations of outfalls and the names and locations of Waters of the U.S. receiving discharges, will be updated periodically to aide in the detection and elimination of sources of illicit discharges.

The following non-stormwater sources may be discharged from the MS4 Operator as allowed under the general permit: water line flushing; runoff or return flow from landscape irrigation,

lawn irrigations, and other irrigation utilizing potable water, groundwater, or surface water sources; discharges from potable water sources; diverted stream flows; rising ground water and springs; uncontaminated ground water infiltration; uncontaminated pumped ground water; foundation and footing drains; air conditioning condensation; water from crawl space pumps; individual residential vehicle washing; flows from wetlands and riparian habitats; dechlorinated swimming pool discharges; street wash water; discharges or flows from emergency firefighting activities (firefighting activities do not include washing of trucks, runoff water from training activities, test water from fire suppression systems, and similar activities); and other similar occasional incidental non-stormwater discharges, unless the TCEQ develops permits or regulations addressing these discharges. Onsite sewage disposal systems are not allowed in this District. The MS4 Operator will document the activities conducted as part of this MCM. These records, along with any changes made to the BMPs or the corresponding implementation schedule, will be communicated in the annual report.

## **2.1 Illicit Discharge Detection and Elimination Program**

### *Description*

The MS4 Operator will continue to implement and enforce the existing IDDE program, outlined in the District's Stormwater Guidance Manual (chapter 2) to detect, investigate, and eliminate illicit discharge into the MS4. The program includes an annual update to the MS4's stormwater conveyance map, methods for training, procedures for tracing, and procedures for removing the source. Chapter 2 of the Stormwater Guidance Manual, which is the MS4's IDDE Program, will continue to be implemented as a part of its SWMP. This chapter shall also include information regarding responses to, and investigations of, illicit discharges and spills. If the illicit connection or illicit discharge is observed related to another operator's MS4, the MS4 Operator shall notify the other MS4 operator within 48 hours of discovery. If impracticable, the MS4 Operator shall notify the appropriate TCEQ regional office of the possible illicit connection. If another MS4 notifies the MS4 Operator of an illegal connection or an illicit discharge, then the MS4 Operator shall follow the IDDE plan. The MS4 operator will review and update the SWMP and IDDE plan throughout the permit term as necessary. The MS4 Operator will also maintain on-site procedures for responding to illicit discharges and spills and will include source investigation and elimination, and conduct inspections deemed appropriate in response to complaints. The clear, specific, and measurable goals for this activity are outlined in the tables below.



*Implementation Schedule*

- Year 1: The stormwater consultant will explain the need to comply with the new conditions of the 2019 TXR040000 to MS4 Operator consultants and customers in attendance at a regularly scheduled meeting of the Board of Directors. Respond to all customer reports of illegal dumping and/or illicit discharges as generated by the cleanbayous.org complaint module.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019
Monitor website for complaints	Respond to 100% of complaints	3 business days

- Year 2: The Stormwater consultant will review and update the District's IDDE Program. This is necessary to comply with new permit conditions in the 2019 TXR040000. The criteria used are the conditions in the TXR040000. Action items as a result of the review will include updated material in the District's GM. Annually review and update the stormwater conveyance map based on changes to the storm sewer system caused by new construction and/or reconstruction. Respond to all customer reports of illegal dumping and/or illicit discharges as generated by the cleanbayous.org complaint module within 3 business days. The MS4 Operator will hold two training sessions relative to IDDE and other SWMP goals. The training sessions will be performed during regularly scheduled monthly Board meetings for MS4 Operator consultants and District customers in attendance at the meeting.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update Chapter 2 of GM	Chapter 2 will comply with new IDDE provisions of TXR04000	December 31, 2020
Review & update stormwater conveyance map	Produce an annual updated stormwater conveyance map	December 31, 2020
Monitor website for complaints	Respond to 100% of complaints	3 business days
Training & Education on IDDE Program	Hold 2 training sessions per year	December 31, 2020

- Years 3-5: The Stormwater consultant will review and update the District's IDDE Program. Annually review and update the stormwater conveyance map based on changes to the storm sewer system caused by new construction and/or reconstruction. Respond to all customer reports of illegal dumping and/or illicit discharges as generated by the cleanbayous.org complaint module within 3 business days. The MS4 Operator will hold two training sessions relative to IDDE and other SWMP goals. The training sessions will be performed during regularly scheduled monthly Board meetings for MS4 Operator consultants and District customers in attendance at the meeting.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update Chapter 2 of GM	Chapter 2 will comply with new IDDE provisions of TXR04000	December 31 of each permit year
Review & update stormwater conveyance map	Produce an annual updated stormwater conveyance map	December 31 of each permit year
Monitor website for complaints	Respond to 100% of complaints	3 business days
Training & Education on IDDE Program	Hold 2 training sessions per year	December 31 of each permit year

- End of Permit Term Goal: The IDDE Program will be updated and implemented. A comprehensive map of the MS4's stormwater conveyance system will be up to date.

*Measurable Evaluation Criteria*

- Monthly meeting agenda item for public involvement, necessary training, and education
- Meeting minutes
- Updated chapter 2 of the GM
- Updated stormwater conveyance map

**Interim Milestone for MCM 2.0**

By the end of year 3, four training sessions on Chapter 2 of the GM will be held for District consultants and customers in attendance at the Board meeting where training was held. The stormwater conveyance map will be updated annually.

**MCM 3.0 Construction Site Stormwater Runoff Control**

*Summary/Rationale*

Construction site runoff has continually been a major source of pollution of the nation's waterways. This source of pollution is so impactful that a separate stormwater permit (TXR150000) has been issued to regulate these pollutants; including trash, chemicals, and other harmful contaminants. The MS4 Operator, to the extent allowable under State and local law, will continue to implement and enforce a program to reduce pollutants in any stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that will result in disturbance of one or more acres. The program, as outlined in the MS4 Operator's Stormwater Guidance Manual, will continue to require construction site operators to implement erosion and sediment control practices as well as manage construction site stormwater runoff, as required by the Construction General Permit (CGP) TXR150000. The program includes the implementation of a regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State and local law. Procedures will be updated as necessary for site inspections, enforcement of resolution, consideration of public input, and site plan review to consider water quality impacts. The MS4 Operator will review and update the existing chapter in the Stormwater Guidance Manual. Updates will ensure that the Construction Site Runoff Control Program, which consists of a Construction Operation Program, a Construction Plan Review Process, and a Construction Site Inspection and Enforcement Program, all meet the standards of the current TXR150000. The MS4 Operator will

document the activities conducted as part of this MCM. These records, along with any changes made to the BMPs or the corresponding implementation schedule, will be communicated in the annual report.

### 3.1 Construction Site Runoff Control Program

#### *Description*

The MS4 Operator will continue to implement and enforce this program requiring operators of small and large construction activities to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the maximum extent practicable. This program also includes the implementation of a regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under law, to require erosion and sediment control. As part of the Construction Site Runoff Program outlined in the Stormwater Guidance Manual, the Construction Operations Program details the methods of ensuring the Stormwater Pollution Prevention Plan (SWPPP) is in accordance with the TXR150000. This program details how the MS4 Operator will maintain and implement site plan review procedures. The MS4 Operator will update its existing inspection procedures where necessary for large and small construction projects. This program also outlines methods relative to the construction site inspection and enforcement requirements, which are included in the program. The clear, specific, and measurable goals for this activity are outlined in the tables below.

#### *Implementation Schedule*

- Year 1: The stormwater consultant will explain the need to comply with the new conditions of the 2019 TXR040000 to the MS4 Operator consultants and customers in attendance at a regularly scheduled meeting of the Board of Directors.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: The stormwater consultant will review and update the existing Construction Site Runoff Control Program (Chapter 3 of Stormwater Guidance Manual). Implement the Construction Site Runoff Control Program as outlined in the Stormwater Guidance Manual. The MS4 Operator will hold two training sessions relative to Construction Site Stormwater Runoff Control and other SWMP goals. The training sessions will be performed during regularly scheduled monthly board meetings for MS4 Operator consultants and District customers in attendance at the meeting.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update chapter 3 of GM	Chapter 3 will comply with the new construction provisions of TXR040000	December 31 of each permit year

Monitor website for complaints	Respond to 100% of complaints	30 days from receipt of plans
Review NOIs for all new construction sites	Review 100% of NOIs received for new construction projects by District's engineer/stormwater consultant	30 days from NOI filing date
Training & education on Construction Site Stormwater Runoff Control	Hold 2 training sessions per year	December 31 of each permit year

- End of Permit Term Goal: The Construction Site Runoff Control Program (TXR040000 and TXR150000) will be implemented throughout the MS4 Operator's jurisdiction on all new construction sites in accordance with the GM and SWMP.

