



Stormwater Management Program

In Accordance With:

**TPDES General Permit
TXR040000**

Prepared By:

Carroll & Blackman, Inc.
Consulting Engineers
Texas Registered Engineering Firm F-001054
3120 Fannin Street
Beaumont, TX 77701
Phone: (409) 833-3363
Facsimile: (409) 833-0317

April 2014

Table of Contents

Section	Page
Introduction	3
Minimum Control Measures (MCMs)	
1: Public Education, Outreach, and Involvement	4 - 7
1.A. Permit Requirements	
1.B. Program Elements	
1.C. Best Management Practices and Measurable Goals	
1.D. BMP Implementation Schedule & Responsible Party	
2: Illicit Discharge Detection and Elimination	8 - 10
2.A. Permit Requirements	
2.B. Program Elements	
2.C. Best Management Practices and Measurable Goals	
2.D. BMP Implementation Schedule & Responsible Party	
3: Construction Site Stormwater Runoff Control	11 - 13
3.A. Permit Requirements	
3.B. Program Elements	
3.C. Best Management Practices and Measurable Goals	
3.D. BMP Implementation Schedule & Responsible Party	
4: Post-Construction Stormwater Management in New Development/Redevelopment	14 - 15
4.A. Permit Requirements	
4.B. Program Elements	
4.C. Best Management Practices and Measurable Goals	
4.D. BMP Implementation Schedule & Responsible Party	
5: Pollution Prevention and Good Housekeeping for Municipal Operations	16 - 19
5.A. Permit Requirements	
5.B. Program Elements	
5.C. Best Management Practices and Measurable Goals	
5.D. BMP Implementation Schedule & Responsible Party	
6: Industrial Stormwater Sources	20
6.A. Permit Requirements	
6.B. Program Elements	
7: Municipal Construction Activities	21
7.A. Permit Requirements	
7.B. Program Elements	
Impaired Water Bodies	22
8: Impaired Water Bodies with Approved TMDLs	23 - 24
9: Impaired Water Bodies without Approved TMDLs	25 - 26

Introduction:

This Stormwater Management Program (SWMP) has been developed in accordance with TPDES General Permit TXR040000 (effective date December 13, 2013) and is being implemented and enforced to reduce the discharge of pollutants from the small MS4(s) to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA) and the Texas Water Code (TWC). Galveston County Consolidated Drainage District is a non-traditional MS4 and is therefore limited in their ability to implement specific portions of the permit. The permittee will continue to implement their program to the MEP and rely on adjacent MS4 operators and the TCEQ Field Operations Support Division for enforcement authority according to Part III.A.3(b) of TPDES General Permit TXR040000.

Entity	Small MS4 Level	Permit Number
Galveston County Consolidated Drainage District	Non-traditional MS4 (Level 2)	TXR040067

Section 1: Public Education, Outreach, and Involvement

1.A. Permit Requirements

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

All permittees shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP, except that correctional facilities are not required to implement this portion of the MCM.

1.B. Program Elements

The existing permittee has assessed the program elements that were described in the previous permit term, modified them as necessary, and developed new elements to continue reducing the discharge of pollutants from the MS4 to the MEP.

- a. Goals and Objectives:** The permittee has identified high-priority issues that can be addressed using the BMPs developed for Public Education, Outreach, and Involvement and developed the following goals: increase construction site operators' awareness of stormwater pollution; increase local residents' awareness of stormwater pollution; and encourage public involvement in the implementation of the stormwater management program.
- b. Target Audiences:** The permittee has identified the following target audiences:
 - residents
 - visitors
 - public service employees
 - businesses
 - commercial and industrial facilities
 - construction site personnel
- c. Education Materials:** The permittee plans to develop and utilize flyers/brochures, signage in select locations, public service announcements, and websites.
- d. Distribution of Materials:** The permittee identified cost effective and practical methods for distribution of public education materials during the first permit term. Flyers and brochures are made available at public locations including: libraries, district offices, etc. Public service announcements are included on the stormwater quality website.

The activities and materials utilized to fulfill the Public Education, Outreach, and Involvement MCM will be documented. The documentation of these records will be summarized in an annual report and will be specific enough to demonstrate compliance with the existing permit requirements. Included in each BMP is a description of what records will be maintained and reported in the annual reports.

