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

CREW

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

#### **Basic EPCRA Timeline**



#### 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



THE LOVE CANAL DISASTER

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 Rightto-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 today

#### 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
- <u>Create</u> 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

#### <u>AEMA</u>

- 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

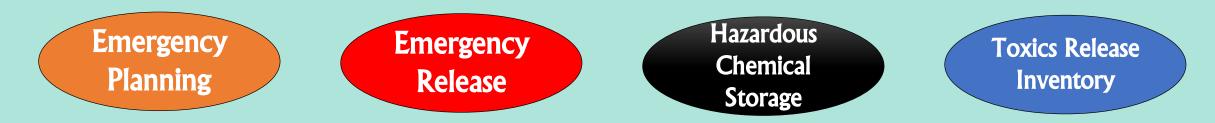


#### **Consider**:

- 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?



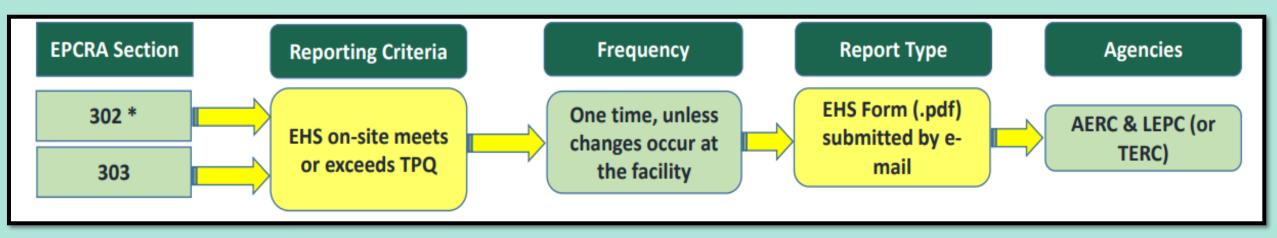
# SARA Title III Sections & Terms



- 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)

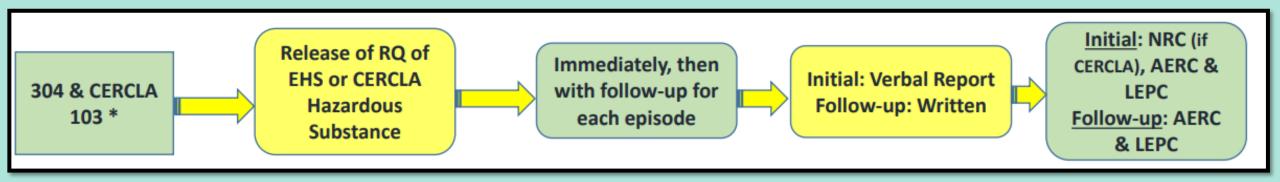
#### **Reporting Requirements: Extremely Hazardous Substance (EHS)**

