STORMWATER PROGRAM Illicit Discharge Detection & Elimination

THE UNIVERSITY OF ALABAMA®

Illicit Discharge Detection and Elimination

• On February 1, 2011, Alabama Department of Environmental Management (ADEM) issued Phase 2 of The University of Alabama National Pollutant **Discharge Elimination** System (NPDES) stormwater discharge permit.





Illicit Discharge Detection and Elimination

- Definition of an Illicit Discharge
 - An Illicit Discharge is defined as any discharge to a municipal separate storm sewer (MS4) that is not entirely composed of storm water, except discharges authorized by under the NPDES permit and discharges from fire fighting activities



Illicit Discharge Detection and Elimination

- As part of the UA discharge permit, EHS has developed a stormwater management plan which is composed of 6 elements.
 - Illicit discharge detection and elimination is one of the six minimum control measures.



Best Management Practices

- The Best Management Practices (BMPs) for the illicit discharge detection and elimination measure include:
 - Storm Sewer Map Maintenance
 - Dry Weather Inspections
 - Employee Training
 - Illegal Dumping Detection



- Construction Administration maintains a storm sewer map which marks the inlets and outlets of the system.
 - The map is updated as lines, outfalls, etc. are added or removed.





Dry Weather Inspections

- Each outfall will be inspected at least annually.
- Dry weather field screening is designed to detect illicit discharges into the storm sewer system.
- Dry weather screening is conducted annually or as a follow-up to an investigation or complaint.



Dry Weather Screening

- Dry weather screening can only be conducted when more than 72 hours has passed since the last rain event of greater than 0.10 inches.
- Dry weather screening includes observations for:
 - Odor
 - Color
 - Clarity
 - Floatables
 - Deposits
 - Stains
 - Vegetation
 - Biologicals
 - Sewage



Lab Analysis

- Dry weather screening lab analysis includes tests for:
 - pH
 - Copper
 - Detergents
 - Ammonia
 - Chlorine
 - Fluoride
 - Phenols



• All dry weather screening procedures must follow NPDES guidelines.

Identification of a Potential Illicit Discharge

- Identification of a potential illicit discharge at the outfall would include an observation of
 - Bad or unusual odor
 - Unusual colors
 - Cloudy water
 - Floatables
 - Sediment
 - Vegetation in water
 - Sewage odor
 - Oil sheen or stains
 - Presence of mosquitos



• If any of these conditions are observed contact EHS at 205-348-5905 or Construction Administration at 205-348-5950 as soon as possible.

- Once advised of a potential illicit discharge, EHS will document the report and begin working to identify the source and characteristics of the discharge.
- Mitigation will involve utilization of UA resources to track the discharge back through the storm sewer system to the originating source.





 EHS will train UA personnel regarding the dry weather screening process and the identification of illicit discharges.



Annual Report

• EHS will include tracking, reporting, screening, sampling, and remedial actions taken regarding illicit discharges in the annual report.



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Environmental Health & Safety

• For any concerns, questions, or comments regarding stormwater, contact Environmental Health & Safety (EHS) at 205-348-5905.