1.C. Best Management Practices and Measurable Goals

BMP Descriptions

Public Education and Outreach

- a. **Flyers and Brochures:** Distribution or posting of flyers and brochures for the purpose of educating the public on stormwater impacts and ways they can minimize stormwater pollution.
- b. **Develop Materials for Local Schools/Libraries:** Development of educational materials for school age children in order to foster an early age respect for water quality.
- c. **Education of Construction Site Personnel:** Development of guidance materials/brochures/webpage for construction site personnel on the proper installation and maintenance of erosion and sediment controls, and other construction site runoff issues.
- d. **Public Service Announcements:** Develop and make available PSAs on the impacts of stormwater pollution and steps that residents can take to improve water quality.
- e. **Stormwater Quality Website:** Develop and maintain a stormwater quality website. The website will include stormwater education per the TCEQ general permit guidelines and provide specific information regarding the TPDES Phase II program; including links to other local, state and national stormwater websites. In addition, the website will provide viewers with instructions on how to report stormwater quality concerns in their area.
- f. **Public Notice:** Comply with all state and local public notice requirements regarding permit application/renewal process and public meetings associated with the stormwater quality program.
- g. **SWMP Availability:** Make the SWMP available to the public on the stormwater quality website. Website address will be included on flyers and brochures distributed by the permittee.

Public Involvement

- h. **SWMP Committee:** Formation/maintenance of a committee on SWMP program development and implementation.
- i. **Public Meetings:** Conduct public meetings to allow citizens to have input in the implementation of the program and provide opportunities for citizens to volunteer to participate in the implementation of the SWMP.
- j. **Stormwater Hotline:** Advertise appropriate phone numbers for citizens to report information regarding illicit discharges, illegal dumping, construction site discharges, etc.

BMP Measurable Goals & Method of Measurement

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
Public Education and Outreach			
Flyers and Brochures	Estimated quantities of materials distributed or posted	Distribute or post at least 2 types of available brochures per year Interim Milestone: N/A	Annually
Develop Materials for Local Schools/Libraries	Estimated quantities of education materials distributed	Ensure at least 1 type of material is distributed annually for local schools and/or public libraries Interim Milestone: N/A	Annually
Education of Construction Site Personnel	Estimated quantities of educational materials or guidance documents distributed	Make available to construction site personnel at least 1 guidance document, brochure, or webpage on construction site runoff issues each year Interim Milestone: N/A	Annually
Public Service Announcements	Number of different PSA's being aired by local media	Provide at least 1 PSA to be aired by local media, public access channel, or website at least once per permit term Interim Milestone: N/A	Once per permit term
Stormwater Quality Website	Number of website updates and estimated number of hits	Update website at least once per permit term Interim Milestone: N/A	Once per permit term
Public Notice	Type/date of event requiring public notice	Comply with state and local public notice requirements for applicable events Interim Milestone: N/A	As needed
SWMP Availability	Methods of making SWMP available	Make SWMP available to the public annually Interim Milestone: N/A	Annually
Public Involvement			
SWMP Committee	Number of meetings held and associated sign-in sheets	Conduct at least 2 SWMP Committee meetings per year and encourage local groups to participate at least once per permit term Interim Milestone: N/A	Once per permit term
Public Meetings	Number of meetings held and associated sign-in sheets	Conduct public meeting at least once per permit term Interim Milestone: N/A	Once per permit term
Stormwater Hotline	Estimated number of phone calls received	Distribute at least 2 types of materials per year that informs the public about reporting stormwater quality concerns Interim Milestone: N/A	Annually

1.D. BMP Implementation Schedule & Responsible Party

BMP	Responsible Party	Full Implementation By:
Flyers and Brochures	Galveston County Consolidated Drainage District	Continued Full Implementation
Develop Materials for Local Schools/Libraries	Galveston County Consolidated Drainage District	Continued Full Implementation
Education of Construction Site Personnel	Galveston County Consolidated Drainage District	Continued Full Implementation
Public Service Announcements	Galveston County Consolidated Drainage District	Continued Full Implementation
Stormwater Quality Website	Galveston County Consolidated Drainage District	Continued Full Implementation
Public Notice	Galveston County Consolidated Drainage District	Continued Full Implementation
SWMP Availability	Galveston County Consolidated Drainage District	December 2015
SWMP Committee	Galveston County Consolidated Drainage District	Continued Full Implementation
Public Meetings	Galveston County Consolidated Drainage District	Continued Full Implementation
Stormwater Hotline	Galveston County Consolidated Drainage District	Continued Full Implementation

Section 2: Illicit Discharge Detection and Elimination

2.A. Permit Requirements:

All permittees shall develop, implement, and enforce a program to detect, investigate, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the MS4 system.