#### 40 CFR Part 355, Appendix A and B



#### Submit EHS Notifications in a .pdf to <u>AL312@adem.alabama.gov</u>

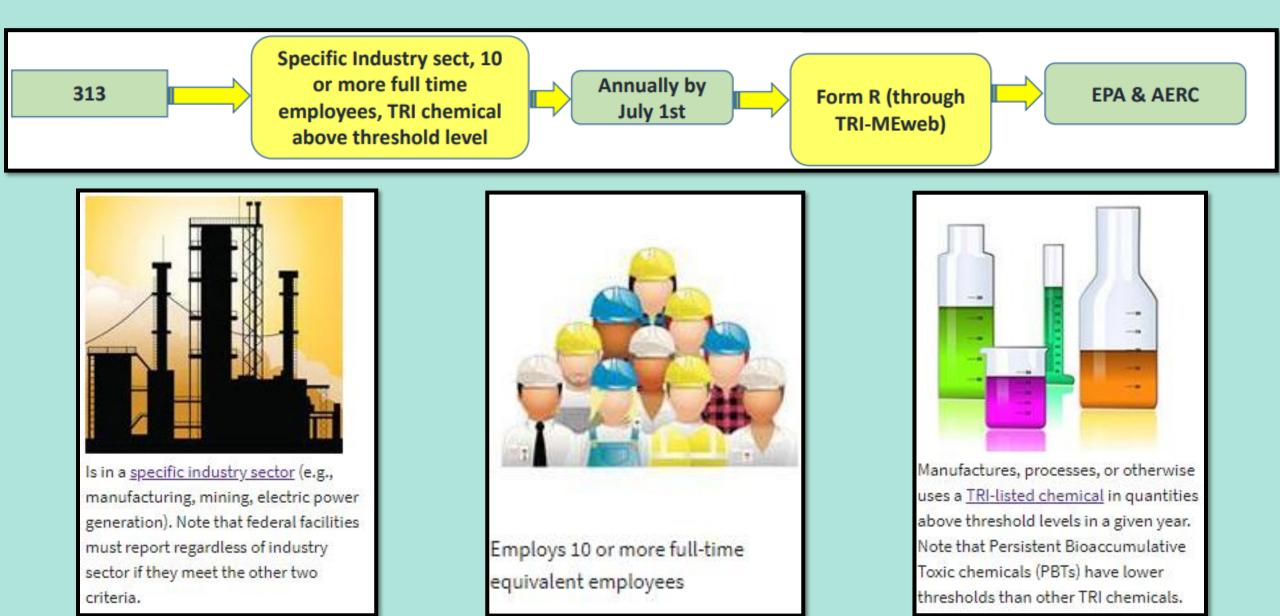
#### **Emergency Release & Continuous Release Notifications**



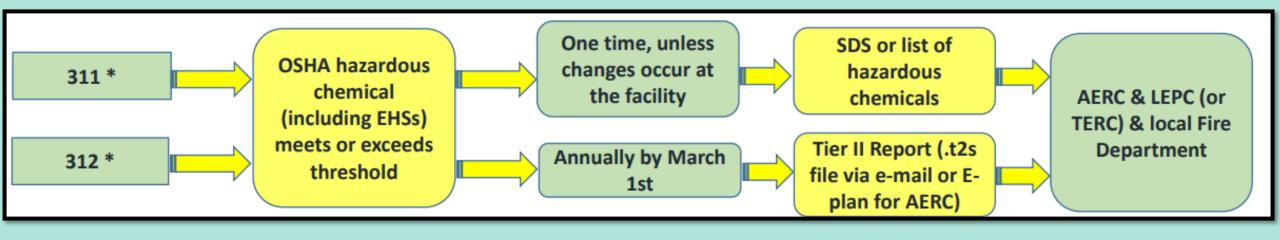
#### Submit ERN & CRN Written Follow-Up Reports to: AL312@adem.alabama.gov

https://www.epa.gov/epcra/cercla-and-epcra-continuous-release-reporting#epcra

#### **Toxics Release Inventory (TRI)**



#### Section 311/312: OSHA Hazardous Chemicals



• Send .pdfs of Safety Data Sheets (SDS) and if using Tier2Submit, submit .t2s file to: <u>AL312@adem.alabama.gov</u>

# What is a Tier II Report?

- "Emergency and Hazardous Chemical Inventory forms"
- Due by March 1<sup>st</sup>
- Used to help agencies plan for and respond to chemical emergencies
- Over 3,600 facilities filed Tier II reports in Alabama for 2018