*Measurable Evaluation Criteria*

- Monthly meeting agenda item for public involvement, necessary training, and education
- Monthly meeting minutes
- Updated chapter 3 of the GM
- Number of NOIs received by the District's engineer
- Number of new construction plans reviewed by District's engineer

**Interim Milestone for MCM 3.0**

By the end of year 2, Chapter 3 of the GM will be updated.

**MCM 4.0 Post-Construction Stormwater Management in New Development and Redevelopment**

*Summary/Rationale*

Stormwater runoff from existing development, as well as redevelopment in previous developed areas can be a major source of pollution, including bacteria, fertilizers, pesticides, trash, and other harmful contaminants. To the extent allowable under State and local law, the MS4 Operator will continue to, implement, and enforce the SOPs detailed in the Stormwater Guidance Manual to address stormwater 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. The Stormwater Guidance Manual works in tandem with the MS4 Operator's adopted regulatory mechanism to address structural/nonstructural controls on new development and redevelopment, as well as sanctions to ensure compliance, to the extent allowable under State and local law. The MS4 Operator will continue to document the activities conducted and the amount of resources/materials used. These records, along with any changes made to the BMPs or the

corresponding implementation schedule, will be communicated in the annual report. Records of enforcement actions will be documented in the meeting minutes and kept in the District file.

**4.1 Post-Construction Stormwater Maintenance Program**

*Description*

The existing chapter in the MS4 Operator’s Stormwater Guidance Manual will be updated at the recommendation of the stormwater manager and with the approval of the Board of Directors. This chapter addresses the MS4 Operator’s approach to Post-Construction Stormwater Maintenance in New Development and Redevelopment. This chapter also addresses the use and recommended implementation of structural/nonstructural controls, as well as outlines methods used for the long term operation and maintenance of these structural controls. Any maintenance of structural/non-structural controls, according to the Stormwater Guidance Manual, will be performed at a frequency determined by the MS4 Operator to ensure adequate long-term operation and to maintain the continued effectiveness of appropriate BMPs for the community. Regular maintenance for all drainage ways and appurtenances within the MS4 Operator’s jurisdiction will be required and outlined in the MS4 Operators Stormwater Guidance Manual. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: The stormwater consultant will explain the need to comply with the new conditions of the 2019 TXR040000 to MS4 Operator consultants and customers in attendance at a regularly scheduled meeting of the Board of Directors. Review the Post-Construction Program within the MS4s jurisdiction.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019
Review & update chapter 4 of GM	Chapter 4 will comply with the new post-construction provisions of TXR40000	December 31, 2019

- Years 2-5: The stormwater consultant will review and update the existing Stormwater Guidance Manual chapter relative to post-construction. Annually review and update the stormwater conveyance map based on changes to the storm sewer system caused by new construction and/or reconstruction. Implement the Post-Construction Program within the MS4’s jurisdiction. Annually review the county’s Drainage Criteria Manual for any new regulations that may affect post-construction/new construction.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update chapter 4 of GM	Chapter 4 will comply with the new	December 31 of

	post-construction provisions of TXR040000	each permit year
Review & update stormwater conveyance map	Produce an annual updated stormwater conveyance map	December 31 of each permit year
Implement chapter 4 of GM	District engineer will review all new post-construction plans and applications for new construction	30 days from NOI filing date
Review county's Drainage Criteria Manual	Modify chapter 4 of the GM based on new provisions found in the county's Drainage Criteria Manual	December 31 of each permit year

- End of Permit Term Goal: Implementation of chapter 4 of the Stormwater Guidance Manual and produce an updated stormwater conveyance map annually.

*Measurable Evaluation Criteria*

- Monthly meeting agenda item for public involvement, necessary training, and education
- Monthly meeting minutes
- Updated chapter 4 of the GM
- Number of applications for new construction/reconstruction received by the District's engineer
- Updated stormwater conveyance map

**Interim Milestone for MCM 4.0**

By the end of year 2, any updates to the Post-Construction Stormwater Management chapter of the Stormwater Guidance Manual will be completed.

**MCM 5.0 Pollution Prevention and Good Housekeeping for Municipal Operations**

*Summary/Rationale*

In addition to the stormwater conveyance system, the MS4 Operator may own facilities including water plants, lift stations, wastewater treatment plants, parks, and parking lots that could be a source of pollution to the state's waterways. The MS4 Operator's Stormwater Guidance Manual addresses the approach to Pollution Prevention and Good Housekeeping for Municipal Operations. The Manual also contains methods used to develop and maintain inventory of facilities and stormwater controls, procedures for contractor requirements and oversight, and evaluation of municipal operation and maintenance activities. The MS4 Operator's Operation and Maintenance Program will continue to be implemented to prevent or reduce pollutant runoff from municipal operations and municipally owned areas. A training program will continue to be implemented for all parties responsible for municipal operations subject to the pollution prevention/good housekeeping program. Procedures for the proper disposal of waste removed within the MS4 Operator boundaries and waste that is collected as a result of maintenance of stormwater structural controls will continue to be implemented as well. A list of maintenance

activities, maintenance schedule, and long-term inspection procedures for controls used to reduce floatables and other pollutants is also included in this program element. Housekeeping measures and BMPs that reduce pollutants will continue to be implemented throughout this permit term. Stormwater discharges authorized by other TPDES permits are authorized and meet the applicability and eligibility requirements under TXR040000. The MS4 Operator will document the activities conducted as part of this MCM. These records, along with any changes made to the BMPs or the corresponding implementation schedule, will be communicated in the annual report.

### 5.1 Operations and Maintenance Program

#### *Description*

As part of its Stormwater Guidance Manual, the MS4 Operator has developed an Operation and Maintenance Program with the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas. The program also includes education concerning the proper disposal of waste material. Contractor oversight is included in this program as well; any contractor hired by the MS4 Operator to perform work within the MS4 Operators jurisdiction is contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures described in the permit. The MS4 Operator will continue to evaluate Operation and Maintenance (O&M) activities for the potential to discharge pollutants. The clear, specific, and measurable goals for this activity are outlined in the tables below.

#### *Implementation Schedule*

- Year 1: The stormwater consultant will annually review and update existing Municipal Operations Program. Implement Operations and Maintenance Program as outlined in chapter 5 of the GM. Annually update inventory of all facilities and stormwater controls owned by the District based on any new construction of District facilities. The MS4 Operator will hold two training sessions relative to Pollution Prevention and Good Housekeeping for Municipal Operations and other SWMP goals. The training sessions will be performed during regularly scheduled monthly Board meetings for MS4 Operator consultants and District customers in attendance at the meeting.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: The stormwater consultant will annually review and update the existing Municipal Operations Program. Implement Operations and Maintenance Program as outlined in chapter 5 of the GM. Annually update inventory of all facilities and stormwater controls owned by the District based on any new construction of District facilities. The MS4 Operator will hold two training

sessions relative to Pollution Prevention and Good Housekeeping for Municipal Operations and other SWMP goals. The training sessions will be performed during regularly scheduled monthly Board meetings for MS4 Operator consultants and District customers in attendance at the meeting.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update chapter 5 of GM	Chapter 5 will comply with the new Municipal Operations provisions of TXR040000	December 31 of each permit year
Implement chapter 5 of GM	Board directors will review monthly operations reports for compliance with the stormwater program	Monthly
Update inventory of District facilities	District operator will maintain & update an inventory of District facilities for use in implementing good housekeeping measures	December 31 of each permit year
Training & education on Municipal Operations & Good Housekeeping	Hold 2 training sessions per year	December 31 of each permit year

- End of Permit Term Goal: Continued implementation of Operation and Maintenance Program for municipally owned facilities, as outlined in chapter 5 of the Stormwater Guidance Manual.

*Measurable Evaluation Criteria*

- Monthly meeting agenda item for public involvement, necessary training, and education
- Monthly meeting minutes
- Updated chapter 5 of the GM
- Number of facilities inventoried

**Interim Milestone for MCM 5.0**

By the end of year 3, inventory of facilities and stormwater controls will be updated and recorded.

**MCM 6.0 Industrial Stormwater Sources**

*Summary/Rationale*

As a level 2 small MS4 operator, there are no industrial stormwater requirements under the current permit.

**MCM 7.0 Authorization for Construction Activities where the MS4 Operator is the Site Operator**

*Summary/Rationale*

The MS4 Operator has chosen not to develop this optional measure at this time.



## Part III - Pollutant of Concern Program

### Background

Section 303(d) of the federal Clean Water Act requires all States to identify and list waters that do not meet, or are not expected to meet, applicable water quality standards. The standards describe the ways the water bodies are used and those descriptions are embodied in the updated *Texas Surface Water Quality Standards (TSWQS-TCEQ 2014)*. Most water bodies in and around the Houston-Galveston region must meet the standard for *contact recreation*. In order to meet this standard, the water body must be safe for swimming, wading by adults and children, canoeing, or other activities that involve direct contact with the water. While there are several sources of pollutants in the streams in and around Houston, the most predominant source is bacteria. The *Texas Surface Water Quality Standards establish the following criteria for the designated uses:*

#### *Bacteria – Contact Recreation*

- The geometric mean of *E-Coli in freshwater* should not exceed 126 colony forming units (cfu) per 100 milliliter (ml).

