



Storm Water Management Plan

Ector County, Texas

Permit Term 2025-2029 Stormwater Management
Program

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I. Stormwater Management Plan (SWMP)

Introduction

Effective stormwater management is critical for protecting both the environment and public health, as well as maintaining sustainable urban development. The purpose of Ector County's Stormwater Management Plan (SWMP) is to provide a comprehensive strategy for managing stormwater runoff in accordance with local regulations and best practices. This plan outlines the goals, methods, and measures necessary to mitigate the impacts of stormwater on the surrounding landscape, infrastructure, and water quality.

The primary objectives of this SWMP are to:

- 1. **Protect Water Quality** – Stormwater can carry pollutants into local waterways, so we will implement strategies to reduce contaminants and improve water quality.
- 2. **Compliance with Regulations** – This plan adheres to all applicable local, state, and federal regulations governing stormwater management.

This document includes stormwater control measures, maintenance protocols, and monitoring procedures to ensure the ongoing effectiveness of the stormwater quality management approach. It also highlights the importance of community engagement and collaboration in stormwater quality management practices to create safer and more resilient communities.

Through the implementation of this plan, we aim to reduce adverse impacts on the environment, protect public infrastructure, and support the long-term sustainability of our natural resources.

Compliance with Texas Commission on Environmental Quality (TCEQ)

This Stormwater Management Plan (SWMP) has been developed in accordance with the requirements set forth by the Texas Commission on Environmental Quality (TCEQ). As a regulated entity, we are committed to meeting the guidelines and standards outlined by TCEQ to ensure the proper management of stormwater runoff and to protect water quality.

Under the authority of the TCEQ, we are required to implement stormwater management practices that comply with both state and federal regulations, including the Clean Water Act (CWA) and the National Pollutant Discharge Elimination System (NPDES) program. Our SWMP ensures that all activities related to stormwater discharge, runoff control, and pollution prevention are conducted in a manner that meets TCEQ's stormwater discharge permit requirements.

In addition to implementing best management practices (BMPs) and monitoring protocols, we will regularly assess the effectiveness of our stormwater management strategies and ensure continued compliance with TCEQ standards. This compliance helps to safeguard the health of Texas' water resources and contributes to maintaining the integrity of local ecosystems.

i. Definitions and Resources

TXR040000, Part 1. Definitions

Best Management Practices (BMPs): Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices meant to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, and drainage from raw material storage areas.

Control Measure: Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

Illicit Discharge: Any discharge to a MS4 that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire-fighting activities.

Industrial Activity: Any of the 10 categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 Code of Federal Regulations (CFR), Subsections 122.26(b)(14)(i)-(ix) and (xi). 7

Maximum Extent Practicable (MEP): The technology-based discharge standard for MS4s to reduce pollutants in stormwater discharges was established by the Clean Water Act Section 402(p). 8 A discussion of MEP as it applies to small MS4s is found in 40 CFR Section 122.34. 9

Measurable Goal: A goal that tracks the progress of your program implementation. Measurable goals are objective markers or milestones to quantify the performance of your BMPs. This includes descriptions of actions you will take to implement each BMP, what you anticipate being achieved by each goal, and the frequency and dates for such actions taken. Example goals include specific recordkeeping practices that are quantifiable (i.e., investigating 80% of active construction sites).

Minimum Control Measure (MCM): Controls or management practices to help operators detail how they will comply with NPDES permit requirements. Examples of MCMs include but are not limited to public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post-construction runoff control, and pollution prevention and good housekeeping.

Outfall: A point source where a small MS4 discharges to “Waters of the U.S.” and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream and are used to convey “Waters of the U.S.” 7. www.tceq.texas.gov/goto/title-40-section-112.34 8. www.tceq.texas.gov/goto/cwa-npdes-section-402 9. www.tceq.texas.gov/goto/title-40-section-112.3

Point Source: Any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant(s) of Concern: For this permit, includes biochemical oxygen demand, sediment (such as total suspended solids, turbidity, or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment for any water body that will receive a discharge from a MS4.

