

US EPA ARCHIVE DOCUMENT

Clean Water Act & Water Conservation/Reuse Issues

**Department of Corrections Environmental
Compliance Workshop**

May 12, 2009

Jim Grassiano, ADEM-Compliance Assistance Program

ADEM

Clean Water Act Issues



adem.alabama.gov



- Stormwater Permitting
- Wastewater Generation
- Contractor Oversight
- Industrial Wastewater

- Direct Discharge Permits: Used to be several...
 - St Clair Correctional Facility: AL0043494
 - Draper Correctional Facility: AL0051349
 - Elmore Correctional Center: AL0043451
 - Farquhar Cattle Ranch: AL0053180
 - Fountain/Holman Corr Facil: AL0046744
 - Limestone Correctional Facil: AL0048461
 - Red Eagle Honour Farm: AL0051403

- Primarily wastewater treatment lagoons
 - 2 or 3 cell systems



Due to a law suit in 2007:

- Ownership & Operation of all wastewater discharge plants is now privatized!

So....ALDOC is out of the wastewater business



However...ALDOC still has responsibility...

- As a 'Customer' of the private WWTPs, certain actions by ALDOC may lead to permit violations:
 - Uncontrolled or illicit industrial discharges
 - Excessive grease, solids or debris
 - Toxic cleaning agents



Stormwater Permits

- Also an NPDES Program
- Limestone CF has the sole Stormwater Permit for ALDOC:
 - Permit No. ALR040032
 - Called a “Municipal Separate Storm Sewer System (MS4) Permit”



Why a Phase II MS4 Permit?

- Required by cities and parts of counties within defined “Urbanized Areas” (if not req’d to have a Phase I Permit)
- For stormwater collection systems similar to municipal separate storm sewer systems (MS4s)
 - military bases, large hospitals or prison complexes and highways



WHEN Did ALDOC become regulated by Stormwater Rule?

- Final Rule was adopted on October 29, 1999
- Automatic Designation was March 10, 2003
- If designated by ADEM; within 180 days of notice of delegation