#### <u>Every county</u> in Alabama has <u>5</u> or more of these facilities present



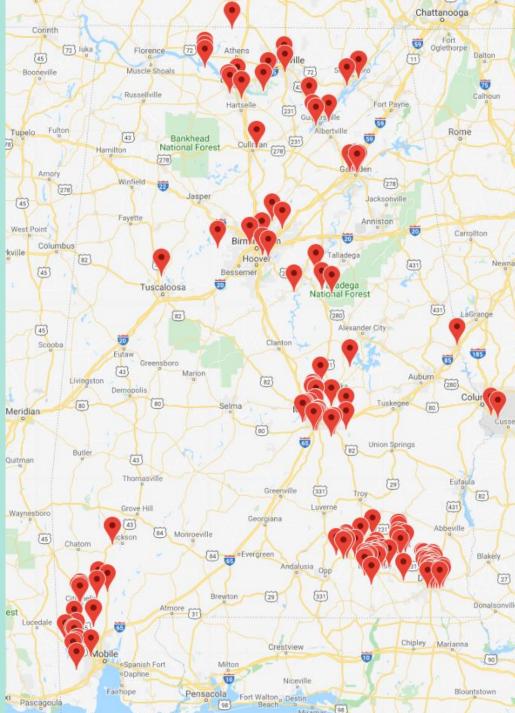
<u>County</u>	<u>#</u>	County	<u>#</u>	<u>County</u>	<u>#</u>
Autauga	19	Dale	30	Madison	173
Baldwin	100	Dallas	36	Marengo	25
Barbour	19	DeKalb	52	Marion	22
Bibb	13	Elmore	33	Marshall	75
Blount	22	Escambia	72	Mobile	343
Bullock	10	Etowah	64	Monroe	38
Butler	19	Fayette	14	Montgomery	185
Calhoun	100	Franklin	19	Morgan	115
Chambers	20	Geneva	14	Perry	5
Cherokee	23	Greene	9	Pickens	19
Chilton	27	Hale	11	Pike	31
Choctaw	30	Henry	15	Randolph	20
Clarke	25	Houston	94	Russell	27
Clay	17	Jackson	50	St. Clair	61
Cleburne	11	Jefferson	439	Shelby	100
Coffee	42	Lamar	35	Sumter	12
Colbert	60	Lauderdale	40	Talladega	73
Conecuh	157	Lawrence	22	Tallapoosa	25
Coosa	9	Lee	69	Tuscaloosa	137
Covington	41	Limestone	49	Walker	46
Crenshaw	11	Lowndes	12	Washington	29
Cullman	70	Macon	8	Wilcox	5
				Winston	28

# Alabama's Tier II Data by



#### 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

TABLE 1. Potential health effects of short-term chlorine exposure, based on animal and human studies (Source: ATSDR).

Concentration	Potential health effects <sup>18</sup>
1-3 ppm	Mild nose irritation
5 ppm	Eye irritation
5-15 ppm	Throat irritation
30 ppm	Immediate chest pain, vomiting,
	changes in breathing rate and cough
40-60 ppm	Lung injury and fluid in lungs
	(pulmonary edema)
430 ppm for	Death
30 minutes	
1,000 ppm for	Death
a few minutes	

# First Responder tools for managing

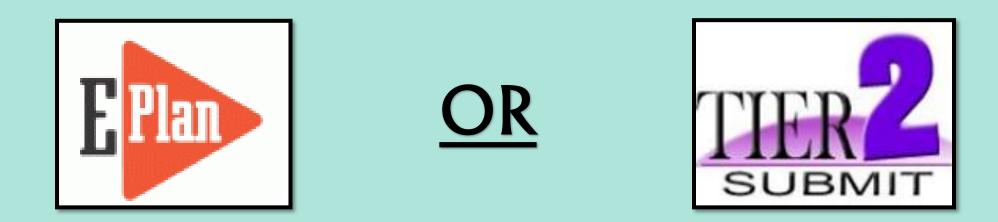
data

- E-Plan is an <u>online</u> database
- CAMEO*fm* is a <u>computer software</u> 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

Information System									
FIR RESPO			Online Tier2 eSubmit						
Login	Page		Login I	Page					
Federal, S Local Gov Perso	vernment onnel	F	Tier II Sul acility Man Business	agers, an	ıd				
	CAMEOfm - [Home] File Edit Sharing	Conjuta I Jala	100	100	-				
	File Edit Sharing	Scripts Help		_	_				
	Search for a C	Chemical	Search f MARPLOT	or a Facility	ו				
	Facilities	Chemicals In Inventory	Contacts	Incidents					
	Special Locations	Routes	Resources	Screening & Scenarios	v 3.5				

**E-Plan - Emergency Response** 

#### Tier II reporting options for submission to the AERC:



https://tier2.erplan.net/onlinefiling/filingLogin.htm https://www.epa.gov/epcra/tier2-submit-software

What is Tier2Submit?