Small Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, and storm drains) that are designed or used for collecting or conveying stormwater and are owned or operated by a city, county, military base, large hospital, prison, or other public body.

Traditional Small MS4: Systems that can pass ordinances and have the authority to enforce the stormwater management program. An example of a traditional MS4 is a city.

Non-traditional Small MS4: These systems generally do not have the authority to pass ordinances or enforce the stormwater management program. Non-traditional small MS4s include entities such as counties, transportation authorities (like the Texas

Department of Transportation), municipal utility districts, drainage districts, military bases, prisons, and universities.

Structural Control: A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls may include wet ponds, infiltration basins, stormwater wetlands, silt fences, sediment traps, check dams, storm drain inlet protection, rock outlet protection, and temporary or permanent sediment basins.

If you have questions or need more information about TXR040000 requirements, please refer to the Small Business and Local Government Assistance (SBLGA)⁶ webpage.

1. www.tceq.texas.gov/downloads/permitting/stormwater/general/ms4/2024-txr040000-general-permit-signed.pdf
2. www.tceq.texas.gov/downloads/permitting/stormwater/general/ms4/2024-txr040000-general-permit-signed.pdf#page=13
3. www.tceq.texas.gov/agency/data/records-services/fileroom.html
4. www.tceq.texas.gov/publications/search_forms.html
5. www.tceq.texas.gov/assistance/water/stormwater/sw-ms4.html
6. www.tceq.texas.gov/assistance
7. www.tceq.texas.gov/goto/title-40-section-112.34
8. www.tceq.texas.gov/goto/cwa-npdes-section-402
9. www.tceq.texas.gov/goto/title-40-section-112.34

II. Level 1 MS4s

Level 1 MS4 (also known as "Small MS4" under the NPDES Program):

- **Population:** Small MS4s generally serve populations under 100,000.
- **Regulation:** These systems are required to comply with the EPA's stormwater regulations, but the requirements are more flexible and less stringent compared to larger systems (like those serving larger cities).
- **Requirements:** Level 1 systems must develop a Stormwater Management Plan (SWMP), implement best management practices (BMPs), and ensure compliance with EPA's six minimum control measures:
 1. **Public education and outreach**
 2. **Public involvement and participation**
 3. **Illicit discharge detection and elimination**

4. **Construction site stormwater runoff control**
5. **Post-construction stormwater management**
6. **Pollution prevention and good housekeeping for municipal operations**

III. Minimum Control Measures (MCMs)

Ector County has developed this Stormwater Management Plan to conform with the requirements of TPDES general permit requirements for obtaining authorization for storm water discharges and certain non-stormwater discharges. This document will outline the efforts of the County to reduce pollutants into the environment to the maximum extent possible.

Within the following MSMs, there are multiple requirements, although the county has flexibility on how the requirements are met. The county will adopt activities called Best Management Practices (BMPs) to meet each of the requirements. These BMPs have been reviewed by all personnel involved in developing this SWMP and agreed upon to follow. This will allow the County to reach the goal of protecting the water quality and reduce pollutants into the natural environment.

MCM 1: Public Education and Outreach

TXR040000, Part III and Part IV, Section D.1

Target Audience and Pollutants

TXR040000, Part III and Part IV, Section D.1.a.1-2

Target Audience	Target Pollutant(s)
Construction Operations	Sediment Runoff
General Public	Pet waste, grass clippings, illegal dumping
Restaurants	Grease and Oil

BMP 1.1 Educational Campaigns and Materials

- Develop brochures, flyers or posters that explain common stormwater pollutants (like oil, fertilizers, trash, and pet waste) and how individuals can help prevent them (e.g., proper disposal, using less-toxic products, and reducing lawn runoff).
- Distribute these materials via mail to at least 75% of major businesses and public places such as libraries, grocery stores, and schools

- Ector County will develop a system to track recipients to ensure 75% of target audience is reached.
- These actions to take place at least once annually throughout this permit term.