Municipalities covered under Phase II General Permit ALR040000

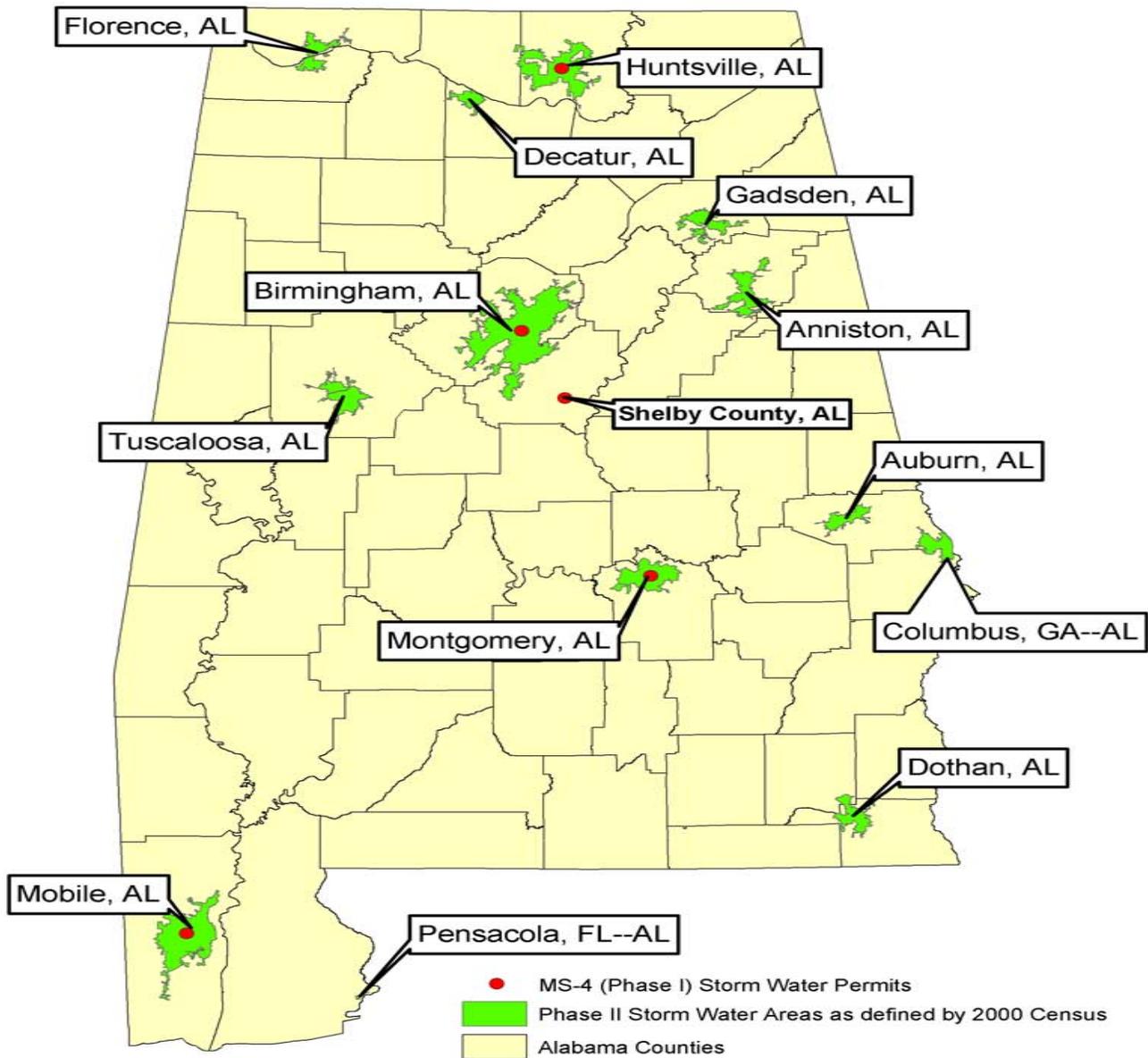
Tuscaloosa County Commission (ALR040001)
ALDOT (ALR040002)*
City of Auburn (ALR040003)
Calhoun County Commission (ALR040004)
Colbert County Commission (ALR040005)
City of Decatur (ALR040006)
City of Dothan (ALR040007)
City of Florence (ALR040008)
City of Gadsden (ALR040009)
Geneva County Commission (ALR040010)
Lauderdale County Commission (ALR040011)
Lee County Commission (ALR040012)
Limestone County Commission (ALR040013)



Municipalities covered under General Permit ALR040000 (continued)

- **Madison County Commission (ALR040014)**
- **Montgomery County Commission (ALR040015)**
- **City of Muscle Shoals (ALR040016)**
- **City of Northport (ALR040017)**
- **City of Opelika (ALR040018)**
- **City of Phenix City (ALR040019)**
- **City of Sheffield (ALR040020)**
- **City of Tuscaloosa (ALR040021)**
- **City of Tuscumbia (ALR040022)**
- **City of Weaver (ALR040023)**
- **Morgan County Commission (ALR040025)**
- **Dale County Commission (ALR040026)**
- **Houston County Commission (ALR040027)**
- **Russell County Commission (ALR040028)**

Alabama Storm Water Management Areas





Requirements of the Phase II General Permit

Six minimum control measures

- Public Education and Outreach on Storm Water Impacts
- Public Involvement/Participation
- Illicit Connection Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post Construction Stormwater Management
- Pollution Prevention/Good Housekeeping



Public Education and Outreach on Impacts

- Distribute educational materials
or
- Conduct equivalent outreach activities about storm water impacts including steps DOC can take to reduce pollutants in storm water runoff

Maxwell Air Force Base

Stormwater Pollution Prevention



Small Sources Of

What is stormwater?

When land surface is covered with concrete or masonry other structures that prevent rainwater from immediately reaching soil the rainwater becomes "stormwater" which flows over parking lots, sidewalks and streets to storm drains where it is collected, piped and otherwise drained to nearby water bodies. Stormwater from Maxwell AFB and Gunter ultimately enters the Tallapoosa River.

