Stormwater Regulations
“The Solution to Pollution is Dilution”
The Clean Water Act
1972, 1977
The cornerstone of surface water quality protection in the United States ...

... gave EPA the authority to implement pollution control programs and

... established the basic structure for regulating discharges of pollutants into the waters of the United States
National Pollutant Discharge Elimination System

NPDES Permit:
A permit issued by EPA (ADEQ) that authorizes the discharge of pollutants to the waters of the United States
Phase I Storm Water Regulations

In 1990, EPA’s **Storm Water Phase I** program addressed storm water runoff from:

- **Ten categories of industrial activity:**
  - Manufacturing facilities, mining operations, disposal sites, recycling yards, transportation facilities, etc.

- **Category Nine (ix):** Treatment works treating domestic sewage with a design flow of 1 million gallons a day or more
Phase I Storm Water Regulations

In 1990, EPA’s Storm Water Phase I program addressed storm water runoff from:

- Ten categories of industrial activity
- “Medium” and “large” municipal separate storm sewer systems (MS4s) generally serving a population of 100,000 or more
In 1990, EPA’s **Storm Water Phase I** program addressed storm water runoff from:

- Ten categories of industrial activity
- “Medium” and “large” municipal separate storm sewer systems (MS4s) generally serving a population of 100,000 or more
- Construction activity disturbing 5 acres of land or greater
Phase II Storm Water Regulations

In 2003, EPA’s **Storm Water Phase II** program expanded the Phase I program by addressing stormwater runoff from:

- “Small” municipal separate storm sewer systems (MS4s) generally serving a population of 10,000 or more or “urbanized areas”
Arkansas MS4 Cities and Counties
Phase II Storm Water Regulations

In 2003, EPA’s Storm Water Phase II program expanded the Phase I program by addressing stormwater runoff from:

- “Small” municipal separate storm sewer systems (MS4s) generally serving a population of 10,000 or more or “urbanized areas”
- Construction activity disturbing 1-5 acres of land or greater
Linear Construction Projects
Regulatory Authority Hierarchy

Clean Water Act  
(Congress)

Code of Federal Regulations  
(EPA)

NPDES Permits  
(Arkansas Department of Environmental Quality)

Policy and Guidance  
(local ordinances)
Remind me again...

What does this have to do with me?!?
You are a member of a community that depends on shared water resources

Craighead Forest Lake
Stormwater management is required by federal and state laws

Stormwater Program

City Water & Light has a federally mandated stormwater NPDES permit that outlines how it will manage its stormwater runoff at the Jonesboro Westside Wastewater Treatment Plant
Failure to comply is a violation of the Clean Water Act.

Each violation of a particular requirement can be the subject of a separate penalty. These can include civil and criminal penalties, punishable by fine and/or incarceration.
Ultimately, you could be liable in a 3rd party lawsuit.
Now a bit more about industrial stormwater management...
Industrial Stormwater Permitting

Engineering Staff

Jamal Solaimanian, P.E.  501-682-0620
Engineering Supervisor

Amanda Gallagher  501-682-0621
Engineer

Jennifer Harmon  501-682-0627
Engineer

Nicholas Willis  501-682-0619
Engineer
Stormwater Discharges Associated With Industrial Activity

Stormwater discharges associated with an industrial activity as defined in 40 CFR 122.26(b)(14)(i) – (xi) are required to obtain coverage under the Industrial Stormwater General Permit ARR000000.
General Requirements of the Industrial Stormwater General Permit
Who is Covered???

Breaks down industries into sectors that are based on Standards Industrial Classification (SIC) code or by industry activity category...

<table>
<thead>
<tr>
<th>SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTOR S: AIR TRANSPORTATION FACILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
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</table>

<table>
<thead>
<tr>
<th>SECTOR T: TREATMENT WORKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
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</tbody>
</table>
What does stormwater pollution management mean for Jonesboro City Water & Light?
Stormwater Program Requirements

- Apply for NPDES permit coverage
- Develop a Stormwater Pollution Prevention Plan (SWPPP)
- Implement the SWPPP using appropriate Best Management Practices (BMPs)
- Develop measurable goals for the program
- Evaluate and report effectiveness of the program
No Exposure Exclusion

Exists at an industrial facility when all industrial materials and activities are protected from exposure to rain and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products.
Scrap areas must either be cleaned up or covered.