2.B. Program Elements:

The existing permittee has assessed the program elements that were described in the previous permit term, modified them as necessary, and developed new elements to continue reducing the discharge of pollutants from the MS4 to the MEP.

- a. Description of Program:** The permittee will utilize their daily field staff, reports from citizens, and a concentrated dry weather screening program to identify illicit discharges within the MS4. Once a discharge has been identified, field technicians will investigate the discharge utilizing colorimetric field test kits to identify its nature and trace the discharge to its origin. Once the responsible party is identified, the MS4 will utilize adjacent MS4 operators and/or the TCEQ Field Operations Support Division to eliminate illicit discharges originating from private parties and/or coordinate with the appropriate municipal departments to make the needed repairs.
- b. MS4 Map:** During the first permit term, the permittee developed a MS4 outfall map which identifies the location of all outfalls operated by the MS4 that discharge into waters of the U.S. and identifies the location and name of all surface waters receiving discharges from the MS4 outfalls. The permittee will continue to maintain their MS4 Map and conduct updates as needed.
- c. Development of Required Procedures:** The permittee has developed BMPs to address the development of the required procedures regarding training MS4 field staff, tracing illicit discharges, removing the source(s) of illicit discharges, responding to illicit discharges/spills, inspection response to complaints, and facilitating public reporting. The established BMPs will be fully implemented within five (5) years from the permit issuance date.
- d. Allowable Non-Stormwater Discharges:** Non-stormwater flows listed in Part II.C of TPDES General Permit TXR040000 will not be considered by the permittee as an illicit discharge unless the permittee identifies the flow as a significant source of pollutants to the small MS4.

2.C. Best Management Practices and Measurable Goals:

- a. MS4 Outfall Map:** Develop/Maintain an updated map of the MS4 indicating the location of stormwater outfalls that discharge to waters of the U.S. and the location and name of all surface waters receiving discharge from the MS4.
- b. MS4 Outfall Inspections:** Utilize reports from MS4 field staff, citizens, and a concentrated dry weather screening program to inspect outfalls for illicit discharges.

- c. **Regulatory Mechanisms:** With the permittee being a non-traditional MS4, the permittee will rely on adjacent MS4 operators and the TCEQ Field Operations Support Division for enforcement authority according to Part III.A.3(b) of the TPDES General Permit TXR040000.
- d. **MS4 Field Staff Training:** Conduct training for MS4 field staff to provide information regarding the identification of illicit discharges and proper reporting.
- e. **IDDE Procedures:** Develop procedures for tracing/removing the source of an illicit discharge, responding to illicit discharges/spills, inspections in response to complaints, and to prevent/correct leaking on-site sewage disposal systems.
- f. **Public Reporting:** Develop media to facilitate public reporting of illicit discharges. Options may include stormwater hotlines, websites, and social media pages.

BMP Measurable Goals & Method of Measurement

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
MS4 Outfall Map	Total number of outfalls mapped	Conduct 1 review of the map per permit term. Map outfalls in new development areas on an as needed basis Interim Milestone: N/A	Once per permit term
MS4 Outfall Inspections	Percentage of outfalls inspected	Inspect approximately 20% of the identified outfalls per year Interim Milestone: N/A	Annually
Regulatory Mechanisms	Number of violations identified and reported	Report identified illicit discharges to the appropriate adjacent MS4 or TCEQ Field Operations Support Division Interim Milestone: N/A	As needed
MS4 Field Staff Training	Number of training sessions conducted	Conduct training for MS4 field staff at least once per permit term Interim Milestone: N/A	Once per permit term
IDDE Procedures	Number of procedures/guidance documents developed	Develop and maintain appropriate IDDE procedures Interim Milestone: N/A	Once per permit term
Public Reporting	Number of reports received	Distribute at least 2 types of media/materials to help facilitate public reporting of illicit discharges Interim Milestone: N/A	Annually

2.D. BMP Implementation Schedule & Responsible Party

BMP	Responsible Party	Full Implementation By:
MS4 Outfall Map	Galveston County Consolidated Drainage District	Continued Full Implementation
MS4 Outfall Inspections	Galveston County Consolidated Drainage District	Continued Full Implementation
Regulatory Mechanisms	Galveston County Consolidated Drainage District	December 2015
MS4 Field Staff Training	Galveston County Consolidated Drainage District	December 2016
IDDE Procedures	Galveston County Consolidated Drainage District	December 2017
Public Reporting	Galveston County Consolidated Drainage District	December 2015

Section 3: Construction Site Stormwater Runoff Control

3.A. Permit Requirements:

All permittees shall develop, implement, and enforce a program requiring operators of small and large construction activities, as defined in Part I of this general permit, to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

3.B. Program Elements:

The existing permittee has assessed the program elements that were described in the previous permit term, modified them as necessary, and developed new elements to continue reducing the discharge of pollutants from the MS4 to the MEP.