For every listed water body that does not meet the standard, the State must develop a Total Maximum Daily Load (TMDL) for each pollutant that contributes to the impairment of the stream. A TMDL is a technical analysis that determines the amount of a particular pollutant that a water body can receive and still meet the applicable water quality standard. The TMDL document estimates how much the pollutant load must be reduced in order to comply with the standard.

A regulated MS4 Operator that discharges stormwater into an impaired water body with a TMDL, is required to develop a program and choose Best Management Practices (BMPs) that target the pollutants of concern as identified in the TMDL. The stormwater discharge does not have to discharge directly into the impaired water body, but if this discharge is located in the watershed where the TMDL was developed, permit conditions will apply. The BMPs chosen will focus on areas the MS4 operator identifies as having the potential to be a cause of the pollutant of concern. Each BMP selected will have measurable goals, an implementation schedule and interim milestones will be set to assess program progress. A benchmark for the pollutant of concern will be identified by the MS4 Operator to assist in determining if the program is effective in addressing the pollutant of concern. Monitoring of progress toward achieving the benchmark is also required and will be included in the annual report using appropriate program indicators.

### **Watershed Description - Buffalo Bayou Above Tidal**

The Buffalo Bayou watershed includes a segment designated as Buffalo Bayou above Tidal. Buffalo Bayou above Tidal is approximately 24 miles long and has a watershed area of approximately 358 square miles. It includes areas in Waller and Fort Bend Counties. However, most of the watershed is in Harris County. A unique feature to the Buffalo Bayou watershed is that two flood control reservoirs are located in the upper end of Buffalo Bayou above Tidal. The MS4 Operator drains through a series of manmade channels and tributaries into Willow Fork (1014I) which flows into Buffalo Bayou/Barker Reservoir (1014B\_01), one of these flood control reservoirs (Figure 1).

### **Impaired Water Body**

The MS4 Operator is located in the Buffalo Bayou above Tidal watershed and TMDLs have been adopted by the TCEQ for this watershed. The TMDL for Buffalo Bayou above Tidal states that for most segments in the watershed a 95% reduction in both the Waste Load Allocation and the Load Allocation is necessary to meet the water quality standard.

### **TMDL - Buffalo and White Oak Bayous**

The Texas Commission on Environmental Quality (TCEQ) adopted Eighteen Total Maximum Daily Loads (TMDLs) for bacteria in Buffalo and White Oak Bayous on April 8, 2009. The EPA approved the TMDL on June 11, 2009. The TCEQ approved the Bacteria Implementation Group's (BIG) I-Plan January 30, 2013. The EPA approved Addendum I to the TMDLs in August 2013. The EPA approved Addendum II to the TMDLs in July 2015. The TMDL identifies the segment that the MS4 Operator drains to as segment 1014B, Assessment Unit (AU) 1014B\_01 (Table 2 from the Buffalo and White Oak TMDL document).

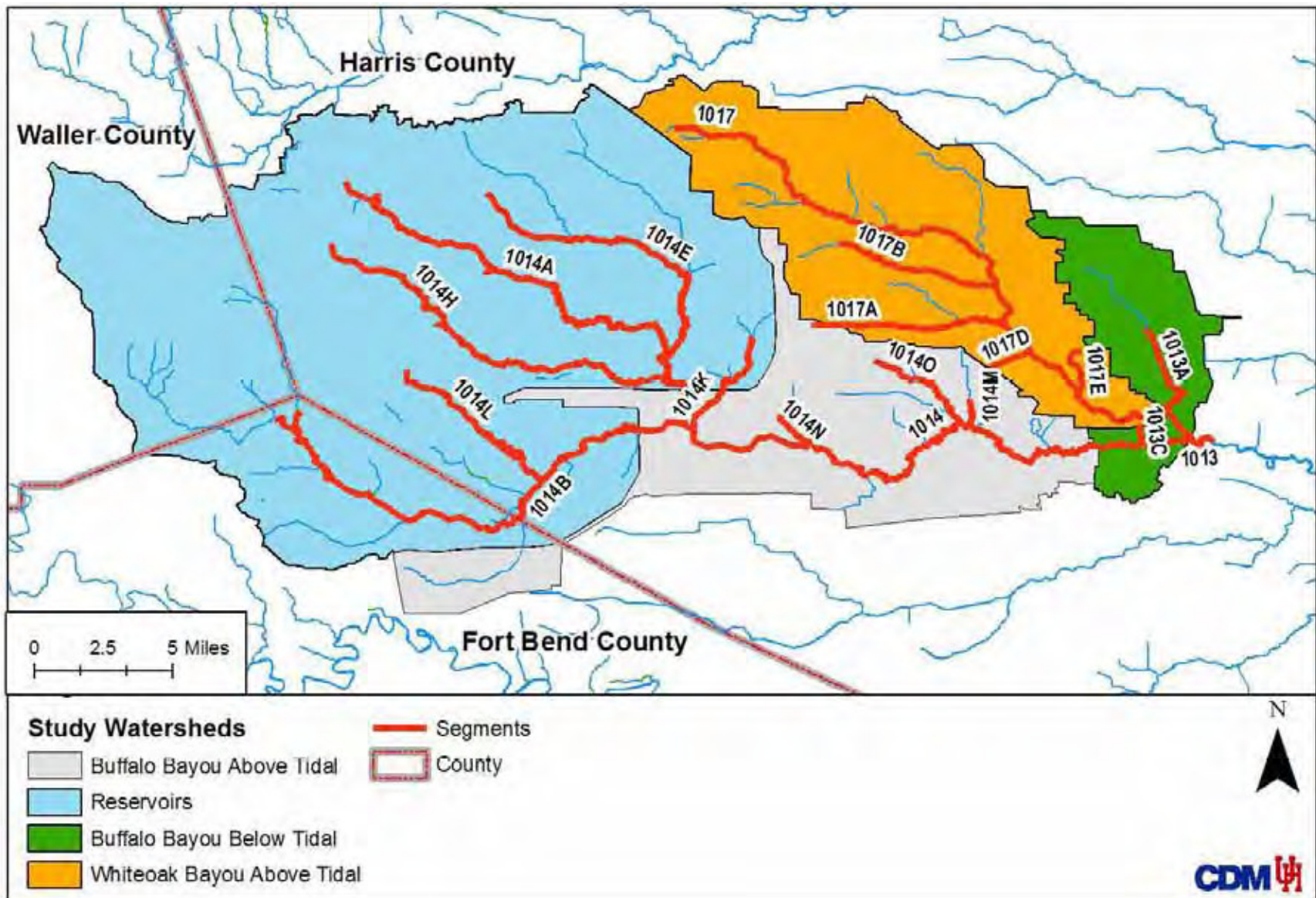


Figure 1 – Segments and Watersheds

The TMDL for bacteria identifies the possible sources of this impairment, one of which is pollution caused by stormwater runoff from urbanized areas. The Final TMDL allocations, as calculated, can be found Table 54 of the TMDL document of Buffalo and White Oak Bayous for Assessment Unit 1014B\_01 (page 25).

Table 2. Water Bodies and Associated Watersheds

<b>Segment Number</b>	<b>Segment Name</b>	<b>Watershed</b>
1013	Buffalo Bayou Tidal	Buffalo Bayou Tidal
1013A	Little White Oak Bayou	
1013C	Unnamed Non-Tidal Tributary of Buffalo Bayou Tidal	
1014	Buffalo Bayou Above Tidal	Buffalo Bayou Above Tidal
1014A	Bear Creek	Reservoirs
1014B	Buffalo Bayou	
1014E	Langham Creek	
1014H	South Mayde Creek	
1014K	Turkey Creek	
1014L	Mason Creek	
1014M	Neimans Bayou (Newman Branch)	
1014N	Rummel Creek	
1014O	Spring Branch	
1017	Whiteoak Bayou Above Tidal	Whiteoak Bayou
1017A	Brickhouse Gully/Bayou	
1017B	Cole Creek	
1017D	Unnamed Tributary of Whiteoak Bayou	
1017E	Unnamed Tributary of White Oak Bayou	

**Benchmarks for Pollutants of Concern**

As outlined above, TXR040000 requires small MS4’s that discharge into an impaired water body with an approved TMDL, where stormwater has the potential to cause or contribute to the impairment, to identify a “Benchmark” for the pollutant of concern. While the benchmark has a numeric value, it is not a numeric effluent limitation, but rather a guideline for evaluating progress toward the goal of achieving the water quality standard for the stream. The establishment of the benchmark for the SWMP considered the following options, as outlined in the permit:

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

The MS4 Operator has elected to use the aggregate Waste Load Allocation (WLA) for all affected MS4s and will be jointly responsible for progress in meeting the benchmark with other MS4s located in the watershed and will develop a monitoring program as described in Part II.D.4(a)(6) of the TXR040000.

