Emergency Planning & Community Right-to-Know Act (EPCRA) in Alabama

Beth Woodfin
SARA Title III Coordinator
Objectives

• Discuss Basic History of Emergency Planning and Community Right-to-Know Act (EPCRA)
• Discuss Alabama Emergency Response Commission
• Discuss Basic EPCRA Reporting Requirements
• Overview of E-Plan and Tier2Submit
• Discuss How First Responders Use Tier II Data
• Discuss Emergency Releases
1976: Resource Conservation and Recovery Act (RCRA)
- Established controls over hazardous waste from generation to disposal
- Toxic Substances Control Act (TSCA) provides EPA authority to make controls on toxic chemicals

1980: Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- aka: Superfund
- Addressed dangers of hazardous waste dumps & created trust fund to finance emergency response

1986: Superfund Amendments and Reauthorization Act (SARA)
- aka: EPCRA
- Title III of SARA focuses on Emergency Planning and Community Right-to-Know
History: Bhopal, India- December 3, 1984

- Union Carbide pesticide plant
- Methylisocyanate gas (MIC) = highly poisonous gas
- More than 30 tons of MIC released
- Over 500,000 people exposed
- Final death toll varies, but is estimated to be over 16,000 people
- Bhopal is still suffering to this day
Institute, West Virginia- August 11, 1985

- Union Carbide manufactured and stockpiled MIC
- 4,000 lbs of toxic chemicals were released
- ~136 people hospitalized
Purpose of EPCRA

• **Help communities prepare** to respond to chemical emergencies

• **Increase** the Public’s **knowledge** of the types of chemicals and releases that are at individual facilities

• **Empower responders** to use the information to improve chemical safety and protect the public and environment

• **Create** State Emergency Response Commissions (SERCs)
# Alabama Emergency Response Commission (AERC) Roles/Contacts:

## ADEM
- **EPCRA Data Repository**
  - Beth Woodfin- 334-394-4306 / beth.woodfin@adem.alabama.gov
- **ADEM Emergency Response Questions**
  - Grady Springer- 334-260-2717 / gspringer@adem.Alabama.gov

## AEMA
- **Appoint and supervise LEPCs**
- **Emergency Planning Districts**
- **Emergency Plan Preparation/Implementation**
  - Reginald Marshall- 205-280-2284 / reginald.marshall@ema.alabama.gov
2016-Shelby County, AL

- Colonial Pipeline
- Multiple gasoline leaks
- Multiple injuries + fatalities
- Gas shortages across the Southeastern U.S.
2017-McIntosh, AL

• Olin Corp
• Chlorine release
• Multiple releases since 2010
• Exposure sends some First Responders & community members to hospital
Consider:

• Are you attending LEPC meetings?
• Are hospitals and other community organizations educated on the chemical hazards at your facility?
• Does your community know what to do during emergencies?
• **302**- Extremely Hazardous Substance (EHS) Notification
• **303**- Designate a Facility Emergency Response Coordinator who participates in local emergency planning process
• **304**- Emergency Release & Continuous Release Notifications
• **311**- Hazardous Chemical Safety Data Sheet (SDS)
• **312**- Hazardous Chemical Inventory- Tier II Reporting
• **313**- Toxics Release Inventory (TRI)
Submit EHS Notifications in a .pdf to AL312@adem.alabama.gov
Emergency Release & Continuous Release Notifications

Submit ERN & CRN Written Follow-Up Reports to:
AL312@adem.alabama.gov

https://www.epa.gov/epcra/cercla-and-epcra-continuous-release-reporting#epcra
Toxics Release Inventory (TRI)

- **313**
  - Specific Industry sect, 10 or more full time employees, TRI chemical above threshold level
  - Annually by July 1st
  - Form R (through TRI-MEweb)
  - EPA & AERC

- Is in a **specific industry sector** (e.g., manufacturing, mining, electric power generation). Note that federal facilities must report regardless of industry sector if they meet the other two criteria.

- Employs 10 or more full-time equivalent employees

- Manufactures, processes, or otherwise uses a **TRI-listed chemical** in quantities above threshold levels in a given year. Note that Persistent Bioaccumulative Toxic chemicals (PBTs) have lower thresholds than other TRI chemicals.
Send .pdfs of Safety Data Sheets (SDS) and if using Tier2Submit, submit .t2s file to: AL312@adem.alabama.gov
What is a Tier II Report?