T1-00C-0-0010 TT1-00C-0040-

- •Form generator software by EPA
- •Users create an encrypted file and must submit it separately
- •Free to download
- •Software updated yearly and must be redownloaded

File       Edit       Record       Search       Scripts       Help         View List       Chem Inventory List       Contact List       New Facility       Quick Report       Help       1       of 8 total											
View List Chem Inventory List Contact List New Facility Quick Report Help 1 of 8 total											
Facilities Last Modified 10/16/2019											
Fasility Name *											
Facility Name * If different, include both company name and facility name in the facility name field. List company name first.											
	Department					F	Report Ye	ar * 2018			
Locati	Location ID and Regs Contacts State Fields Attachments Certification										
	Location Where H	lazardous Chemical	s are Present			Mailing Addre	ess (if diffe	erent)			
Stree	et *										
Cit	y *		1	State *			Zip *				
							-ip				
Count	y *		Fire District					Country U	SA		
	L		k								
Emergency 24-Hour Phone Number											
Enter lat/long values in decimal degrees (use a negative number for Western hemisphere longitude).											
		Need	help finding your lat/lor	ng values?							
	Latitude *		ongitude *								
			A red * indicates a fed								



# "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 <u>not</u> 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 <u>list</u> 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 <u>guide</u>
- 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 Tier2 Submit such as .t2s or Tier2 zip file electronically, you can create and export data via E-Plan. Please <u>Contact Us</u> 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.

#### Sign In

If you have already registered for an account, enter your Access ID and password in the boxes below and Sign In to access or update your account and data.

Access ID	
Forgot Access ID	
Password	
orgot Password	
Sign In	

Create An Account

New to E-Plan?