Sampling that has taken place to determine the TMDL for Buffalo Bayou used *E-Coli* as the indicator bacteria for assessing contact recreation. The WLA for E-Coli for Assessment Unit 1014B\_01 is found in Table 54 of the TMDL document for Buffalo and White Oak Bayous.

<b>Assessment Unit</b>	<b>TMDL (Billion MPN/day)</b>	<b>WLA WWTF (Billion MPN/day)</b>	<b>WLA Storm Water (Billion MPN/day)</b>	<b>LA (Billion MPN/day)</b>	<b>MOS (Billion MPN/day)</b>
1013_01	1,574.77	1.19	267.95	1,305.63	0
1013A_01	1,379.94	1.19	234.66	1,144.09	0
1013C_01	102.08	1.19	16.37	84.52	0
1014_01	1,841.94	54.21	837.68	950.06	0
1014A_01	195.04	38.15	141.2	15.69	0
1014B_01	626.91	90.87	482.44	53.6	0
1014E_01	236.83	9.06	205	22.78	0
1014H_01	39.18	2.38	33.12	3.68	0
1014H_02	175.43	35.51	125.93	13.99	0
1014K_01	35.06	4.11	27.86	3.1	0
1014K_02	15.09	1.12	12.58	1.4	0
1014L_01	69.66	43.98	23.11	2.57	0
1014M_01	76.75	2.38	34.79	39.58	0
1014N_01	204.66	103.26	5.56	95.84	0
1014O_01	434.9	0.05	209.26	225.59	0
1017_01	173.57	108.09	58.94	6.55	0
1017_02	52.06	0.10	46.77	5.2	0
1017_03	149.47	2.38	132.38	14.71	0
1017_04	537.09	0.77	482.69	53.63	0

Table 54. Final TMDL Allocations for All Impaired Assessment Units at Wet-Flow (Critical) Conditions (TCEQ 2009)

**The Benchmark for the pollutant of concern is the WLA stormwater as shown in Table 54 and is 482.44 Billion MPN/Day.**

### **Implementation Plans (I-Plans)**

In order to address the high levels of bacteria in and around the Houston area, the TCEQ asked stakeholder groups to convene and address the problems. Two separate groups were assembled. One group represented the watersheds in the Houston-Galveston Region and became known as the Bacteria Implementation Group (“BIG”), the other group represented Upper Oyster Creek and was simply known as the Upper Oyster Creek Implementation Group. While these were two distinct groups, they both consisted of representatives from city and county governments, resource agencies, business and agriculture, professional organizations, watershed groups and the public. The BIG started meeting in 2010 and met over the course of over 2 years to produce a document entitled “Implementation Plan for Seventy-Two Total Maximum Daily Loads for Bacteria in the Houston-Galveston Region.” This document was adopted by TCEQ on January 30, 2013. The EPA approved an addendum to the TMDLs in August 2013. The Implementation Plan (I-Plan) summarizes the TMDL’s that were adopted by the TCEQ in 2009. The BIGs I-Plan outlines the potential sources of bacteria and dissolved oxygen, as well as implementation strategies that will be used to reduce these pollutants of concern over the next several years. While many of the ideas and strategies are intended for the entire Brays Bayou watershed, several of the implementation strategies are applicable to the MS4 Operator. The MS4 Operator will refer to information found in the I-Plan, and consider the ideas and applicability within its jurisdiction.

### **Sources of the Bacteria Impairment**

The TMDL documents state the sources for indicator bacteria vary, and there is no single predominant source. Bacteria specific to humans, avian, and non-avian wildlife and domestic animals all accounted for appreciable portions of the loadings. The I-Plan summarizes information found in the TMDL documents for potential pollution sources. The MS4 Operator has reviewed the potential sources of bacteria as identified in the I-Plan as well as the strategies proposed to address these potential sources. I-Plan strategies are intended to be implemented on a watershed basis; however, some of the strategies do not apply within the jurisdiction of the MS4 Operator. The MS4 Operator has developed a Bacteria Program based on selected sources for bacteria that may occur within its jurisdiction.

## **Bacteria Specific Program Elements**

- 1.0 Waste Water Treatment Facilities (WWTFs) (facility monitoring/reporting/assessment) (only if applicable)
- 2.0 Sanitary Sewer System
- 3.0 Illicit Discharges and Dumping
- 4.0 Residential Education
- 5.0 Animal Sources

The MS4 Operator has chosen the following Best Management Practices that focus on the impairment of concern for the selected program elements.

### **1.0 - WWTF discharge monitoring and reporting and facilities**

#### *Description*

Non-compliant WWTFs can be sources of bacteria in the receiving stream. With the exception of those facilities using an ultraviolet (UV) disinfection system, WWTFs were, historically, not required to monitor for bacteria. As mentioned in the BIG's I-Plan, "results from limited monitoring of bacteria in the BIG region suggests that while levels of indicator bacteria in effluent from individual WWTFs is typically low, at any given time approximately 5 percent to 10 percent of the facilities can be found to be exceeding the single-sample criterion for E-coli." The goal of this program element is to keep the MS4 Operator aware of E-Coli limits at the WWTF throughout the permit term. Training of the MS4 Operator's consultants and applicable parties in an integral part of this program element.

#### **BMP 1.1 - Monitor permit limits for the WWTF**

The MS4 Operator has enlisted a group of professionals to manage its day-to-day business activities. Of these professionals, the District Operator is in charge of the daily operations and maintenance of the WWTF. Reporting compliance with permit conditions takes place on a regular basis. E-coli limits are now required in WWTF permits. The TCEQ has placed these limits in all new WWTF permits where E-Coli is the impairment of concern. The MS4 Operator will require written regular reporting of E-Coli limits on any operations report delivered to the MS4 Operator. The clear, specific, and measurable goals for this activity are outlined in the tables below.



*Implementation Schedule*

- Year 1: Introduce the need to comply with TXR040000 to the MS4’s consultant team.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: Review existing operations reports to ensure Discharge Monitoring Reports (DMRs) information is included in the report.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review monthly operations reports	Ensure E-coli values are within permits	Monthly

- End of permit term Goal – MS4 Operator will be aware of E-Coli limits in its WWTF permit and will receive regular reports with DMR values included in the Operators report.

*Measurable Criteria*

- Meeting agenda to include operations report
- District Operator’s reports includes E-coli limits for WWTF

**BMP 1.2 Facilities Assessment**

The MS4 Operator enlists a group of professionals to manage its day-to-day business activities. Of these professionals, the District Engineer is in charge of the design and construction of the MS4 Operator’s WWTF. Regular reporting concerning the compliance with permit conditions, as well as on-going conversations with other members of the management team, help assess the operating condition of the WWTF. As mentioned in the BIG’s I-Plan, “bacteria monitoring may reveal WWTFs that are not meeting effluent limits. Upgrades or repairs, as appropriate, will be the responsibility of each individual facility owner in order to comply with individual permits.” The MS4 Operator will continue to review conditions of the WWTF with its management team on a periodic basis to determine if problems exist that may lead to non-compliance with effluent conditions, especially the E-Coli limit. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Introduce the need to comply with TXR040000 to the MS4’s management team.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: Report to the MS4 Operator on a regular basis any deficiencies of the WWTF that may lead to non-compliance, especially with E-coli.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review monthly operations reports	Ensure deficiencies of the WWTF are identified	Monthly

- End of permit term Goal – MS4 Operator will be aware of the condition of its WWTF and its ability to comply with permit effluent limitations.

*Measurable Criteria*

- Meeting Agenda to include engineering reports
- Engineer/District operator reports from regular meetings

**Interim Milestones**

By the end of year 2, ensure the District Operator’s report includes monthly E-coli values.

**2.0 – Sanitary Sewer System**

*Description*

Sanitary sewer system overflows (SSOs) may be a source of bacteria in stormwater runoff within the MS4 Operator’s jurisdiction. The BIG’s I-Plan mentions strategies for SSOs. The EPA has concluded that SSOs contribute to bacteria loading in nearly all impaired streams, but may or may not be a primary source of loading. These overflows can originate from individual homes, businesses, as well as MS4 Operator-owned facilities. Overflows may be caused by blockages in the line, line breaks, defects that allow stormwater and groundwater to infiltrate into the system, lapses in operation, inadequate design and construction, power failures, and even vandalism. The goal of this program element is to review existing operations and incorporate tools necessary for proper operation and maintenance of the system. This element includes a review of existing documents, as well as the physical system, including lift stations. Components of the program will be reviewed over the permit term and updated as necessary.

