

# 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.





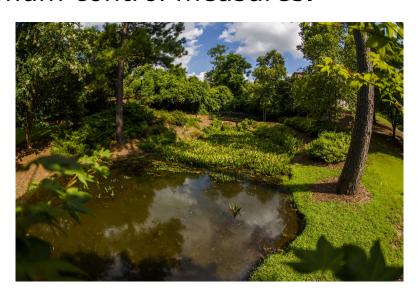
#### Illicit Discharge Detection and Elimination

- 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



#### **Storm Sewer Map**

- 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.



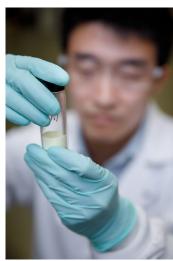
#### **Dry Weather Screening**

- 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.

# **Potential Illicit Discharge**

- 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.



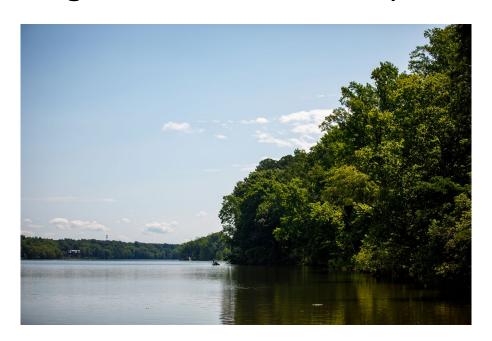
# **Training**

 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.





# **Environmental Health & Safety**

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