What is stormwater pollution and where does it come from?

Stormwater on its path to outfalls picks up litter, spilled oil and gasoline, antifreeze, pet waste, pesticides, fertilizers, grass clippings or other materials left on the sidewalks or streets. This polluted stormwater washes into storm drains located on Maxwell and Gunter and is carried via other water bodies to the Tallapoosa River where it can cause severe problems for wildlife living in and around these water bodies as well creating highly undesirable aesthetic conditions.



Stormwater Contamination Process



Household Contaminants Reaching Stream with Stormwater

How can I do my part to Prevent Stormwater Pollution?

- Use lawn and garden chemicals sparingly.
- Don't use storm drains as a disposal point.
- Use the carwash or wash vehicles on grass.
- Repair vehicle oil leaks.
- Take old oil and fluids such as motor grease to the Auto Hobby Shop.
- Clean up and dispose of pet droppings in the garbage or flush down a toilet.
- Collect leftover oil-based paint or thinner, cleaners, aerosol spray cans and other household hazardous materials for proper disposal at designated collection points on Base Hallway.
- Store all chemicals in secure containers in a safe place.



AFTER THE STORM: A CITIZEN'S GUIDE TO UNDERSTANDING STORMWATER



STORMWATER POLLUTION SOLUTIONS

Residential

Homeowners can help reduce stormwater pollution by taking simple steps to prevent pollutants from entering stormwater systems. The following are some ways to help:

- Do not use lawn care products. Instead, use natural lawn care products.
- Use pet waste disposal bags. Do not bury pet waste in your yard or flush it down the toilet.
- Dispose of paint properly. Do not pour it down the drain or dump it in the trash. Take it to a local household hazardous waste collection event.



Residential Landscaping

Residential landscaping practices can help reduce stormwater pollution by preventing pollutants from entering stormwater systems. The following are some ways to help:

Construction

Construction activities can help reduce stormwater pollution by preventing pollutants from entering stormwater systems. The following are some ways to help:

- Cover construction sites. Use silt fences to prevent soil from entering stormwater systems.
- Install silt fences. Silt fences are used to prevent soil from entering stormwater systems.
- Install sediment traps. Sediment traps are used to prevent sediment from entering stormwater systems.
- Install erosion control measures. Erosion control measures are used to prevent soil from entering stormwater systems.



Stormwater pollution can be reduced by taking simple steps to prevent pollutants from entering stormwater systems. The following are some ways to help:

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Automotive Facilities

Automotive facilities can help reduce stormwater pollution by preventing pollutants from entering stormwater systems. The following are some ways to help:

- Use a car wash. Car washes are used to clean cars and prevent pollutants from entering stormwater systems.
- Place mats and traps. Mats and traps are used to prevent pollutants from entering stormwater systems.

Automotive Facilities

Automotive facilities can help reduce stormwater pollution by preventing pollutants from entering stormwater systems. The following are some ways to help:

- Clean up spills immediately. Spills are cleaned up immediately to prevent pollutants from entering stormwater systems.
- Provide cover for fueling stations. Fueling stations are covered to prevent pollutants from entering stormwater systems.
- Recycle materials. Recycled materials are used to prevent pollutants from entering stormwater systems.
- Recycle oil. Recycled oil is used to prevent pollutants from entering stormwater systems.





Public Involvement/Participation

- Must comply with State, Tribal and local public notice requirements



Stormwater Management...

Preventing Pollution at the University of Alabama.

Community meetings are scheduled for Wednesday April 24 at 7 pm and Thursday April 25 at 8 pm.

At the City of Fair located on Wainwright Drive behind Shelby Hall.