**BMP 2.1 Mapping of Sanitary Sewer System**

*Description*

An accurate map of the MS4 Operator’s sanitary sewer system is critical to proper operations and reporting of overflows. The MS4 Operator will review existing maps of the sewer system and determine the need for updates of existing maps. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Introduce the need to comply with TXR040000 to the MS4’s consultant team

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: Update existing maps of the MS4 Operator’s sanitary facilities, including lift stations

BMP/Activity	Quantifiable Target/Objective	Deadline
Review and update sanitary sewer map	Produce an annual updated sanitary sewer map	December 31 every permit year

- End of permit term goal – MS4 Operator will have an accurate overall map of the sanitary sewer system to aid in the proper management of the MS4 Operators wastewater flows.

*Measurable Criteria*

- Meeting Agenda/minutes
- Overall sanitary sewer system map

**BMP 2.2 Reporting of Sanitary Sewer Overflows (SSOs)**

*Description*

Reporting of events that could discharge the pollutant of concern is critical to the proper management of the sanitary sewer system. Current EPA regulations specify reporting requirements for noncompliance, including SSOs, in 40 C.F.R. § 122.41 (1) (6) and (7) (2011). Reporting at regular meetings of any applicable overflows and/or stoppages in the system, sanitary lift station operations, as well as critical information about operations at the WWTF, will aid in the reduction of bacteria discharges into the receiving stream. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Introduce the need to comply with TXR040000 to the MS4’s management team.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: Review operations reports for specific information that pertains to the discharge of the pollutant of concern from SSOs.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review all monthly operations reports	Ensure reporting of SSOs is included on monthly reports	Monthly

- End of permit term goal – MS4 Operator will have an operations report that includes information on SSOs.

*Measurable Criteria*

- Meeting Agenda/minutes
- Completed/updated operations report with SSO information included

**BMP 2.3 Facilities Assessment**

*Description*

The BIG’s I-Plan suggested to the TCEQ that all sanitary systems should be required to develop and implement a Utility Asset and Management Program (UAMP) (Implementation Activity 2.1 As previously stated, the MS4 Operator enlists a group of professionals to manage its day to day business activities. The District Engineer is the professional in charge of the design and construction of the MS4 Operator’s sanitary sewer system. Regular reporting of the compliance with permit conditions, as well as on-going conversations with other members of the management team, help assess the operating condition of the sanitary sewer system. The MS4 Operator will continue to review conditions of the sanitary sewer system with its management team on a periodic basis to determine if problems exist that may lead to non-compliance with effluent conditions. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1 – Introduce the need to comply with TXR040000 to the MS4’s management team.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Years 2-5: Review reporting program that aids management and operations personnel in determining the overall conditions of the sanitary sewer system. Based on the previous year’s BMP evaluation included in the annual report, modifications to measurable goals and/or to the implementation schedule will be made as appropriate.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review all monthly operations reports	Ensure reporting of damages to sanitary sewer system, lift stations, and the WWTF is included on monthly reports	Monthly

- End of permit term Goal – MS4 Operator will be aware of the condition of its sanitary sewer system to ensure continued compliance with all permit conditions, including SSOs.

*Measurable Criteria*

- Meeting Agenda/minutes

- Monthly District Operator’s report
- Monthly Engineers’s report
- Annual capital improvement budget

**BMP 2.4 Reporting and maintenance of Lift Station Functions**

*Description*

The proper design and maintenance of lift stations located within the MS4 Operator’s jurisdiction is critical for compliance with the bacteria program. Lift stations can fail, as demonstrated by the many power outages during 2017 when Hurricane Harvey hit the Houston Metropolitan Area. There were many power outages that led to discharge of untreated wastewater into the receiving streams. Lift stations may also fail due to mechanical failure, vandalism and old age. This program element includes a review of existing lift stations with the goal of developing an overall operations and inspection plan to be implemented on a regular basis, and also in case of emergencies. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Introduce the need to comply with TXR040000 to the MS4’s management team.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Year 2: Prepare an updated inventory of existing lift stations that are managed by the District Operator, including the ability to operate under loss of power conditions.

BMP/Activity	Quantifiable Target/Objective	Deadline
Audit 100% of MS4 Operator-owned lift stations	Prepare an overall map/list showing locations of 100% of MS4 Operator-owned lift stations	December 31, 2020
Analyze 100% of MS4 Operator-owned lift stations	Determine lift station capability to operate under loss of power conditions	December 31, 2020

- Years 3-5: Review lift station operations on a monthly basis to ensure proper operations and maintenance, including the capability to operate under loss of power conditions.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review monthly District Operator’s report	Ensure proper operation and maintenance of 100% of MS4 Operator-owned lift stations	Monthly

- End of permit term goal – MS4 Operator will have a complete inventory of MS4 Operator-owned lift stations, including the status of ability of each lift station to operate under loss of power conditions.

*Measurable Criteria*

- Meeting agenda/minutes
- Map/list of sanitary lift stations located within the MS4 Operator’s jurisdiction
- Monthly District Operator’s report, including sanitary lift station operations

**BMP 2.5 Sanitary Sewer Use Requirements**

*Description*

Whether the MS4 Operator discharges to another WWTF (subscriber system), or owns and operates its own WWTF, the proper use of the sanitary sewer system by all registered customers within the MS4 Operator’s jurisdiction is critical for compliance with stream standards. This program element includes a review of existing rules and regulations of the MS4 Operator, including applicable subscriber system contracts, in order to ensure proper use of the system. Emphasis will be placed on rules that govern the ownership and operations of grease traps, grit traps and the discharge of fats, oils and grease into the sanitary system. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Introduce the need to comply with TXR040000 to the MS4’s management team.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019

- Year 2: Identify/update applicable subscriber system(s) to the WWTF.

BMP/Activity	Quantifiable Target/Objective	Deadline
Identify subscribers that use the WWTF	Ensure 100% of subscribers to the WWTF are identified	December 31, 2020
Review existing subscriber contracts	Ensure subscriber contracts address the proper operation of grease traps, grit traps, and the discharge of fats, oils, and greases (FOG)	December 31, 2020

- Years 3-5: Review the MS4 Operator’s Rate Order/rules that pertain to the proper use of the sanitary sewer system. The review will ensure there are rules that govern the ownership of grease traps, grit traps and the discharge of fats, oils and grease into the sanitary system.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review Rate Order/rules	Ensure rules are in place regarding ownership of grease traps, grit traps, and FOG	December 31 every permit year

- End of permit term goal– MS4 Operator will have adequate rules and contracts in place to ensure proper use of the sanitary system by all parties, including subscriber systems.

*Measurable Criteria*

- Meeting agenda/minutes
- Rate Order language that addresses proper use of the MS4 Operator’s sanitary sewer system
- Copy of subscriber system contracts

**Interim Milestones**

By the end of year 2, each lift station will be inventoried. The operations report will include information on SSO’s that have occurred in the system. By the end of year 3, the MS4 Operator’s Rate Order will be reviewed to ensure proper use of the MS4 Operator’s sanitary sewer system.

**3.0 – Illicit Discharge & Dumping**

*Description*

As reported in the BIG’s I-Plan “Many of the TMDLs in the BIG region indicate that illicit discharges and dumping account for a significant dry-weather bacteria loadings. As described and developed in MCM 2, of this SWMP, the MS4 Operator has developed a program in its Stormwater Guidance Manual to detect, investigate, and eliminate illicit discharge into the MS4. Emphasis on bacteria laden discharges and spills, such as from grease traps, grit traps and waste haulers will be the focus during this permit term. The goal of the program is to eliminate illicit discharges to the extent allowable under State and local law. Training of the MS4 Operator’s consultants and applicable parties is an integral part of this program element.

**BMP 3.1 Rules and Regulations for Illicit Discharges**

*Description*

Illicit discharge and dumping can introduce pollutants both directly and indirectly into the waterways. Sources can include illegal connections to the storm sewer, as well as discharges directly into the water body. As described in MCM 2, the SWMP will include a current map of the MS4 Operator’s storm sewer system. The MS4 Operator will review existing maps of the storm sewer systems and determine the need for creation/updates of existing maps. The MS4 Operator will review existing rules and regulations concerning illicit discharges with emphasis on grease trap, grit traps and other sources of bacteria.

*Implementation Schedule*

- Year 1: The stormwater consultant will explain the need to comply with the new conditions of the 2019 TXR040000 to MS4 Operator consultants and customers in attendance at a regularly scheduled meeting of the Board of Directors. Respond to all customer reports of illegal dumping and/or illicit discharges as generated by the cleanbayous.org complaint module within three business days.