- a. Description of Program:** The permittee is a non-traditional MS4 and lacks adequate legal authority to inspect private construction sites, therefore the MS4 will be limited to conducting inspections of only the sites operated by the permittee. Violations related to construction site stormwater runoff identified on private sites will be reported to the appropriate adjacent MS4 or TCEQ Field Operations Support Division.
- b. Regulatory Mechanisms:** With the permittee being a non-traditional MS4, the permittee will rely on adjacent MS4 operators and the TCEQ Field Operations Support Division for enforcement authority according to Part III.A.3(b) of the TPDES General Permit TXR040000. Within (2) two years from the permit issuance date, the permittee will review and revise (if necessary) construction guidance documents to include procedures for permittee owned projects that:
 - i.** require soil stabilization measures, and implementation of BMPs to control pollutants from equipment and vehicle washing and other wash waters;
 - ii.** require operators to minimize exposure for stormwater discharges related to building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials;
 - iii.** require operators to implement BMPs that minimize the discharge of pollutants from spills and leaks; and
 - iv.** prohibits illicit discharges such as wash out wastewater, fuels, oils, soaps, solvents, and dewatering activities.

The permittee will refer all identified construction site stormwater runoff issues to the appropriate adjacent MS4 or TCEQ Field Operations Support Division for enforcement.

All permittee owned construction sites resulting in a land disturbance of greater than or equal to one acre or are part of a larger common plan of development or sale will comply with the TCEQ Construction General Permit TXR150000. Each required site will incorporate a Stormwater Pollution Prevention Plan (SWPPP) including adequate sediment and erosion controls.

3.C. Best Management Practices and Measurable Goals:

- a. Construction Site Plan Review:** Implement a construction site plan review program that focuses on compliance with the Construction General Permit for permittee owned construction sites and develop associated guidance materials.
- b. Construction Site Inspection/Enforcement:** Conduct inspections of permittee owned construction sites/associated control measures to ensure compliance with the CGP.
- c. Construction Site Notice Posting:** Post an appropriate site notice or NOI in a publicly accessible location for each permittee owned construction project subject to the TCEQ Construction General Permit.
- d. Public Reporting:** Develop and implement procedures for receipt and consideration of information submitted by the public regarding construction site stormwater runoff.
- e. MS4 Staff Training:** Develop and implement procedures for MS4 staff training regarding construction site stormwater runoff control.

BMP Measurable Goals & Method of Measurement

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
Construction Site Plan Review	Number of plans reviewed	Review applicable permittee owned construction site plans for compliance with the CGP Interim Milestone: N/A	Annually
Construction Site Inspection/ Enforcement	Number of construction site inspections	Inspect all permittee owned construction sites for compliance with the CGP Interim Milestone: N/A	Annually
Construction Site Notice Posting	Number of applicable permittee owned construction sites	Post an appropriate site notice at each permittee owned construction site subject to the TPDES Construction General Permit TXR150000 Interim Milestone: N/A	As needed
Public Reporting	Number of reports received	Develop procedures for receipt and consideration of information submitted by the public Interim Milestone: N/A	Once per permit term
MS4 Staff Training	Number of training sessions conducted	Conduct training for MS4 field staff at least once per permit term Interim Milestone: N/A	Once per permit term

3.D. BMP Implementation Schedule & Responsible Party

BMP	Responsible Party	Full Implementation By:
Construction Site Plan Review	Galveston County Consolidated Drainage District	Continued Full Implementation
Construction Site Inspection/ Enforcement	Galveston County Consolidated Drainage District	Continued Full Implementation
Construction Site Notice Posting	Galveston County Consolidated Drainage District	Continued Full Implementation
Public Reporting	Galveston County Consolidated Drainage District	December 2016
MS4 Staff Training	Galveston County Consolidated Drainage District	December 2017

Section 4: Post-Construction Stormwater Management in New Development/Redevelopment

4.A. Permit Requirements:

All permittees shall develop, implement, and enforce a program, to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

4.B. Program Elements:

The existing permittee has assessed the program elements that were described in the previous permit term, modified them as necessary, and developed new elements to continue reducing the discharge of pollutants from the MS4 to the MEP.