#### **Common filing errors/reminders:**

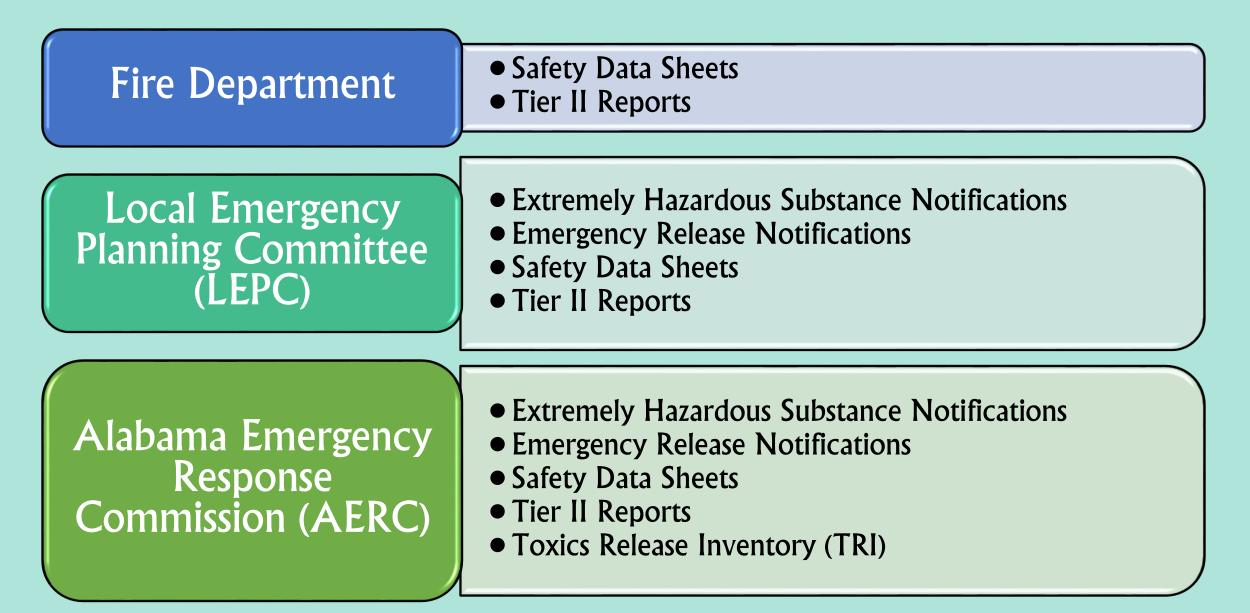
#### **Tier II Reporting:**

- Due by March 1<sup>st</sup> (anything after is late!)
- State Fields: Master ID and E-mail address
- Accuracy issues (spelling, lat/long, naming consistency)
- Obtain proof-of-receipt from <u>each</u> <u>entity</u> (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



## 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 <u>local</u> emergency planning committees.

For more information, see www.congress.gov/bill/115th-congress/senate-bill.

# Inside E-Plan: First Responder View

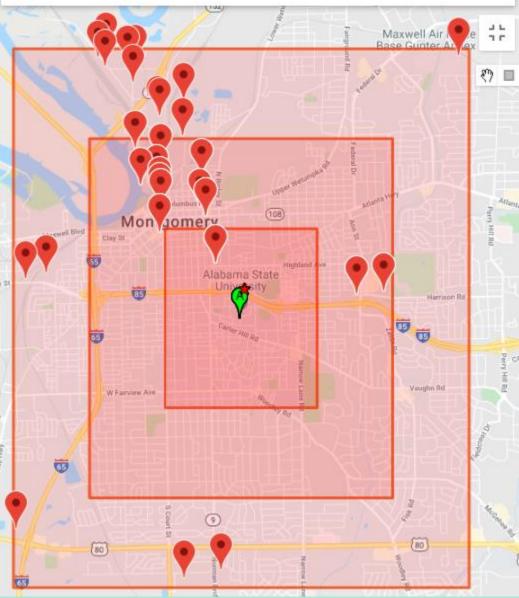
## **E-Plan Facility Visual Search**

- 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

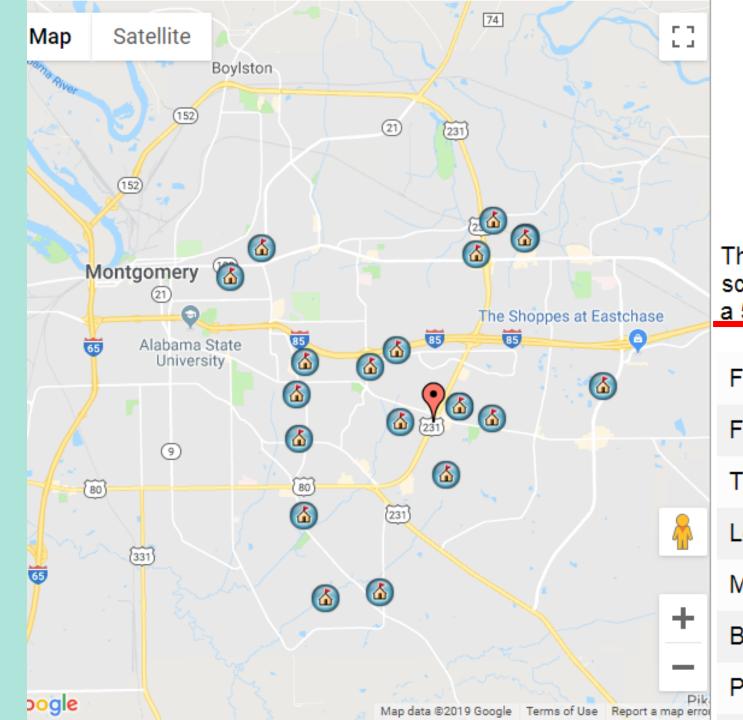
Address search Clear Map Back

FilingYear: 2018 ▼ Radius (miles): 3 ▼ Find Facilities	Download Exce	File
Alabama State University, South Jackson Street, M	/lon GO	Download Map