BMP 1.2 Public Service Announcements (PSAs)

- Create radio, television, or digital PSAs highlighting the importance of stormwater management.
- Feature messages that encourage residents to keep stormwater runoff clean (e.g., "Only Rain Down the Drain").
- Utilize local news channels or community networks/Newspaper to air these PSAs.
- Ector County will record date and time of PSA to keep on file.
- Ector County will make these PSA's three times annually throughout this permit term.

BMP 1.3 Social Media and Digital Outreach

- Ector County will utilize its Facebook page to post stormwater-related information, tips, and community events.
- Share stormwater-related infographics, videos, and interactive content that educate followers on reducing pollution.
- Posts will happen quarterly each year of this permit and will be visible to the public.
- These posts will be time and date stamped for tracking.

BMP 1.4 Community Workshop

- The County will organize a workshop for homeowners, landscapers, and businesses on best management practices (BMPs) for stormwater, such as using fertilizers properly, preventing soil erosion, or building rain gardens.
- This workshop will be held annually throughout the permit term and recorded with number of attendees.

MCM 2: Public Involvement and Participation

TXR040000, Part III and Part IV, Section D.2

BMP 2.1 Host Public Meeting

- Town Hall Meetings targeting at least 75% of residents will be held to provide an opportunity for the community to hear about the Stormwater Management plan, ask questions, and provide feedback in an open setting.
- This meeting will be held annually throughout the term of this permit.
- Meeting agenda will be printed and a copy will be provided for tracking.

BMP 2.2 Annual Clean-Up Events

- Ector County will host at least one clean-up event annually throughout the term of this permit.
- This event will be advertised via Facebook and newspaper to target 75% of the County and attendance will be logged to keep on file.

BMP 2.3 Fair Booth Activity

- A hands-on activity or the public pertaining to stormwater management will be put on at the annual Fair held at the Ector County Coliseum. The County will record ticket sales to make sure 75% of the target audience is being reached.
- This activity will be reviewed annually and changed/updated if required.

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

TXR040000, Part III and Part IV, Section D.3

BMP 3.1 Develop and maintain a current MS4 Map

TXR040000, Part IV, Section D.3.c.1

- A current MS4 map will be created in year one of this permit and reviewed and updated as necessary each year.
- The map will include the location of all the outfalls operated by the MS4 that discharges into waters of the U.S., the location and name of all surface waters receiving discharges from the outfalls, and date of last revision.
- A copy of the map will be kept on file for review each year.

BMP 3.2 IDDE Education and Training

TXR040000, Part IV, Section D.3.c.2

- Ector County will conduct at least one training annually for 100% of the Environmental Department field staff that may encounter or observe illicit discharges, illegal dumping, or illicit connections during normal job duties or responsibilities.
- Training will be specified if in-person, video, reading material or other
- Training will be documented on worksheet (held at Engineering Department).
- A copy of the training sign-in sheet will be kept on file for review.

BMP 3.3 Establish Reporting Mechanisms for the Public

TXR040000, Part IV, Section D.3.c.3

- Ector County will create an easy-to-use online reporting system where residents can report suspected illicit discharges, illegal dumping
- Ensure reports are promptly reviewed, investigated, and acted upon.
- Set up a dedicated webpage for reporting illicit discharges.
- The website will be created by year one of this permit, and publicized via Facebook and Ector County Webpage twice annually.
- Date that will be released will be recorded at the environmental department and/or engineering department, tracking systems via email will be monitored for estimating effectiveness.
- Website url and record of number of incidents reported will be logged and kept on file.

BMP 3.4 IDDE Response Procedures

TXR040000, Part IV, Section D.3.c.4

- Create field IDDE Response Procedures to trace the source of illicit discharges. This can involve tracking the discharge back through the system to identify the origin (e.g., using dyes or smoke tests to follow the flow of wastewater).
- Use forensic tools like water quality testing (e.g., chemical testing for pollutants, DNA testing for wastewater) to identify the source of the contamination.
- These procedures will be developed in year one of this permit and reviewed/updated annually and copies of procedures will be kept on file.