- a. Description of Program:** Being a non-traditional MS4, the permittee is limited to only conducting inspections of the controls owned and operated by the MS4. The permittee includes/maintains structural and/or non-structural controls for post-construction stormwater management in new development and redevelopment on permittee owned sites. The permittee documents and maintains records of all associated enforcement and maintenance activities.
- a. Regulatory Mechanisms:** With the permittee being a non-traditional MS4, the permittee will rely on adjacent MS4 operators and the TCEQ Field Operations Support Division for enforcement authority according to Part III.A.3(b) of the TPDES General Permit TXR040000. Within (2) two years from the permit issuance date, the permittee will review and revise (if necessary) post-construction guidance documents to include procedures for permittee owned projects that:
 - i.** require owners or operators of new development and redeveloped sites to design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality; and
 - ii.** require long-term operation and maintenance of post construction stormwater control measures.

The permittee will refer all post construction stormwater management issues to the appropriate adjacent MS4 or TCEQ Field Operations Support Division for enforcement.

4.C. Best Management Practices and Measurable Goals:

- a. Development Project Plan Review:** Review development plans for permittee owned sites to ensure compliance with local post-construction runoff guidelines and inclusion of appropriate permanent stormwater quality controls. Ensure that contracted operators hired by the permittee design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality.

- b. Inspection of Post Construction Control Measures:** Conduct inspections of post construction control measures owned and operated by the MS4. Document and maintain all associated inspection/maintenance records.

BMP Measurable Goals & Method of Measurement

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
Development Project Plan Review	Number of plans reviewed	Review construction plans for the inclusion of appropriate post-construction controls for permittee owned projects Interim Milestone: N/A	Annually
Inspection of Post Construction Control Measures	Number of inspections conducted on permittee owned and operated controls	Conduct at least 1 inspection of control measures per permit term Interim Milestone: N/A	Once per permit term

4.D. BMP Implementation Schedule & Responsible Party

BMP	Responsible Party	Full Implementation By:
Development Project Plan Review	Galveston County Consolidated Drainage District	Continued Full Implementation
Inspection of Post Construction Control Measures	Galveston County Consolidated Drainage District	Continued Full Implementation

Section 5: Pollution Prevention and Good Housekeeping for Municipal Operations

5.A. Permit Requirements:

All permittees shall develop and implement an operation and maintenance program, including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

5.B. Program Elements:

The existing permittee has assessed the program elements that were described in the previous permit term, modified them as necessary, and developed new elements to continue reducing the discharge of pollutants from the MS4 to the MEP.

The permittee currently has an operation and maintenance program, including an employee training component, to reduce/prevent pollution from municipal activities and municipally owned areas included but not limited to fleet and building maintenance; stormwater system maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards. During the second permit term, the permittee plans to strengthen the existing program elements.

The permittee plans to implement good housekeeping measures and non-structural BMPs that reduce the discharge of pollutants from the following operations:

- fleet and building maintenance
- storm sewer system maintenance
- new construction & land disturbances
- municipal parking lots
- vehicle/equipment maintenance and storage yards

Within the regulated area, the permittee does not operate or maintain the following operations:

- waste transfer stations
- street, road or highway maintenance
- salt and sand storage locations
- parks and open spaces

All permittee employees responsible for municipal operations will attend training programs that focus on procedures for reducing the discharge of pollutants from municipal operations. The MS4 will inspect structural control measures to ensure adequate long term maintenance.

5.C. Best Management Practices and Measurable Goals:

- a. **MS4 Facility Inventory:** Develop and maintain an inventory of the applicable MS4's facilities and stormwater controls within the regulated area.
- b. **Employee Training Program:** Develop a training program to target all employees responsible for operations subject to the prevention/good housekeeping program.
- c. **Disposal of Waste:** Properly dispose of waste materials that are removed as a result of maintenance activities; such as floatables, dredge spoils, and or accumulated sediments.
- d. **Contractor Oversight Procedures:** Develop procedures that contractually require contractors hired by the permittee to perform maintenance activities on permittee-owned facilities to comply with all stormwater control measures, good housekeeping practices, and facility specific stormwater management operating procedures.
- e. **Operation and Maintenance Activities:** Evaluate O & M activities for their potential to discharge pollutants to stormwater. Develop general pollution prevention plans that identify potential pollutants of concern and implement appropriate measures to reduce the discharge of pollutants from O & M activities. Conduct inspections at MS4 facilities and maintain associated records.
- f. **MS4 Structural Controls:** Implement and maintain appropriate structural controls at applicable MS4 facilities.
- g. **Vehicle and Equipment Maintenance:** Conduct routine maintenance of permittee owned vehicles according to manufacturer's specifications.
- h. **Litter/Garbage Collection:** Conduct garbage and/or litter collection in order to reduce floatable material discharges to stormwater.
- i. **Maintain Municipally Owned Construction Sites:** Conduct maintenance activities necessary to properly maintain erosion and sediment controls at municipally owned construction sites based on needs identified during construction site inspections.
- j. **Permittee Parking Lots:** Inspect and maintain municipal parking lots.