Here is an option for cover.
Dumpsters must either be covered or drain back to treatment

This dumpster drains back to treatment
Perform comprehensive site evaluation and site inspection annually.
Exposure of Potential Pollutants

Spills and Leaks

Un-authorized Non-stormwater Discharges

Poor Housekeeping
The Department will notify all existing permittees via correspondence when the appeal has been resolved.
Current Permit

- Current Industrial General Permit (IGP) Expired March 31, 2009

- The Renewal Permit was issued June 30, 2009 with an effective date of July 1, 2009

- The Renewal Permit was appealed by the Arkansas Environmental Federation on July 29, 2009 and thus stayed
On March 26, 2010, the APCEC lifted the stay on the IGP per a Minute Order until a final decision was made on the appeal (62-page AR000000 permit and minute order.pdf)

The 2009 IGP became effective immediately, except for those sections that are the subject of the appeal

Alternative terms and conditions were applied in the place of the sections that remained stayed
Obtaining Renewal Permit Coverage for Existing Permittees

Within 180 days of the effective date of the Minute Order – **September 26th, 2010**:

- Submit completed NOI

  and

- Update SWPPP, as necessary, to comply with the requirements of renewal permit (do NOT submit SWPPP)
Stormwater Pollution Prevention Plan (SWPPP)

- SWPPP must match the renewal permit

- **SWPPP Changes:**
  - Facility Information
  - New Control Measure - Minimize Exposure
  - Sara Title 313 section has been removed
  - Format has been rearranged
Find the NOI and other forms in the Water Division web pages.
Questions?
Where to Submit

• By snail mail to:
  General Permits Section
  Water Division
  Arkansas Department of Environmental Quality
  5301 Northshore Drive
  North Little Rock, AR 72118

• or by electronic mail
  Complete documents must be submitted in Adobe Acrobat .pdf to: Water-permit-application@adeq.state.ar.us
### Effluent Limitations Guidelines (ELGs) for Stormwater

Additional facilities under the following ELG’s are now allowed to discharge under the Industrial Stormwater Permit

<table>
<thead>
<tr>
<th>Regulated Discharge</th>
<th>40 CFR Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runoff from material storage piles at cement manufacturing facilities</td>
<td>Part 411, Subpart C</td>
</tr>
<tr>
<td>Runoff from phosphate fertilizer manufacturing facilities that comes into contact</td>
<td>Part 418, Subpart A</td>
</tr>
<tr>
<td>with any raw materials, finished product, byproducts or waste products (SIC 2874)</td>
<td></td>
</tr>
<tr>
<td>Runoff from coal storage piles at steam electric generating facilities</td>
<td>Part 423</td>
</tr>
<tr>
<td>Runoff from asphalt emulsion facilities</td>
<td>Part 443, Subpart A</td>
</tr>
</tbody>
</table>

*Only one in previous permit*
Effluent Limitations Guidelines (ELGs) for Stormwater

- Not all ELG’s for Stormwater are included
- Grab Sample – Annual Sampling
- Permit Limitations – are enforceable
Parameter Benchmark Monitoring Requirements

- Stormwater Sampling for 12 monitoring categories of industries.
  - SARA Title III
  - Primary Metals
  - Wood Treatment, etc.

- Monitoring Frequency:
  Annually for Monitoring Categories 1-12

- Reporting Period:
  January 1 - December 31 of a calendar year.
Similar Outfall

- What is a similar outfall?
  - similar effluents based on a consideration of industrial activity, significant materials and management practices, and activities within the area drained by the outfall.

- The permittee may sample only the discharge point (outfall) with the highest concentration of pollutants, but must include documentation in SWPPP.
Sampling Procedures

- **Measurable Storm Events** - a storm event that results in an actual discharge from the site that follows the preceding measurable storm event by at least 72 hours (3 days).

- **Grab Sample** – must be taken within the first 30 minutes of a discharge resulting from a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample must be collected as soon as practicable.
Adverse Weather Conditions

When adverse weather conditions prevent the collection of samples according to the relevant monitoring schedule, a sample can be taken during the next qualifying storm event.
Parameter Benchmark Values

- Same as previous permit
- Except for 6 Metals
  - Cadmium
  - Copper
  - Lead
  - Nickel
  - Silver
  - Zinc
Discharge Monitoring Reports

- Submit monitoring results obtained from the previous twelve (12) months on Discharge Monitoring Report (DMR) Forms

- Reports are due by the 31st day of January each year for the previous January – December reporting period (i.e. January 31, 2011 for Year 2010)

- Make sure DMR’s are signed by the proper official