BMP 3.5 Source Investigation and Elimination Procedures

TXR040000, Part IV, Section D.3.c.5

- Ector County will complete an investigation worksheet (held at engineering department) for every source investigation conducted where they have authority to act.
- Ector County will immediately notify TCEQ of the occurrence of any illicit flows believed to be an immediate threat to human health or environment.
- Ector County will notify the responsible party and require them to perform all necessary corrective actions to eliminate the illicit discharge and illegal dumping where they have authority to act.
- Source Investigation worksheets must be filled out (held at engineering department)
- Ector County will respond to all high priority discharges must be within 24 hours. This will be recorded and kept on file; number of incidents reported and number responded to in 24 hrs. Records of any reports will be sent to TCEQ.

BMP 3.6 Implement an IDDE Monitoring and Inspection Program

TXR040000, Part IV, Section D.3.c.6

- Ector County will develop written procedures within year one of this permit, describing the basis for conduction inspections in response to complaints and follow-up instructions to ensure corrective measures have been taken where they have authority to act.
- Inspection instructions will be reviewed annually throughout this permit term to address changes if required.

MCM 4: Construction Site Stormwater Runoff Control

TXR040000, Part IV, Section D.4

Construction site stormwater runoff control is a crucial part of a county's Stormwater Management Plan (SWMP). Construction activities often disturb soil and increase the risk of erosion, sedimentation, and pollution entering stormwater systems, which can degrade water quality in nearby streams, rivers, and lakes. Effective runoff control during construction can minimize these impacts and help ensure compliance with local, state, and federal stormwater regulations (like the TPDES or NPDES).

BMP 4.1 Stormwater Control Program

TXR040000, Part IV Section D.4.b.1-2

- Ector County will continue to enforce the regulations prohibiting discharge stated in the "Subdivision and Manufactured Home Rental Community Regulations for Ector County, Texas" Effective December 28, 2022. These regulations are found in the Planning and Development section of the Ector County website. In addition, hard copies are found at the Ector County Engineering Department.
- The ordinance will be reviewed annually for any revisions needed.

BMP 4.2 Implement Site Plan Review Procedures

TXR040000, Part IV, Section D.4.b.3

- Ector County has a procedure in place to review all site plans 100% where they have authority and reviews considerations for potential water quality impacts as well as site-specific construction site control measures that meet the requirements of TPDES CGP TXR150000.
- Procedures will be reviewed annually for any revisions needed.
- Copies of procedures will be kept on file for review.

BMP 4.3 Construction Site Inspections and Enforcement Procedures

TXR040000, Part IV, Section D.4.b.4

- The County has site inspection procedures where they have authority to act currently in place and will review them annually for revisions if needed.
- Copies of procedures are kept on file for review.

BMP 4.4 Construction Site Inspections and Enforcement Reports

TXR040000, Part IV, Section D.4.b.4

- Ector County will conduct inspections at least 80% of active construction sites where they have authority to act, annually. Following a construction site inspection, inspectors must provide a written or electronic inspection report to site operators.
- Based on findings, Ector County will take all necessary follow-up actions to ensure compliance with permit requirements and this SWMP. Follow up inspections will be tracked, and records will be maintained for review.
- Follow up inspections will be conducted on 100% of sites where Ector County has the authority to act. If they do not, they will contact the appropriate jurisdiction or TCEQ as required.

BMP 4.5 Information Submitted by the public

TXR040000, Part IV, Section D.4.b.5

- Ector County will develop and implement a procedure for receiving and considering information submitted by the public. This webpage will be integrated onto our Ector County site under Stormwater Management by the first year of this permit.
- This procedure will be reviewed and updated annually to address changes if required.
- Url will be kept for review.

BMP 4.6 Staff Training

TXR040000, Part IV, Section D.4.b.6

- All Ector County personnel whose primary job duties are related to implementing the construction stormwater program are informed or trained to conduct these activities. The training will be done annual via in person, videos or reading material.
- Documentation of all training will be kept for review.

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

TXR040000, Part IV, Section D.5

Post-construction stormwater management is a critical part of a county's Stormwater Management Plan (SWMP) to ensure that new development and redevelopment projects don't negatively impact local water quality after construction is completed. The goal is to manage stormwater runoff in a way that mimics natural conditions and minimizes pollutants (like sediment, nutrients, and chemicals) from entering stormwater systems, which eventually flow into rivers, lakes, or oceans.