BMP/Activity	Quantifiable Target/Objective	Deadline
Attend Board of Directors meeting	Outline TXR040000 new permit terms	July 23, 2019
Monitor website for complaints	Respond to 100% of complaints	3 business days

- Year 2: The stormwater consultant will review and update the District's IDDE Program. This is necessary to comply with new permit conditions in the 2019 TXR040000. The criteria used are the conditions in the TXR040000. Action items as a result of the review will include updated material in the District's GM. Annually review and update the stormwater conveyance map based on changes to the storm sewer system caused by new construction and/or reconstruction. Respond to all customer reports of illegal dumping and/or illicit discharges as generated by the cleanbayous.org complaint module within three business days. The MS4 Operator will hold two training sessions relative to IDDE and other SWMP goals. The training session will be performed during regularly scheduled monthly Board meetings for MS4 Operator Consultants and District customers in attendance at the meetings.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update Chapter 2 of GM	Chapter 2 will comply with new IDDE provisions of TXR04000	December 31, 2020
Review & update stormwater conveyance map	Produce an annual updated stormwater conveyance map	December 31, 2020
Monitor website for complaints	Respond to 100% of complaints	3 business days
Training & Education on IDDE Program	Hold 2 training sessions per year	December 31, 2020

- Years 3-5: The stormwater consultant will review and update the District's IDDE Program. Annually review and update the stormwater conveyance map based on changes to the storm sewer system caused by new construction and/or reconstruction. Respond to all customer reports of illegal dumping and/or illicit discharges as generated by the cleanbayous.org complaint module within 3 business days. The MS4 Operator will hold two training sessions relative to IDDE and other SWMP goals. The training sessions will be performed during regularly scheduled monthly Board meetings for MS4 Operator consultants and District customers in attendance at the meeting.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review & update chapter 2 of GM	Chapter 2 will comply with the new IDDE provisions of TXR040000	December 31 of each permit year
Review & update stormwater conveyance map	Produce an annual updated stormwater conveyance map	December 31 of each permit year
Monitor website for complaints	Respond to 100% of Complaints	3 business days
Review county's Drainage Criteria Manual	Hold 2 training sessions per year	December 31 of each permit year

- End of Permit Term Goal: The Illicit Discharge Detection and Elimination Program will be updated and implemented. A comprehensive map of the MS4's stormwater conveyance system will be up to date.



*Measurable Evaluation Criteria*

- Monthly meeting agenda item for public involvement, necessary training, and education
- Monthly meeting minutes
- Updated chapter 2 of the GM
- Updated stormwater conveyance map

**Interim Milestones**

By the end of year 3, four training sessions on chapter 2 of the GM will be held for District consultants and customers in attendance of the Board meeting where training was held. The stormwater conveyance map will be updated annually.

**4.0 - Residential/Public & MS4 Operator Consultant Education**

*Description*

MCM 1 in this SWMP is designed to be an overall public education program that is used to inform the public about the impacts that pollution in stormwater run-off can have on water quality, hazards associated with illegal discharges and improper disposal of waste, and ways to minimize the impact on stormwater quality. This program element is aimed at changing public behavior through education efforts. Specific educational material will continue to be developed, placing emphasis on possible sources of bacteria, including bacteria from residential sites during stormwater runoff events, bacteria from fats, oils and greases that clog drains and sanitary lines, pet waste and general lawn care practices. Public education material will continue to focus on why bacteria is an issue in our waterways and strategies that can reduce bacteria in these waterways. This program element will continue to take advantage of existing public education programs and materials. Material will continue to be distributed to registered customers within the MS4 Operator’s jurisdiction and will be posted on at least one of the aforementioned websites for public viewing. Training of the MS4 Operator’s consultants and applicable parties is an integral part of this program element.

**BMP 4.1 MS4 Operator Consultant Training**

*Description*

A training program outlined in the Stormwater Guidance Manual has been developed for applicable MS4 Operator consultants and other respective parties responsible for municipal operations. Training sessions seek to educate all interested parties on the requirements of TXR040000, concentrating on the bacteria program elements of the SWMP. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: MS4 Operator consultants who regularly attend District Board meetings and members of the public who may be in attendance at District Board meetings, will be educated on the Public Education, Outreach and Involvement goals of the SWMP during two regular meetings in the calendar year.

BMP/Activity	Quantifiable Target/Objective	Deadline
Training and Education	Hold 2 training sessions per year	July 23, 2019

- Years 2-5: MS4 Operator consultants who regularly attend District Board meetings and members of the public who may be in attendance at District Board meetings, will be educated on the Public Education, Outreach and Involvement goals of the SWMP during two regular meetings in the calendar year.

BMP/Activity	Quantifiable Target/Objective	Deadline
Training and Education	Hold 2 training sessions per year	December 31 of each permit year

- End of Permit Term Goal: All MS4 Operator consultants and members of the public who were in attendance at regular board meetings will be educated on the Public Education, Outreach and Involvement goals of the SWMP and the requirements of TXR040000.

*Measurable Evaluation Criteria*

- Meeting agenda
- Number of training sessions held
- Training material distributed at meetings
- Minutes of the meeting

**Interim Milestones**

At least two training sessions on bacterial specific topics will be held by the end of year 2. At least one design for bacteria specific training material will be selected by the end of year 2.

**5.0 – Animal Sources**

*Description*

Animals that use open space and other green areas within the MS4 Operator’s jurisdiction could be a significant source of bacteria entering the receiving stream. These sources include pets such as dogs, cats, horses and other types of domestic animals. The sources also include many species of wild animals that travel and use these open spaces. This program element is aimed at changing public behavior relating to the proper use of these open spaces and green areas. Public education will include mail outs and/or other educational material that may be developed over the term of the permit. Educational material will be regularly distributed, as deemed necessary by the MS4 Operator, to residents within the MS4 Operator’s jurisdiction and will be posted on

cleanbayous.org for public viewing. The clear, specific, and measurable goals for this activity are outlined in the tables below.

*Implementation Schedule*

- Year 1: Review the overall public education program with an emphasis on material describing the proper disposal of pet waste.

BMP/Activity	Quantifiable Target/Objective	Deadline
Review public education program	Design a utility bill insert specific to pet waste	December 31, 2019

- Years 2-5: Approve design for the educational material, in the form of a utility bill insert (UBI), to be distributed in an annual mailing to all District customers. Perform 1 mailing to MS4 Operator customers. Post on website.

BMP/Activity	Quantifiable Target/Objective	Deadline
Presentation of educational material options at District board meeting	Approve design for utility bill insert	April 30 of each permit year
Mail approved UBI to all District customers	Mail all District customers annually in one mail out	December 31 of each permit year
Post educational material on website	The website is updated annually	December 31 of each permit year

- End of Permit Term Goal: All customers within the MS4 Operator’s jurisdiction will receive educational material annually. Updated educational information and the SWMP and GM will be available on the website.

*Measurable Evaluation Criteria*

- Educational material approved annually
- Educational material distributed annually
- Educational material posted on website annually

**6.0 – Monitoring of Progress towards the Benchmark**

*Description*

The MS4 Operator will continue to monitor progress in achieving the listed benchmark and improving water quality and shall report this progress in each annual report. Based on an evaluation of the BMPs chosen for each program element, the MS4 Operator will assess program success and progress towards achieving the benchmark. Progress will be reported using program indicators such as number of educational opportunities conducted, number of training sessions held, etc. The MS4 Operator is part of an I-Plan that has been prepared for the watershed. The MS4 operator will continue to monitor progress of stream quality by attending the annual meeting of the BIG. The MS4 operator will review the effectiveness of the program to determine the need to change any program elements or BMPs and will make these decisions on an annual basis. The clear, specific, and measurable goals for this activity are outlined in the table below.

BMP/Activity	Quantifiable Target/Objective	Deadline
Prepare annual report	Monitor progress towards achieving the benchmark	December 31 of each permit year
Stormwater consultant to attend TMDL/I-Plan meetings	Keep informed on overall watershed progress relative to the bacteria program	December 31 of each permit year