BMP Measurable Goals & Method of Measurement

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
MS4 Facility Inventory	Facility inventory and associated controls	Develop and maintain MS4 facility inventory list and stormwater controls within the regulated area Interim Milestone: N/A	Once per permit term
Employee Training Program	Number of training sessions conducted	Conduct at least 1 training session per permit term Interim Milestone: N/A	Once per permit term
Disposal of Waste	Documentation regarding the disposal procedures for collected dredge spoil, accumulated sediments and floatables	Properly dispose of waste materials on a routine basis and maintain documentation regarding disposal procedures Interim Milestone: N/A	Annually
Contractor Oversight Procedures	Development of procedures	Develop contractor oversight procedures and conduct a review of the procedures once per permit term Interim Milestone: N/A	Once per permit term
Operation and Maintenance Activities	Number of general pollution prevention plans developed	Inspect municipal facilities at least once per permit term Interim Milestone: N/A	Once per permit term
MS4 Structural Controls	Inventory of MS4 structural controls	Inspect structural controls at least once per year Interim Milestone: N/A	Annually
Vehicle and Equipment Maintenance	Total number of vehicles/equipment operated by MS4	Conduct routine maintenance and repairs on permittee owned equipment Interim Milestone: N/A	As needed
Litter/Garbage Collection	Estimated volume of litter/garbage removed	Conduct litter/garbage collection at least once per year within the regulated area Interim Milestone: N/A	Annually
Maintain Municipally Owned Construction Sites	Number of permittee owned construction sites	Inspect and maintain permittee owned construction sites as required by the TCEQ Construction General Permit Interim Milestone: N/A	Annually
Permittee Parking Lots	Number of parking lot inspections	Inspect/maintain permittee parking areas at least once per year Interim Milestone: N/A	Annually

5.D. BMP Implementation Schedule & Responsible Party

BMP	Responsible Party	Full Implementation By:
MS4 Facility Inventory	Galveston County Consolidated Drainage District	December 2015
Employee Training Program	Galveston County Consolidated Drainage District	December 2017
Disposal of Waste	Galveston County Consolidated Drainage District	Continued Full Implementation
Contractor Oversight Procedures	Galveston County Consolidated Drainage District	December 2017
Operation and Maintenance Activities	Galveston County Consolidated Drainage District	December 2017
MS4 Structural Controls	Galveston County Consolidated Drainage District	December 2017
Vehicle and Equipment Maintenance	Galveston County Consolidated Drainage District	Continued Full Implementation
Litter/Garbage Collection	Galveston County Consolidated Drainage District	Continued Full Implementation
Maintain Municipally Owned Construction Sites	Galveston County Consolidated Drainage District	Continued Full Implementation
Permittee Parking Lots	Galveston County Consolidated Drainage District	Continued Full Implementation

Section 6: Industrial Stormwater Sources

6.A. Permit Requirements:

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

6.B. Program Elements:

N/A – only applies to Level 4 Small MS4s

Section 7: Municipal Construction Activities

7.A. Permit Requirements:

The development of this MCM for construction activities, where the small MS4 is the site operator, is optional and provides an alternative to the MS4 operator seeking coverage under TPDES CGP, TXR150000 for each construction activity. Permittees that choose to develop this measure will be authorized to discharge stormwater and certain non-stormwater from construction activities where the MS4 operator meets the definition of a construction site operator in Part I of this general permit. When developing this measure, permittees are required to meet all requirements of, and be consistent with, applicable effluent limitation guidelines for the Construction and Development industry (40 CFR Part 450), TPDES CGP TXR150000, and Part III.B.3 of this permit. The authorization to discharge under this MCM is limited to the regulated area, such as the portion of the small MS4 located within an UA or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their small MS4 that are also in compliance with all of the MCMs listed in this general permit. This MCM must be developed as a part of the SWMP that is submitted with the NOI for permit coverage. If this MCM is developed after submitting the initial NOI, a NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit. Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES CGP, TXR150000, or under an individual TPDES permit.