#### No. of Facilities near this location = 30



# oogle Map Pla <u>Advanced</u>



Icon Legend 🕀 - Hospital 6 - School 9 - 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)

#### **Chemical In Facility Search**

bornia of in different Englitize, by giving exerch percenter

Search for a chemical in c	anerent i acinties by giving search parameter
Chemical	
CAS	
Facility	
Company	
Quantity(Pounds)	Any Quantity
Quantity Greater Than Value in	Pounds
State	AL 🔻
County/Parish	Mobile <b>•</b>
City	
Zip	
EHS	
Filing Type	<ul> <li>302</li> <li>311</li> <li>Tier2</li> <li>TRI</li> <li>RMP (by Tier2 User)</li> <li>RMP (by EPA)</li> </ul>
Filing Year	All 🔻
SIC Code	
NAICS Code	
Search	Reset

#### 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) indicates facility with uploaded document(s)

No.	ld	Facility Name	Company Name	Filing Type by Submitter	Filing Year(Type)	Street Address	City	County	State
1	4515728	ABC Chemical Company (DEMO)					Bonita Springs	Live Oak	тх
2	6336713	ABC Chemical Company (DEMO)					Bonita Springs	Live Oak	тх
3	1288139	DISTILL PETROLEUM CORPORATION (DEMO)	DISTILL PETROLEUM CORPORATION		2009 (Tier2)	0007 GULF VALLEY STREET	OAKVILLE	Live Oak	тх

#### **Facility Search Result**

## E-Plan can do plume modeling for 519 chemicals

Chemical (Click for ERG link)	CAS#	Max Qty. (Ibs)	Avg Qty. (Ibs)	Max Amount in largest container (lbs)	NFPA Code H F R S	Properties	Fact Sheets
Chlorine (EHS Chemical) Show Chemical Plume	7782-50-5	689,098	49,098		4 0 0 OX	Pure Liquid Gas EHS	SDS MSDS Profile CHRIS

#### 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

#### **Resources**

- ADEM's SARA Title III Webpage: <a href="http://adem.alabama.gov/MoreInfo/saralll.cnt">http://adem.alabama.gov/MoreInfo/saralll.cnt</a>
- Tier2Submit: <u>https://www.epa.gov/epcra/tier2-submit-software</u>
- Tier2Submit Tutorial: <a href="https://www.epa.gov/epcra/tier2-submit-tutorial">https://www.epa.gov/epcra/tier2-submit-tutorial</a>
- E-Plan: <u>https://erplan.net</u>
- E-Plan Users Guide: <u>https://erplan.net/news/Tier2SubmitUsersGuide/UsersGuide.html</u>
- EPA's EPCRA Site: <u>https://www.epa.gov/epcra</u>
- Chemical Safety Board:
  - Reflections on Bhopal After Thirty Years
  - <u>https://www.youtube.com/watch?time\_continue=29&v=HZirRB32qzU</u>

EPCRA Section 304 - Emergency Release Notification

Under EPCRA section 304, facilities are required to provide <u>immediate telephone</u> <u>notification to the appropriate SERC (or TERC) and LEPC</u> 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

#### 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)

#### **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

EPCRA Section 304 - Follow Up Written Report

Submit the 304 Follow Up Report to:

AERC – E-mail a .pdf to <u>AL312@adem.alabama.gov</u>

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 (251) 581-0144





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

\*Citations for this presentation can be provided on request\*