BMP 5.1 Post-Construction Stormwater Management Program

TXR040000, Part IV, Section D.5.a.2

- Ector County will continue to review and enforce regulations in Ector County's "Subdivision and Manufactured Home Rental Community Regulations".
- A copy of regulations will be kept on file for review.

BMP 5.2 Enforcement Records

TXR040000, Part IV, Section D.5.b.1

- Ector County will keep record of enforcement actions and make them available for review, if requested, under TXR040000, part IV, Section D.5.b.1. Ector

BMP 5.3 Long-term Maintenance of Post-Construction Stormwater Control Measures

TXR040000, Part IV, Section D.5.b.2

- Where Ector County has authority, they will require new development owners to maintain stormwater controls on their sites and keep maintenance records available.
- Ector County will establish a maintenance schedule for all stormwater controls within its jurisdiction.
- A copy of the ordinance for private controls and maintenance schedule for Ector County owned controls will be kept on file for review.

MCM 6: Pollution Prevention and Good Housekeeping for Municipal Operations

TXR040000, Part IV, Section D.6

BMP 6.1 MS4-Owned Facilities and Control Inventory

TXR040000, Part IV, Section D.6.b.1

- Ector County will develop and maintain inventory of facilities and stormwater controls we own and operate by year one of this permit. This inventory will include all permit numbers, registration numbers, and authorizations for each facility or stormwater control.
- This inventory will be reviewed and updated annually every year of this permit.
- List of facilities will be kept on file.

BMP 6.2 Training and Education

TXR040000, Part IV, Section D.6.b.2

- Ector County will train all employees involved in implementing pollution prevention and good housekeeping practices.
- This training will be held at least once annually
- This training shall be documented and noted if it was in-person, video, or reading material
- A log in sheet (held at Engineering Department) must be filled out for every training and kept on record.

BMP 6.3 Contractor Oversight Procedures

TXR040000, Part IV, Section D.6.b.4

- Any contractors hired by Ector County to perform maintenance activities on an MS4 facility must be contractually required to comply with all stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures.
- Contractors will follow the same procedures as County employees.
- A copy of contract will be kept on file with language requiring contractor compliance, if contractors are hired.

BMP 6.4 O&M Evaluation

TXR040000, Part IV, Section D.6.b.5.a-b

Potential Pollutants in Ector County:

Potential Pollutants	Potential Pollutant Sources
Paint, paving materials, sediment	Road and Parking lot maintenance
Herbicide, pesticides, trash	Right-of-way Maintenance
Deicing and anti-icing compounds	Cold weather operations

- Ector County Environmental Services will review and update this list at least once annually.
- A copy of this list will be kept on record.

BMP 6.5 O&M Pollution Prevention Measures

TXR040000, Part IV, Section D.6.b.5.c

- Ector County will develop a set of pollution prevention measures to reduce the discharge of pollutants by year one of this permit.
- The County will implement the following:
 - Replacing at least 50% of the MS4's materials and chemicals with more environmentally friendly materials or methods by the end of this permit term.
 - Tracking 100% of the application of deicing and anti-icing compounds and recording the amount of compound used for each application annually.

BMP 6.6 O&M Pollution Prevention Inspection Procedures

TXR040000, Part IV, Section D6.b.5.d

- At least once annually, Ector County will visually inspect 100% of all pollution prevention measures implemented at MS4-owned facilities to ensure they are working properly.
- Ector County will develop written procedures that describe the frequency of inspections and how to conduct them
- The County will review and update procedures annually to address any changes if required.
- A log of these records will be kept for review by TCEQ if requested.

BMP 6.7 Structural Control Maintenance Records

TXR040000, Part IV, Section D.6.b.6

- Ector County will perform necessary maintenance on 100% of stormwater structural controls at least once per year.
- Ector County will develop written procedures that describe frequency of inspections and how to conduct them.
- These records will be kept and reviewed/updated each year for changes that might be required.