• “Emergency and Hazardous Chemical Inventory forms”
• Due by March 1st
• Used to help agencies plan for and respond to chemical emergencies
• Over 3,600 facilities filed Tier II reports in Alabama for 2018
Every county in Alabama has 5 or more of these facilities present.
<table>
<thead>
<tr>
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<td>Randolph</td>
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<td>Limestone</td>
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<td>Walker</td>
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<td>Winston</td>
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</table>
Water Supply and Irrigation Systems

NAICS Code: 221310

- FY 2017: 153
- FY 2018: 128
Chemicals common to drinking water facilities

- Chlorine (AKA):
  - Sodium Hypochlorite Solution
  - Calcium Hypochlorite
- Ferric Sulfate
- Hydrofluorosilicic Acid
- Muriatic Acid
- Phosphoric Acid
- Potassium Permanganate
- Sulfuric Acid

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<tr>
<th>Concentration</th>
<th>Potential health effects</th>
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<tr>
<td>1-3 ppm</td>
<td>Mild nose irritation</td>
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<tr>
<td>5 ppm</td>
<td>Eye irritation</td>
</tr>
<tr>
<td>5-15 ppm</td>
<td>Throat irritation</td>
</tr>
<tr>
<td>30 ppm</td>
<td>Immediate chest pain, vomiting, changes in breathing rate</td>
</tr>
<tr>
<td>40-60 ppm</td>
<td>Lung injury and fluid in lungs (pulmonary edema)</td>
</tr>
<tr>
<td>430 ppm</td>
<td>Death</td>
</tr>
<tr>
<td>30 minutes</td>
<td>Death</td>
</tr>
<tr>
<td>1,000 ppm</td>
<td>Death</td>
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</tbody>
</table>
First Responder tools for managing data

- **E-Plan** is an **online database**
- **CAMEO fm** is a **computer software program** that is used to import .t2s files
- The AERC uses both programs for their ease of use and for the many tools within them
Tier II reporting options for submission to the AERC:

https://tier2.erplan.net/onlinefiling/filingLogin.htm  OR  https://www.epa.gov/epcra/tier2-submit-software
What is Tier2Submit?

- Form generator software by EPA
- Users create an encrypted file and must submit it separately
- Free to download
- Software updated yearly and must be re-downloaded
“In hazmat or terrorism disasters, every second should count. With E-Plan, every second does.”
What is E-Plan?

• Online database
• Allows secure online submission
• Small fee for the facility
• Data saved from year-to-year
• Free for First Responders for EPCRA purposes

Welcome to E-Plan's Online Tier II Reporting System

This easy E-Plan online reporting system will allow you to create a report you can submit to your state to meet their requirement for filing of (SARA Title III) Tier II Emergency and Hazardous Chemical Inventory Reports. This system is for Tier II filing organizations to file their Tier II reports to the State each year. However, filing Tier II report via E-Plan may not fulfill the mandate per your state SERC and/or County LEPC and local fire department. Contact your State and County officials to see if they accept E-Plan as a form of electronic filing.

If you have comments or questions, please use the Contact Us button on any E-Plan website page.

Important Notes

1. Completed Tier II forms for reporting year 2018 are due by March 1, 2019.
2. For reporting year 2018, UT Dallas institutes an administrative charge for organizations that use E-Plan for creating/filing online Tier II reports. Please look at the list to see if a charge for creating/filing applies to each facility. Detailed instructions including how and where to pay online payment are available. Please view this step-by-step guide.
3. For the 2018 reporting year, nine States (i.e., Alabama, Florida, Georgia, Mississippi, Montana, New York, North Carolina, South Carolina, and Tennessee) and several Counties (i.e., Warren County (OH), Chesapeake City (VA), Hopewell City (VA), Patrick County (VA), Pittsylvania County (VA), Richmond City (VA), Smyth County (VA), Virginia Beach City (VA), and Waynesboro City (VA)) accept E-Plan as an electronic form of Tier II reports.
4. If your State SERC and/or County LEPC's accept Tier II Submit such as Tier II forms electronically, you can create and export data via E-Plan. Please Contact Us to ask a question or report a problem.
5. Please refer to your state's web site and the EPA's State Tier II Reporting Requirements and Procedures for submission details.
6. E-Plan online Tier II training video. Click here to watch.
Common filing errors/reminders:

**Tier II Reporting:**
- Due by March 1st (anything after is late!)
- State Fields: Master ID and E-mail address
- Accuracy issues (spelling, lat/long, naming consistency)
- Obtain proof-of-receipt from each entity (all EPCRA documents)

**Section 302/304/311:**
- Remember to include the Master ID, type of report and facility name in the subject line of e-mail submissions
Agencies and their corresponding EPCRA documents

**Fire Department**
- Safety Data Sheets
- Tier II Reports

**Local Emergency Planning Committee (LEPC)**
- Extremely Hazardous Substance Notifications
- Emergency Release Notifications
- Safety Data Sheets
- Tier II Reports

**Alabama Emergency Response Commission (AERC)**
- Extremely Hazardous Substance Notifications
- Emergency Release Notifications
- Safety Data Sheets
- Tier II Reports
- Toxics Release Inventory (TRI)
America’s Water Infrastructure Act 2018:

- This law requires community (drinking) water systems to develop or update risk assessments and emergency response plans (ERPs)

**FREQUENTLY ASKED QUESTIONS**

**I need more information about risk and resilience assessments and emergency response plans:**

Risk and resilience assessments evaluate the vulnerabilities, threats and consequences from potential hazards.

**What does a risk and resilience assessment include?**
- Natural hazards and malevolent acts (i.e., all hazards).
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution, and electronic, computer and other automated systems).
- Monitoring practices.
- Financial systems (e.g., billing systems).
- Chemical storage and handling.
- Operation and maintenance.

**What does an emergency response plan include?**
- Strategies and resources to improve resilience, including physical security and cybersecurity.
- Plans and procedures for responding to a natural hazard or malevolent act that threatens safe drinking water.
- Actions and equipment to lessen the impact of a malevolent act or natural hazard, including alternative water sources, relocating intakes and flood protection barriers.
- Strategies to detect malevolent acts or natural hazards that threaten the system.

**Who should I work with when creating my emergency response plan?**
- Utilities must coordinate the risk and resilience assessments, as well as the emergency response plans with local emergency planning committees.

Inside E-Plan: First Responder View
E-Plan Facility Visual Search

- Can search within a mile radius (1-200) around specific location
- # of Tier II facilities near this building:
  - 1 Mile: 1 facilities
  - 2 Miles: 14 facilities
  - 3 Miles: 30 facilities
Advanced Google Map

E-Plan

Icon Legend

- Hospital
- School
- Facility

This map shows the nearest schools and hospitals within a 5 mile radius of the facility.

Frazer Christian Kinde...
Frazer United Methodi...
The Montgomery Aca...
Lee High School
Montgomery Catholic ...
Brewbaker Technolog...
Peter Crump Element...
E-Plan has many ways to search for data

- 302
- 304
- 311
- Tier2
- TRI
- Emergency Plan
- RMP (by Tier2 User)
- RMP (by EPA)
## Facility Search Result

### Download Tier2 Zip File

(Click to omit attachments)

### Google Map

### Download Public Excel

### Download Excel File

### Sort by Facility ID ▼ Type All Chemicals ▼ Download PDF

### Download Multiple KML File

Showing 5 of 5 result(s)

- Green square indicates facility with uploaded document(s)

<table>
<thead>
<tr>
<th>No.</th>
<th>Id</th>
<th>Facility Name</th>
<th>Company Name</th>
<th>Filing Type by Submitter</th>
<th>Filing Year (Type)</th>
<th>Street Address</th>
<th>City</th>
<th>County</th>
<th>State</th>
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<td>ABC Chemical Company (DEMO)</td>
<td>Cutting Edge Planning &amp; Training Inc.</td>
<td>302 Tier2</td>
<td>2013 (Tier2)</td>
<td>90 3rd Street</td>
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<td>1288139</td>
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# E-Plan can do plume modeling for 519 chemicals

