





DIVERSITY & INCLUSION DIVERSIDAD & INCLUSIÓN









MS4 Storm Water No Exposure Permit & Pollution Prevention Training

Environmental Health, Safety, & Risk Management

Training Objectives

- Understand the terms "stormwater " & "illicit discharge"
- Understand why these terms are important & why you should care
- Understand the construction and post-construction stormwater
 management structures
- Understand what you can do to help prevent stormwater pollution
- Understand how to recognize & report illicit discharges (pollution)

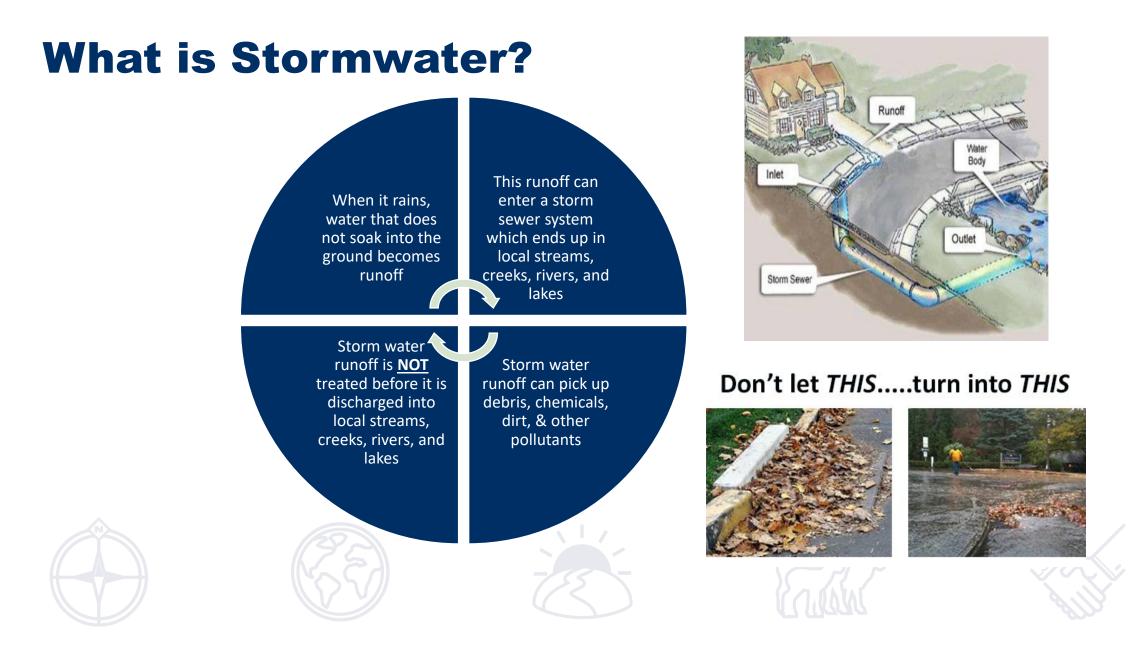












What is an Illicit Discharge?

Any discharge to the storm sewer system that is not composed entirely of stormwater. Exceptions are:

- Water line flushing
- Runoff or return flow from landscape irrigation
- Discharges from potable water sources
- Diverted stream flows
- Rising groundwater and infiltration
- Uncontaminated pumped groundwater
- Foundation and footing drains
- Air conditioning condensation
- Water from crawl space pumps
- Individual residential vehicle washing
- Dechlorinated swimming pool discharges
- Street wash water
- Discharges or flows from firefighting activities
- Etc.

Why is Illicit Discharge Important?

Illicit discharges often include pathogens, nutrients, toxic pollutants, etc.

Illicit discharges = Pollution

Anything that enters a storm sewer system flows **untreated** to a local waterway















Why Should You Care?

We use local waterways for swimming, fishing, boating, and as a source of drinking water.

Angelo State University is required by Texas MS4 Permit to prevent pollutants from entering the storm sewer system – <u>It's the Law</u>











What is an MS4 Permit?



Municipal Separate Storm Sewer System

A Storm Water Permit issued by TCEQ that covers storm water runoff from properties in the District

Purpose: to improve water quality by reducing the quantity of pollutants that storm water picks up and carries into storm sewer systems during rain events.











Stormwater Management Construction

Stormwater Pollution Prevention Plan (SWPPP) required on site

• It is the law

• Designed to eliminate pollution from leaving the construction site

Ecologs & Silt Fencing

Stone Construction Entrance

Grass covered drainage ditches











Construction Site Stormwater Pollution Prevention







Secondary Containment	
Properly Trenched	
Reinforced Filter Fabric	
Anchored	

















Stormwater Management Construction

Poor examples of construction site pollution prevention efforts



























ASU's Post-Construction Stormwater Pollution Prevention













Best Management Practice







What Can You Do?

Employees can help prevent stormwater pollution by:

- Preventing pollutants from being dumped or spilled into the storm sewer system (this includes driveways, sidewalks, streets, storm drains)
- Reporting pollution or questionable discharges to the storm sewer system or local waterways













Preventing Pollution

- Store and handle materials safely
- Clean up spills properly
- Never dump or wash out items down or near storm drains









Managing stormwater runoff can help bring cleaner water faster to all of Richmond.







Reporting Pollution

If you see questionable discharges entering the storm sewer system or someone dumping something down the storm drain, report it.















Examples of What to Report

Pollution Entering Storm Sewers



Grease leaks

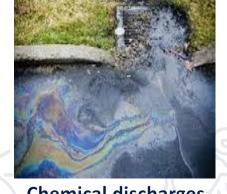


Liquids dumped down drain



Dirty construction water





Chemical discharges





Examples of What to Report Unusual Water Color



Purple, dark red, blue, black



Pea-green/ bright green



Milky white









Examples of What to Report

Unusual Odor

- Some odors are an immediate indicator of pollution
- Sewage, gasoline, and chemical odors should be reported

Odor	Causes
Rotten eggs/ hydrogen sulfide	Raw sewage, lack of oxygen
Sharp, pungent odor	Chemicals or pesticides
Gasoline, petroleum	Industrial discharge, illegal dumping of wastes, waste water











Examples of What to Report

Floatables in the Water



Trash/ Debris



Sewage fungus



Leaves/ grass clippings









Where are hazardous spill kits located at ASU?

- Cavness 011A (30 gallon) & Cavness 212 (Kit)
- Science III 206 (20 gallon)
- Vincent R06, 244
- MIR Center (20 gallon) & MIR Barn (20 gallon)
- Hunter Strain Engineering 108
- Hazmat Storage Building FM Yard
- Chemical Storage 307 Outside Central Plant
- Greenhouse











How to Report

Call UPD (325) 942-2071 or EHSRM (325) 486-6725 or Email <u>ehsrm@angelo.edu</u> or submit a <u>Illicit Discharge</u> <u>report</u> found on the EHSRM website:

Please Include the following information:

Specific Location

Date and time

Description of the pollution

Description of the violator (ex: license plate, personal description) * If applicable

Your contact info

Take a picture (if you are able) and send to EHSRM email (EHSRM@angelo.edu)











No exposure definition is clear

- If precipitation can touch exposed scrap metal, scrap wood, open trash, or other unfinished products, we do not meet compliance requirements
- If debris can leave a construction site during or after precipitation, we do not meet compliance requirements
- No complacency allowed
- Only rain down the drain