YOU SHOULD KNOW
The University of Alabama is committed to protecting the environment and preventing pollution. Stormwater runoff from paved areas can carry pollutants like oil, grease, and sediment into nearby water bodies. To help prevent this, we encourage you to take the following steps:
1. Use car care products responsibly. Avoid washing your car in the driveway. Use car washes that have proper runoff collection.
2. Dispose of hazardous materials properly. Do not pour oil, paint, or other chemicals down the drain or into the trash. Use designated collection events.
3. Maintain your lawn. Use fertilizers and pesticides sparingly. Use mulch to reduce erosion.
4. Clean up litter. Do not throw trash, especially plastic, into the trash can or down the drain.
5. Use litter receptacles. Place your trash in the proper receptacle. Do not throw trash in the trash can or down the drain.
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Auto Care



Use a commercial car wash that has proper runoff collection. Do not wash your vehicle in a yard. Dispose of used fluids and materials at designated recycling facilities. Clean up fuel spills immediately. Properly maintain vehicles to prevent oil, gas, and other fluids from being washed into the storm water system.

Facility & Lawn Care



Use pesticides and herbicides sparingly and only as directed. Design or locate your water area to prevent erosion and runoff. Use proper mowing, edging, and watering techniques. Do not use fertilizers or pesticides. Use litter receptacles. Place your trash in the proper receptacle. Do not throw trash in the trash can or down the drain.

Construction



Install silt fences and other sediment control measures. Erosion control.



**BE PART OF THE SOLUTION
TO STORMWATER POLLUTION**

WHAT IS THE PROBLEM?

Each time it rains, water washes over our streets, driveways, and yards picking up pollutants along the way and flowing into our storm drains. This runoff may contain pollutants such as motor oil, yard clippings, pet waste, litter, lawn chemicals, anti-freeze, or other toxins, which can pollute our water supply as well as clog pipes and culverts which can lead to flooding. Known as "Non-Point Source Pollution", it is the largest threat to our waterways today. Sometimes pollutants are dumped directly into storm drains by neighbors who don't know any better. Contrary to popular belief, most storm drains are not connected to treatment systems. Whatever enters the drain is discharged directly, untreated into local waterways!

HOW CAN YOU

**Stormwater Pollution
Found in Your Area!**

This is not a citation.

This is to inform you that our staff found the following pollutants in the storm sewer system in your area. This storm sewer system leads directly to

- Motor oil
- Oil filters
- Antifreeze/
transmission fluid
- Paint
- Solvent/degreaser





Illicit Connection Detection and Elimination

- Develop map of outfalls with names of receiving streams
- Enact internal ordinance with enforcement provisions
- Implement a plan to detect and eliminate non-storm water discharges
- Inform public of hazards associated with illegal discharges

- Illicit Discharge Ordinance
- Inspection of Drainage Systems
- Detention Pond Inspections
- Storm Drain Stenciling (Magnets)



- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

Storm Drain Inlet Protection



Bad



Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.



Construction Site Stormwater Runoff Control

- A separate construction permit must be issued by the Department; nothing else required by ALDOC
- ALDOC may enact its own ordinance or guidance but ADEM maintains regulatory authority



Post-Construction Stormwater Management

- Very few requirements
- Ensure DOC does not alter runoff volume and quality (pre construction vs post construction)



Pollution Prevention/Good Housekeeping of Municipal Operations

- Must develop an O & M program to prevent or reduce pollutant runoff from DOC operations
- Must conduct employee training to prevent and reduce storm water pollution



Examples Of BMPs Applicable to ALDOC

- Spill Response and Prevention Training
- Risk Management Manual
- Recycling Operations
- Nutrient Management Plan for grazing land
- Waste minimization for metal plating operations
- Pollution Prevention Plan for Catfish Plant WWTP





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- “Supplemental Environmental Project”
- SEP = a beneficial environmental project that a violator agrees to undertake in the settlement of an enforcement action
- ADEM intends to expand the use of SEPs
- SEP Banks are a good way to implement pollution prevention and stream restoration projects

- ADEM is developing a list of specific projects that are included in a pre-approved SEP Bank
- SEP Bank Committee established to review the proposals
- Any person or group can propose a project

- We will initiate the SEP Bank in a matter of weeks



Questions

Jim Grassiano 334-279-3071

jgrassiano@adem.state.al.us

Compliance Assistance Program