



MS4 Program

Understanding Stormwater
Regulations and Management
Practices

Senna Hills MUD

Introduction to MS4 Program

Environmental Protection Agency:

Under the requirements of the Clean Water Act (CWA), the U.S. Environmental Protection Agency (EPA) is required to protect the water quality of natural waters throughout the country. The EPA established the National Pollutant Discharge Elimination System (NPDES) program to identify sources of water pollution and work to reduce or eliminate the pollutants from waters of the U.S.

Texas Commission on Environmental Quality:

The EPA has delegated responsibility for the NPDES program in Texas to the Texas Commission on Environmental Quality (TCEQ), which administers the Texas Pollutant Discharge Elimination System (TPDES). In addition to issuing discharge permits to traditional “point sources,” such as municipal wastewater treatment plants and industrial wastewater discharges, TCEQ is also responsible for minimizing pollution from other sources, such as stormwater runoff from construction sites, industrial facilities, and publicly owned and operated storm sewer systems.

Municipal Separate Storm Sewer System:

A publicly owned and operated storm sewer system is designated as a Municipal Separate Storm Sewer System (MS4). Regulated MS4s are required to reduce the discharge of pollutants from its MS4 to the maximum extent practicable.

Introduction to MS4 Program – cont'd.

Urban Areas:

Any operator of a small MS4 within or partially within an urban area with a population of at least 50,000 will be regulated under the TPDES 2024 Phase II (Small) MS4 General Permit TXR040000.

Senna Hills Municipal Utility District:

Senna Hills MUD, as a regulated MS4 operator and subject to TPDES permitting requirements.



Key MS4 Operator Responsibilities

Stormwater Management Program/Plan:

MS4 operators must develop and implement a comprehensive Stormwater Management Program (SWMP). An SWMP includes a comprehensive plan each MS4 develops to manage stormwater discharges effectively to protect watersheds and downstream estuaries.

Permitting and Regulatory Oversight:

An NOI (Notice of Intent) is the formal application for obtaining permit coverage; TCEQ enforces the TPDES program regulations.

Annual Reporting:

MS4 operators must submit detailed annual reports covering SWMP progress and effectiveness.

Scope of SWMP

Minimum Control Measures:

Standard minimum control measures (MCMs) must be implemented applying specific Best Management Practices (BMPs) and measurable goals for each MCM. BMPs are proven methods, procedures, or structures that are the most effective, practical, and cost-effective way to achieve a specific goal.

Water Quality and TMDLs:

SWMP also assesses waterbodies for impairment and Total Maximum Daily Loads to guide pollution control efforts.

Independent Program Management:

Many MS4 operators manage their SWMP independently rather than as part of a coalition, ensuring localized control.



Overview of Required Measures

- **MCM 1: Public Education and Outreach**

Raises awareness about stormwater pollution through targeted public education and outreach campaigns.

- **MCM 2: Public Involvement/Participation**

The Public Involvement measure promotes community participation in stormwater management through BMPs, evaluated by measurable goals to reduce contamination.

- **MCM 3: Illicit Discharge Detection and Elimination (IDDE)**

Involves detecting and eliminating illicit discharges using mapping and reporting systems.

- **MCM 4: Construction Site Runoff Control**

Manages runoff at construction sites through inspections and best management practices.

- **MCM 5: Post-Construction Stormwater Management**

Ensures effective stormwater management after construction to reduce pollution risks.

- **MCM 6: Pollution Prevention and Good Housekeeping**

Focuses on municipal operations to reduce pollutant runoff through training and maintenance practices.



Best Management Practices (BMPs)

- **MCM 1: Public Education and Outreach**
 1. Information on the MS4 Operator's Website
 2. Advertising Campaign / Public Service Announcements
 3. Electronic Newsletter Distribution
 4. Utility Bill Inserts / Door Hangers
- **MCM 2: Public Involvement/Participation**
 1. Community Clean-Up/Restoration Event
 2. MS4 Stormwater Program Implementation Survey
 3. Public Meeting for Input on Program Implementation
- **MCM 3: Illicit Discharge Detection and Elimination (IDDE)**
 1. Maintain Current MS4 Map
 2. Annual Training of Operations Field Staff
 3. Public Reporting Method for Illicit Discharges
 4. Illicit Discharge Source Investigation and Elimination (Inspection)
- **MCM 4: Construction Site Stormwater Runoff Control**
 1. Construction Site Plan Review
 2. Construction Site Inspections
 3. Receipt of Information Submitted by the Public
 4. Annual Training of Operations Field Staff
- **MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment**
 1. Post-Construction Structural Control Measures
- **MCM 6: Pollution Prevention and Good Housekeeping for Municipal Operations**
 1. Operations and Maintenance (O&M) Program



HELP CONSERVE WATER IN YOUR DAILY LIFE

Dispose of household and yard chemicals properly; follow disposal directions on their labels



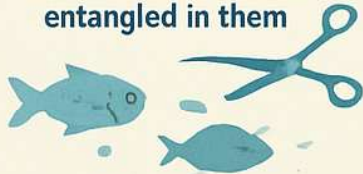
Don't be wasteful: reduce, re-use and recycle every day



Pick up trash; participate in trash clean-up days



Cut up the rings of plastic six-pack holders so that aquatic life and birds cannot become entangled in them



Respect your sewer system, don't pour toxic wastes, chemicals or any medications down the toilet



Maintain your cars and other heavy equipment to reduce oil leaks



Minimize use of fertilizers and pesticides on your yard



Water your lawn conservatively and keep grass clippings out of street gutters



Avoid pouring fats, grease or solids down the drain



Volunteer with your local environmental organizations



Plant trees and remove invasive vegetation



Do not dump petroleum products, including oil, down storm drains



Choose non-toxic products



What You Can Do to Help

- Conserve water in your daily life.
- Dispose of household and yard chemicals properly; follow disposal directions on their labels.
- Don't be wasteful: reduce, re-use and recycle every day.
- Pick up trash; participate in trash clean-up days.
- Cut up the rings of plastic six-pack holders so that aquatic life and birds cannot become entangled in them.
- Respect your sewer system: don't pour toxic wastes, chemicals or any medications down the toilet.
- Maintain your cars and other heavy equipment to reduce oil leaks.
- Minimize use of fertilizers and pesticides on your yard.
- Water your lawn conservatively and keep grass clippings out of street gutters.
- Avoid pouring fats, grease or solids down the drain.
- Volunteer with your local environmental organizations.
- Plant trees and remove invasive vegetation.
- Don't litter.
- Pick up your pet's waste.
- Do not dump petroleum products, including oil, down storm drains; recycle used motor oil.
- Use reusable bags rather than paper or plastic ones.
- Choose non-toxic products for household use.