## **Part IV – Appendices**

**Appendix A**  
**“References”**

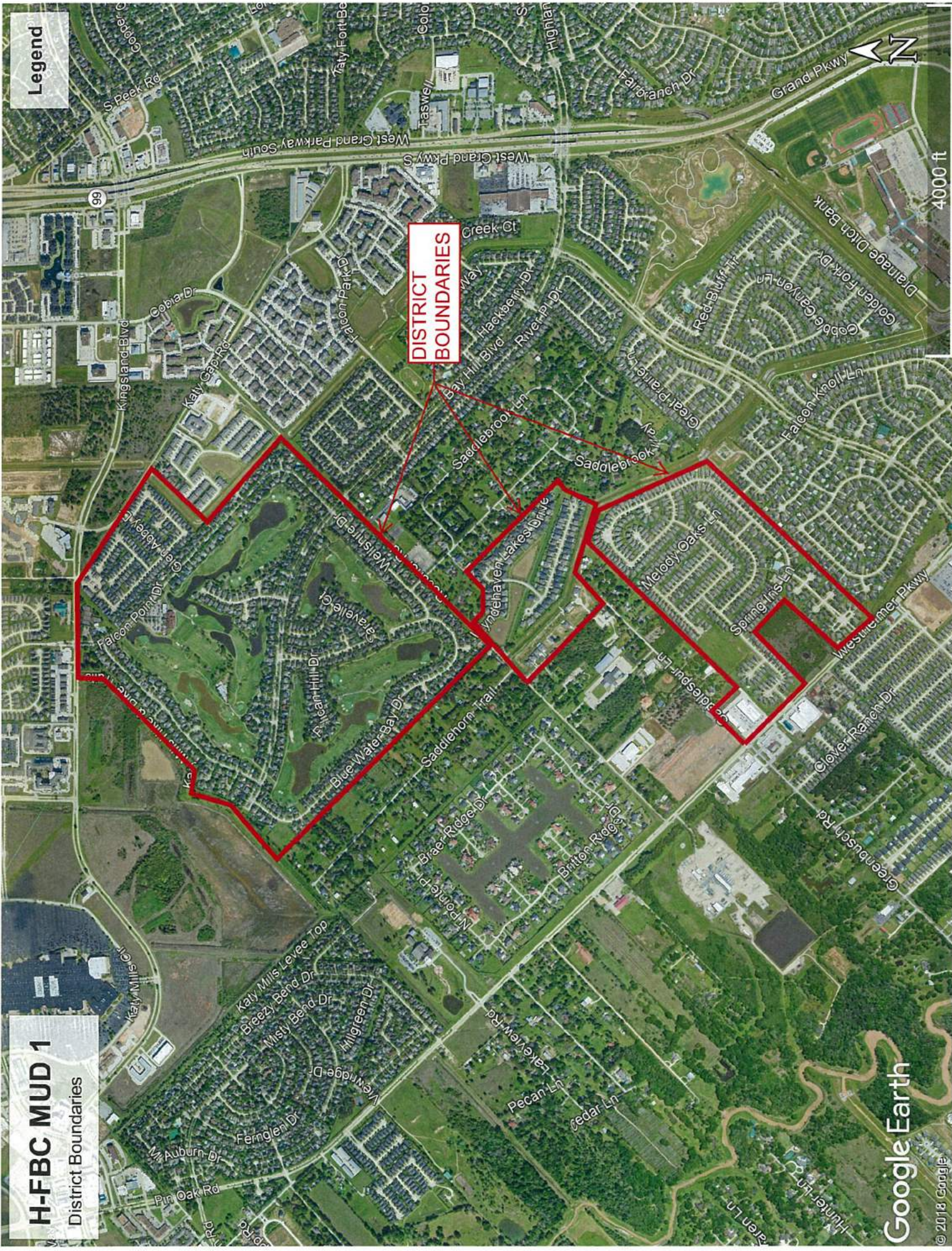
## References

- TCEQ 2014. Texas Surface Water Quality Standards, 2014 update, 30 TAC §307.1 – 307.10, <[www.tceq.texas.gov/assets/public/waterquality/standards/tswqs\\_2014/TSWQ2014Rule.pdf](http://www.tceq.texas.gov/assets/public/waterquality/standards/tswqs_2014/TSWQ2014Rule.pdf)>
- TCEQ 2013. Implementation Plan for Seventy-Two Total Maximum Daily Loads for Bacteria in the Houston-Galveston Region, <[www.tceq.texas.gov/assets/public/waterquality/tmdl/00BIG/42-HoustonRegionBacteriaIPlan-approved.pdf](http://www.tceq.texas.gov/assets/public/waterquality/tmdl/00BIG/42-HoustonRegionBacteriaIPlan-approved.pdf)>
- TCEQ 2013. Texas General Permit Number TXR040000, Relating to Discharges from Small Municipal Separate Storm Sewer Systems, <[www.tceq.texas.gov/assets/public/permitting/stormwater/txr040000\\_issued\\_permit.pdf](http://www.tceq.texas.gov/assets/public/permitting/stormwater/txr040000_issued_permit.pdf)>
- TCEQ 2012. 2012 Texas Integrated Report – Texas 303(d) List (Category 5), <[www.tceq.texas.gov/assets/public/waterquality/swqm/assess/12twqi/2012\\_303d.pdf](http://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/12twqi/2012_303d.pdf)>
- TCEQ 2009. Eighteen Total Maximum Daily Loads for Bacteria in Buffalo and Whiteoak Bayous and Tributaries, <[www.tceq.texas.gov/assets/public/waterquality/tmdl/22buffalobayou/22-bbbwbtml\\_adopted.pdf](http://www.tceq.texas.gov/assets/public/waterquality/tmdl/22buffalobayou/22-bbbwbtml_adopted.pdf)>
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**Appendix B**

**“Location Map – Harris Fort Bend Counties MUD No. 1 Aerial”**





# H-FBC MUD 1

District Boundaries

## Legend

**DISTRICT BOUNDARIES**

4000 ft



**Appendix C**

**“TXR040000”**

**Appendix D**  
**“Notice of Intent”**



# Notice of Intent (NOI) for Small Municipal Separate Storm Sewer Systems (MS4) authorized under TPDES Phase II MS4 General Permit TXR040000

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## IMPORTANT:

Use the [INSTRUCTIONS](#) to fill out each question in this form.

Once approved, your permit authorization can be viewed at:  
<http://www.tceq.texas.gov/goto/wq-dpa>

## APPLICATION FEE:

You must pay the **\$400** Application Fee to TCEQ for the application to be complete.  
Payment and NOI must be mailed to separate addresses.

You can pay online at: <http://www.tceq.texas.gov/goto/epay>

Select Fee Type: GENERAL PERMIT MS4 PHASE II STORMWATER DISCHARGE NOI  
APPLICATION

## Provide your payment information below, for verification of payment:

Mailed      Check/Money Order Number:   
                  Check/Money Order Amount:   
                  Name Printed on Check:   
EPAY        Voucher Number: 425807  
                  Is a copy of the Payment Voucher enclosed?  Yes

**One (1) copy of the NOI, Stormwater Management Program (SWMP) cover sheet, and SWMP MUST be submitted with the original NOI, SWMP cover sheet, and SWMP.**

Is the copy attached?  Yes

## REASON FOR APPLICATION:

Select the reason you are submitting this application:

- New authorization  
 Renewal of authorization number: TXR040306

**Note: An authorization cannot be renewed after July 23, 2019**

## Section 1. OPERATOR (Applicant)

- a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? CN 601356728
- b) What is the exact Legal Name of the entity (applicant) applying for this permit?  
Harris-Fort Bend Counties Municipal Utility District No. 1
- c) Complete and attach a Core Data Form (TCEQ-10400) for this customer.

## Section 2. ANNUAL BILLING CONTACT

The operator is responsible for paying the annual water quality fee. The annual fee will be assessed to permits active on September 1 of each year. TCEQ will send a bill to the address provided in this section. The operator is responsible for terminating the permit when it is no longer needed.

Provide the name and contact information of the billing contact.

Prefix (Mr. or Ms.): Mr.

First and Last Name: Terry Holland

Title: Bookkeeper

Organization Name: Myrtle Cruz, Inc.

Phone Number: 713-759-1368

Fax Number:

Email: terry\_holland@macruz.com

Mailing Address: 3401 Louisiana Street, Suite 400

City, State, and Zip Code: Houston, Texas 77002-9552

## Section 3. APPLICATION CONTACT

This is the person TCEQ will contact if additional information is needed about this application.

Provide the name and contact information of the application contact.

Prefix (Mr. or Ms.): Ms.

First and Last Name: Jolie Craft

Title: Engineer

Organization Name: Van De Wiele & Vogler, Inc.

Phone Number: 713-782-0042

Fax Number:

Email: jcrafft@vandewiele-eng.com

Mailing Address: 2925 Briarpark, Suite 275

City, State, and Zip Code: Houston, Texas 77042

#### Section 4. REGULATED ENTITY (RE) INFORMATION FOR SITE

- a) If this is an existing permitted site, what is the Regulated Entity Number (RN) issued to this site? RN 105589568
- b) Name of site as known by the local community:  
Harris Fort Bend Counties MUD 1 MS4
- c) Name of the urbanized area(s) the Phase II MS4 is located within:  
Houston
- d) Provide a brief description of the regulated MS4 boundaries: *Example: Area within the City of XXXX limits that is located within the xxx urbanized area.*  
Area outside the City of Katy limits that is located within the Houston urbanized area

#### Section 5. GENERAL CHARACTERISTICS

- a) Is this site located on Indian Country Lands?
- Yes, do not submit this form. You must obtain authorization through U.S. EPA Region 6.
- No, continue to item b
- b) Has TCEQ formally "designated" the small MS4 as needing coverage under this general permit?
- Yes. Attach a copy of the documentation sent to the MS4 by TCEQ.
- No
- c) Select the MS4 level, which is based on the population served within the urbanized area (UA) based on the most recent Decennial Census at the time of issuance of the general permit.
- Level 1:** Traditional small MS4s with a population of less than 10,000.
- Level 2:** Traditional small MS4s with a population of at least 10,000 but less than 40,000.
- Non-traditional MS4s: This level also includes all non-traditional small MS4s regardless of population unless the non-traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage. *Examples of non-traditional small MS4s include counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts, and other special districts.*
- Level 3:** Traditional small MS4s with a population of at least 40,000 but less than 100,000.
- Level 4:** Traditional small MS4s with a population of 100,000 or more.
- d) What is the estimated current population served by your MS4 (regulated area?)  
3,943 People



e) Is the MS4 part of a coalition?