7.B. Program Elements:

The permittee has elected **NOT** to utilize the optional 7th MCM.

Impaired Water Bodies

The permittee has assessed and identified impaired water bodies that receive MS4 discharges and has developed targeted control measures accordingly. For MS4 discharges to water quality impaired water bodies **with** an approved TMDL, the permittee will implement program elements as described in Section 8 of the SWMP. For MS4 discharges to water quality impaired water bodies **without** an approved TMDL, the permittee will implement program elements as described in Section 9 of the SWMP. If during the course of the permit term a TMDL is developed and approved for a stream segment that did not have an existing TMDL, the permittee will begin implementation of the Section 8 program elements for the MS4 discharges to that water body. The following table includes a list of stream segments, current 303d list/TMDL status, pollutant of concern, and associated water quality benchmarks.

Benchmark(s) for Impaired Water Bodies by Stream Segment:

TCEQ Stream Segments	303(d) List/TMDL Status	Parameter(s)	Benchmark(s)/Waste Load Allocation	MS4(s) that Discharge
Clear Creek Tidal - 1101	Approved TMDL I-Plan	bacteria	8,160 counts/day Enterococci	Galveston County Consolidated Drainage District
	303(d) list	dioxin in edible tissue; PCBs in edible tissue	N/A	
Clear Creek Above Tidal - 1102	Approved TMDL I-Plan	Bacteria *Chlorides, Total Dissolved Solids	N/A	Galveston County Consolidated Drainage District
	303(d) list	PCBs in edible tissue	N/A	
Dickinson Bayou Tidal - 1103	Approved TMDL I-Plan	bacteria	3.47E+10 MPN/day Enterococci	Galveston County Consolidated Drainage District
	303(d) list	bacteria; PCBs in edible tissue	N/A	
Dickinson Bayou Above Tidal - 1104	Approved TMDL I-Plan	bacteria	4.27E+09 MPN/day E. coli	Galveston County Consolidated Drainage District

*The TMDL established for Clear Creek Above Tidal (stream segment no. 1102) that addresses chlorides and total dissolved solids, identifies sand mining operations as the primary source of impairment. Stormwater discharges are not listed as a contributing source for the pollutants of concern.

Section 8: Impaired Water Bodies with Approved TMDLs

8.A. Permit Requirements:

Discharges of the pollutant(s) of concern to impaired water bodies for which there is a TCEQ and EPA approved total maximum daily load (TMDL) are not eligible for this general permit unless they are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA approved CWA §303(d) list, as not meeting Texas Surface Water Quality Standards.

8.B. Program Elements:

The permittee has assessed the water bodies receiving stormwater discharges from the MS4, and developed targeted elements in order to comply with existing TMDLs and address the pollutant(s) of concern.

- a. Targeted Controls:** The permittee will utilize existing and new best management practices to reduce the discharge of pollutants to impaired water bodies. The targeted controls include compliance with existing TMDL implementation plans, illicit discharges/dumping, animal sources, and residential education programs.
- b. Measurable Goals:** The permittee has developed measurable goals and implementation schedules for all best management practices included for each targeted control listed in this section of the SWMP. The measurable goals and implementation schedules are included in the sections below.
- c. Identification of Benchmarks:** The benchmark for each pollutant(s) of concern for water bodies with TMDLs are listed in the table included in the introduction portion for this section of the SWMP. The benchmarks were selected based on associated waste load allocation(s) for permitted MS4 stormwater sources as identified in TMDL documents and/or implementation plans.
- d. Assessment of Progress:** The permittee will assess progress in achieving benchmarks and determining the effectiveness of BMPs by evaluating program implementation measures. The following indicators will be utilized to assess progress towards the benchmark(s): the number of illicit discharge sources identified or eliminated, number of public education opportunities conducted, and results of dry weather screening activities.

8.C. Best Management Practices and Measurable Goals for Targeted Controls:

- a. TMDL I-Plans:** Comply with existing implementation plans for discharges to impaired water bodies for which there is a TCEQ and EPA approved TMDL.
- b. MS4 Outfall Inspections:** Utilize reports from MS4 field staff, citizens, and a concentrated dry weather screening program to inspect outfalls for illicit discharges.
- c. Public Reporting:** Develop media targeting the pollutant(s) of concern to facilitate public reporting sanitary sewer overflows, failing on-site sewer systems, illicit discharges and/or other pollutant sources. Educational materials may include stormwater hotlines, brochures, websites, and/or social media pages.