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<tr>
<th>Chemical (Click for ERG link)</th>
<th>CAS #</th>
<th>Max Qty. (lbs)</th>
<th>Avg Qty. (lbs)</th>
<th>Max Amount in largest container (lbs)</th>
<th>NFPA Code</th>
<th>Properties</th>
<th>Fact Sheets</th>
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<td>Chlorine (EHS Chemical)</td>
<td>7782-50-5</td>
<td>689,098</td>
<td>49,098</td>
<td></td>
<td>4 0 0 OX</td>
<td>Pure Liquid Gas EHS</td>
<td>SDS MSDS Profile CHRIS</td>
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</table>

### Physical Hazard:
- Oxidizer (liquid, solid or gas)
- Gas under pressure (compressed gas)

### Health Hazard:
- Acute toxicity (any route of exposure)
- Skin corrosion or irritation
- Serious eye damage or eye irritation
- Respiratory or skin sensitization
- Aspiration hazard

Synonyms: Bertholite; Chlore (dot french); Chlorine; Chlorine mol.; Chlorine molecule (Cl2); Cloro (dot spanish); Diatomic chlorine; Dichlorine; Molecular chlorine;

[https://plume.erplan.net/eplume/helps/E-PlanChemicalPlumeMappingTrainingManual.html](https://plume.erplan.net/eplume/helps/E-PlanChemicalPlumeMappingTrainingManual.html)
Resources

• ADEM’s SARA Title III Webpage: http://adem.alabama.gov/MoreInfo/saralll.cnt
• Tier2Submit: https://www.epa.gov/epcra/tier2-submit-software
• Tier2Submit Tutorial: https://www.epa.gov/epcra/tier2-submit-tutorial
• E-Plan: https://erplan.net
• EPA’s EPCRA Site: https://www.epa.gov/epcra
• Chemical Safety Board:
  • Reflections on Bhopal After Thirty Years
  • https://www.youtube.com/watch?time_continue=29&v=HZirRB32qzU
Release Reporting Requirements

EPCRA Section 304 - Emergency Release Notification

Under EPCRA section 304, facilities are required to provide **immediate telephone notification to the appropriate SERC (or TERC) and LEPC** of any releases of Extremely Hazardous Substances (EHSs) listed under EPCRA -or- hazardous substances listed under Section 302.4 of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

- EPA recommends a proactive and conservative approach to release reporting; “…immediate telephone notification, as soon as practicable” upon knowledge of the release.

- Legislative history indicates Congress considered 15 minutes to satisfy the term immediately.

https://www.epa.gov/epcra/epcra-section-304
Release Reporting Requirements

Making the Notification

- **National Response Center (NRC)** – (888)-424-8802
  Generally via email and Flash Fax

- **Alabama State Warning Point (AEMA)** – (800)-843-0699

AEMA Communications Room notifies the appropriate ADEM Field Office depending on location of spill.

Notification to either or both entities will satisfy the reporting requirement for the SERC/TERC and LEPC and the newly adopted Americas Water Infrastructure Act (AWIA)
Release Reporting Requirements
EPCRA Section 304 - Follow Up Written Report

Facilities are also required to submit a follow-up report of the release within 30 days to the SERC (or TERC) and LEPC (or TEPC):

- Detailing the release event that occurred including quantities if known
- Describing response actions during the event by facility staff (facility ERP’s)
- Any known or anticipated acute or chronic health risks associated with the release

https://www.epa.gov/epcra/epcra-section-304
Release Reporting Requirements

EPCRA Section 304 - Follow Up Written Report

Submit the 304 Follow Up Report to:

- AERC – E-mail a .pdf to AL312@adem.alabama.gov

- LEPC – Submit a copy in the format requested (contact your LEPC)

https://www.epa.gov/epcra/epcra-section-304
Field Offices and AOR’s

- **Decatur**  
  (256) 260-5114

- **Birmingham**  
  (205) 438-1080

- **Montgomery**  
  (334) 850-6621

- **Mobile**  
  (251) 581-0144
Questions?

• Beth Woodfin: beth.woodfin@adem.alabama.gov /334-394-4306
• Grady Springer: gspringer@adem.alabama.gov /334-260-2717

*Citations for this presentation can be provided on request*