- Yes
- No

f) If yes, list the entity names of the coalition members responsible for implementation of the SWMP *and* their unique TXR04#### number.

- 1. \_\_\_\_\_ TXR04 \_\_\_\_\_
- 2. \_\_\_\_\_ TXR04 \_\_\_\_\_
- 3. \_\_\_\_\_ TXR04 \_\_\_\_\_
- 4. \_\_\_\_\_ TXR04 \_\_\_\_\_
- 5. \_\_\_\_\_ TXR04 \_\_\_\_\_
- 6. \_\_\_\_\_ TXR04 \_\_\_\_\_

If needed, add a copy of this page to add more entities.

g) What is your annual reporting year?

- Calendar year
- Small MS4 General Permit year
- MS4 Fiscal year - What is the last month and day of the fiscal year? \_\_\_\_\_

h) Stormwater Management Program (SWMP)

- 1. I certify that the SWMP submitted with this NOI has been developed according to the provisions of the Small MS4 General Permit TXR040000.  Yes
- 2. I certify that the SWMP Cover Sheet is completed and attached to the front of the SWMP.  Yes
- 3. Have the program elements in the previous SWMP been re-assessed and modified and new program elements been developed and implemented, as necessary?
  - Yes
  - No. This facility did not have a previous authorization.
- 4. Is the optional 7<sup>th</sup> Minimum Control Measure (MCM) for Municipal Construction Activities selected and included with the attached SWMP?
  - No. Continue to Question 5.
  - Yes.
    - If yes, is MCM 7 limited to the regulated area within the urbanized area?
      - Yes. Continue to Question 5.
      - No

If No, then MCM 7 is included in the geographic area or boundary outside of the urbanized area. Note: *In this case, you must incorporate the entire area*

(urbanized and non-urbanized areas) in the SWMP and implement all MCMs 1-7 in the urbanized and non-urbanized areas.

5. Provide the name and contact information of the person responsible for implementing or coordinating implementation of the SWMP.

Prefix (Mr. or Ms.): Ms.

First and Last Name: Jolie Craft

Title: engineer

Organization Name: Van De Wiele & Vogler, Inc.

Phone Number: 713-782-0042

Fax Number:

Email: jcrafft@vandewiele-eng.com

Mailing Address: 2925 Briarpark, Suite 275

City, State, and Zip Code: Houston, Texas 77042

i) Discharge Information

1. What is the name of the waterbody(ies) receiving stormwater discharges from the MS4? Buffalo Bayou Above Tidal
2. What is the classified segment number(s) that the discharges will eventually reach? 1014

Does the small MS4 discharge directly or indirectly into the classified segment(s)?

Directly

Indirectly

3. Are any of the waterbody(ies) receiving discharges from the small MS4 identified as impaired waters (Category 4 or 5) in the *Texas Integrated Report of Surface Water Quality*?

Yes

What is the name of the impaired waterbody(ies) receiving the discharge from the small MS4? Buffalo Bayou Above Tidal

What is/are the pollutants(s) of concern? Bacteria

No

4. Does the impaired water body(ies) have a TMDL (Category 4 waterbody)?

Yes

What is/are the pollutants with a TMDL? Bacteria

No



5. Does your MS4 discharge into any other MS4 entity's jurisdiction prior to discharge into water in the state?

Yes

What is the name of the MS4 operator? Willow Fork Drainage District

No

6. Edwards Aquifer Rule

Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, within the Contributing Zone within the Transition Zone, or zero to ten (0 to 10) miles upstream of the Recharge Zone of the Edwards Aquifer?

Yes - NOTE: A copy of the agency approved Water Pollution Abatement Plan (WPAP) required by the Edwards Aquifer Rule (30 TAC Chapter 213) must be either included or referenced in the SWMP.

No

- j) Public Participation Process

1. Provide the name and contact information of the person responsible for publishing notice of the executive director's preliminary determination on the MS4's NOI and SWMP?

Prefix (Mr. or Ms.): Ms.

First and Last Name: Jolie Craft

Title: engineer

Company: Van De Wiele & Vogler, Inc.

Phone Number: 713-782-0042

Fax Number: [REDACTED]

Email: jcrafft@vandewiele-eng.com

Mailing Address: 2925 Briarpark, Suite 275

Internal Routing (Mail Code, Etc.): [REDACTED]

City, State, and Zip Code: Houston, Texas 77042

2. Provide the name and location of the public place where copies of the NOI, SWMP, Small MS4 General Permit TXR040000, and general permit fact sheet may be viewed and copied by the public?

Name of Public Place: Cinco Ranch Branch Library

Address of Public Place: 2620 Commercial Center Blvd., Katy, Texas 77479

County of Public Place: Fort Bend

3. Provide the address for the website where the MS4's SWMP and annual report will be posted. [REDACTED]

Do not have a website.

**Section 6. CERTIFICATION**

I certify that I have obtained a copy and understand the terms and conditions of the Phase II (Small) MS4 General Permit TXR040000 issued January 24, 2019.

Yes

I certify that the small MS4 qualifies for coverage under the Phase II (Small) MS4 General Permit TXR040000.

Yes

I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.

Yes

I understand that authorizations active on September 1<sup>st</sup> of each year will be assessed an Annual Water Quality Fee.

Yes

**Operator Certification**

Operator Signatory Name: David Beyer

Operator Signatory Title: President, Harris-Fort Bend Counties MUD No. 1

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): \_\_\_\_\_ Date: \_\_\_\_\_

## TCEQ ePay Voucher Receipt

### Transaction Information

**Voucher Number:** 425807  
**Trace Number:** 582EA000352106  
**Date:** 07/15/2019 04:46 PM  
**Payment Method:** CC - Authorization 000008026D  
**Amount:** \$400.00  
**Fee Type:** GENERAL PERMIT MS4 PHASE II STORM WATER DISCHARGE NOI APPLICATION  
**ePay Actor:** Jolie Craft

### Payment Contact Information

**Name:** Jolie Craft  
**Company:** Van De Wiele & Vogler Inc  
**Address:** 2925 Briarpark Suite 275, Houston, TX 77042  
**Phone:** 713-782-0042

### Site Information

**Site Name:** HARRIS-FORT BEND COUNTIES MUD NO 1  
**Site Location:** HARRIS-FORT BEND COUNTIES MUD NO 1

### Customer Information

**Customer Name:** JOLIE CRAFT  
**Customer Address:** 2925 BRIARPARK SUITE 275, HOUSTON, TX 77042





23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	1300 Post Oak Blvd							
	Suite 1400							
	City	Houston	State	TX	ZIP	77056	ZIP + 4	3078
24. County	Harris							

**Enter Physical Location Description if no street address is provided.**

25. Description to Physical Location:								
26. Nearest City						State	Nearest ZIP Code	
Katy						TX	77494	
27. Latitude (N) In Decimal:	29.758			28. Longitude (W) In Decimal:	-95.793			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
29	45	29	-95	47	35			
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)			
9511			924110					
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>								
providing water and sewer service								
34. Mailing Address:	1300 Post Oak Blvd							
	Suite 1400							
	City	Houston	State	TX	ZIP	77056	ZIP + 4	3078
35. E-Mail Address:	mreed@sphllp.com							
36. Telephone Number			37. Extension or Code		38. Fax Number <i>(if applicable)</i>			
( 713 ) 407-2076					( ) -			

**39. TCEQ Programs and ID Numbers** Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

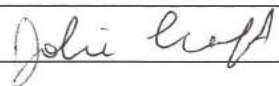
<input type="checkbox"/> Dam Safety	<input checked="" type="checkbox"/> Districts	<input type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input checked="" type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

**SECTION IV: Preparer Information**

40. Name:	Jolie Craft	41. Title:	engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
( 713 ) 782-0042		( ) -	jcrafft@vandewiele-eng.com

**SECTION V: Authorized Signature**

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Van De Wiele & Vogler, Inc.	Job Title:	District Engineer
Name <i>(In Print)</i> :	Jolie Craft	Phone:	( 713 ) 782-42
Signature:		Date:	7/22/2019