- d. Pet Waste Management:** Develop media to facilitate and promote proper pet waste management practices. Educational materials may include flyers/brochures, websites, and/or social media pages.
- e. Residential Education for Bacterial Sources:** Develop media to facilitate public education for bacterial sources including residential sources, proper disposal of fats, oils and greases, and decorative ponds. Educational materials may include flyers/brochures, websites, and/or social media pages.

BMP Measurable Goals & Recordkeeping

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
TMDL I-Plans	Compliance with Implementation Plan	Conduct annual compliance evaluation Interim Milestone: N/A	Annually
MS4 Outfall Inspections	Percentage of outfalls inspected	Inspect approximately 20% of the identified outfalls per year Interim Milestone: N/A	Annually
Public Reporting	Number of reports received	Develop at least 2 types of media/materials to help facilitate public reporting of illicit discharges Interim Milestone: N/A	Once per permit term
Pet Waste Management	Number of educational materials distributed.	Develop at least 2 types of media/materials to help promote proper pet waste management Interim Milestone: N/A	Once per permit term
Residential Education for Bacterial Sources	Number of educational materials distributed	Develop at least 2 types of media/materials to help facilitate public education for residential bacterial sources Interim Milestone: N/A	Once per permit term

Section 9: Impaired Water Bodies Without an Approved TMDL

9.A. Permit Requirements:

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

9.B. Program Elements:

The permittee has assessed the water bodies receiving stormwater discharges from the MS4(s), and developed targeted elements in order to address the pollutant(s) of concern for impaired water bodies without approved TMDLs.

- a. Pollutant of Concern:** During the first year following the permit effective date, the permittee will conduct an assessment to determine if discharges from the permittee's MS4 may be a source of pollutant(s) of concern by referring to the 303(d) list for specific stream segments. In cases where the assessment identifies that the pollutant(s) of concern are not likely to be contained by MS4 discharges, the MS4(s) will not be subject to this section of the SWMP for those stream segments.
- b. Targeted Controls:** The permittee will utilize existing and new Best Management Practices to reduce the discharge of pollutants to impaired water bodies. The targeted controls include activities related to sanitary sewer systems, illicit discharges/dumping, and residential education programs.
- c. Measurable Goals:** The permittee has developed measurable goals and implementation schedules for all best management practices included for each targeted control listed in this section of the SWMP. The measurable goals and implementation schedules are included in the sections below.

9.C. Best Management Practices and Measurable Goals for Targeted Controls:

- a. MS4 Outfall Inspections:** Utilize reports from MS4 field staff, citizens, and a concentrated dry weather screening program to inspect outfalls for illicit discharges.
- b. Public Reporting:** Develop media targeting the pollutant(s) of concern to facilitate public reporting of sanitary sewer overflows, failing on-site sewer systems, illicit discharges and/or other pollutant sources. Educational materials may include stormwater hotlines, brochures, websites, and/or social media pages.
- c. Residential Education for Bacterial Sources:** Develop media to facilitate public education for bacterial sources including residential sources, proper disposal of fats, oils and greases, and decorative ponds. Educational materials may include flyers/brochures, websites, and/or social media pages.

BMP Measurable Goals & Recordkeeping

BMP	Method of Measurement	Measurable Goals/Interim Milestones	Frequency of Action
MS4 Outfall Inspections	Percentage of outfalls inspected	Inspect approximately 20% of the identified outfalls per year	Annually
Public Reporting	Number of reports received	Develop at least 2 types of media/materials to help facilitate public reporting of illicit discharges Interim Milestone: N/A	Once per permit term
Residential Education for Bacterial Sources	Number of educational materials distributed	Develop at least 2 types of media/materials to help facilitate public education for residential bacterial sources Interim Milestone: N/A	Once per permit term

Impaired Water Bodies - BMP Implementation Schedule & Responsible Party

BMP	Responsible Party	Full Implementation By:
TMDL I-Plans	Galveston County Consolidated Drainage District	December 2017
MS4 Outfall Inspections	Galveston County Consolidated Drainage District	Continued Full Implementation
Public Reporting	Galveston County Consolidated Drainage District	December 2017
Pet Waste Management	Galveston County Consolidated Drainage District	December 2017
Residential Education for Bacterial Sources	Galveston County Consolidated Drainage District	December 2017

Represents targeted BMPs developed for discharges to an impaired water body **with** an approved TMDL
 Represents focused BMPs developed for discharges to an impaired water body **with or without** an approved TMDL