

# Emergency Planning & Community Right-to-Know

## Emergency Planning & Community Right-to-Know



**Susan Parker**  
**Michigan**  
**SARA Title III**  
**Program**  
**May 2009**

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## History of the Regulation

- **Comprehensive Environmental Response, Compensation and Liability Act of 1980**
- **Cleanup hazardous waste disposal sites**
- **Emergency response for hazardous substances released into the environment**

**CERCLA = Superfund**

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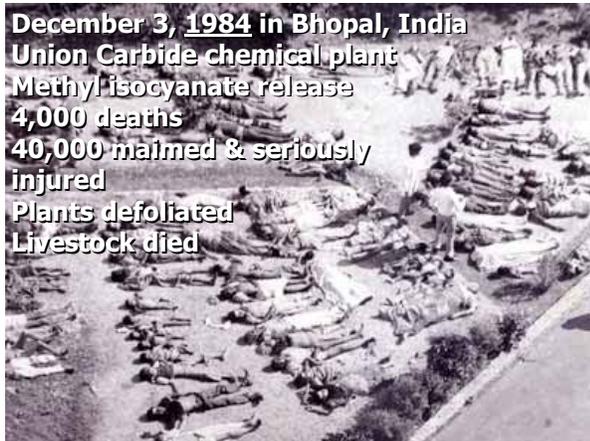
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# Emergency Planning & Community Right-to-Know

## History of the Regulation



- **Superfund Amendments and Reauthorization Act of 1986 (SARA)**
- **SARA Title III = Emergency Planning and Community Right-to-Know Act (EPCRA)**

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## What is Right-to-Know?

- **Employee Right-to-Know**
  - Occupational Safety & Health Administration (OSHA)
  - Hazard Communication Standard (29 CFR 1910.1200)
  - Material Safety Data Sheet (MSDS)
  - [www.osha.gov](http://www.osha.gov)

**PROTECTION OF THE EMPLOYEE**

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## What is Right-to-Know?

- **Firefighter Right-to-Know**
  - Michigan OSHA (MIOSHA)
  - Fire Prevention Code (1941 PA 207)
  - Fire Dept Hazardous Material Emergency Planning Responsibilities (Bulletin 9)
  - [www.michigan.gov/deleg](http://www.michigan.gov/deleg)

**PROTECTION OF THE FIREFIGHTER**

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# Emergency Planning & Community Right-to-Know

## What is Right-to-Know?

### ➤ Community Right-to-Know

- SARA Title III
  - LEPCs planning responsibilities
  - Facilities provide planning information
  - Facilities provide hazardous chemical inventories
- Tier Two report
- [www.michigan.gov/deqsara](http://www.michigan.gov/deqsara)

**PROTECTION OF THE COMMUNITY**

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## Emergency Planning



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## SARA Title III in Michigan

- Federal Regulation
- Enforced by EPA
- Implemented under Executive Order from the Governor



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# Emergency Planning & Community Right-to-Know

## SARA Title III - Components

- **Emergency Planning**  
Sections 302 & 303
- **Emergency Release Notification**  
Section 304
- **Hazardous Chemical Inventory**  
Sections 311 & 312
- ~~➤ **Toxic Chemical Release Inventory**  
Section 313~~



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## SARA TITLE III - Components

- **Emergency Planning - 302 & 303**
- **Emergency Release Notification**
- **Hazardous Chemical Inventory**
- **Toxic Chemical Release Inventory**



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## Emergency Planning Sect 302 & 303

- **Establish State Emergency Response Commission (SERC)**
- **Michigan Citizen-Community Emergency Response Coordinating Council (Exec. Order 2007-18)**
- **Establish Local Emergency Planning Committees (LEPCs)**
- **88 LEPCs in Michigan**



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# Emergency Planning & Community Right-to-Know

## Emergency Planning SERC Involvement

### Receive Facility Reports

- **MDEQ** Michigan SARA Title III Program

### Review LEPC Plans

- **MSP** Emergency Management & Homeland Security Division (EMHSD)

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## Emergency Planning Sect 303 LEPC Requirements

- **LEPC** writes **Offsite HazMat Response Plans**
- Containing information about certain facilities
- Submit to **MSP-EMHSD**
- Provide copies to **Responders**

How does the LEPC get the information they need?



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## Emergency Planning Sect 302 Facility Requirements

- **Extremely Hazardous Substance (EHS)** at or above the **Threshold Planning Quantity (TPQ)**
- Submit **Emergency Planning Notification**, a **ONE TIME REPORT** within 60 days
- To Michigan SARA Title III Program (**online**) and **LEPC**

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# Emergency Planning & Community Right-to-Know

## Extremely Hazardous Substances at water treatment plants

<u>EHS</u>	<u>TPQ in pounds</u>
Anhydrous Ammonia	500
Chlorine	100
Ozone	100
Sulfur Dioxide	500
Sulfuric Acid	1000



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## Emergency Planning Sect 302 Facility Requirements

- Designate a facility **emergency coordinator** and tell the **LEPC**
- **Provide information** requested by the **LEPC** that it needs to fulfill its planning responsibilities
- Inform the **LEPC** of any **changes** relevant to emergency planning

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View 302 Report  
[Submission Listing](#)

Facility Name: Water Plant  
302 Record Number: 5218  
Initiated Date: 4/22/2009 12:02:40 PM

Certification Date: 4/22/2009 12:02:45 PM  
Certified By: Doug Rascal (Supervisor)

**Emergency Contact Information**

Name:	Doug Rascal	Company Name:	UP City Waterworks Water Plant
Phone:	906-555-5555	Title:	
24 Hr Phone:	906-222-2222	Address:	420 5th Street
Pager:		City:	Marquette
Email:		State:	MI
Exempt from 302 Reporting:	<input type="checkbox"/>	Zip:	49841

**Chemical Information**

CAS	EHS Name	EHS Quantity (lbs)	TPQ Value	Chemical Name
7782-50-5	CHLORINE	6000	100	CHLORINE

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# Emergency Planning & Community Right-to-Know

## SARA TITLE III - Components

- Emergency Planning
- Emergency Release Notification -304
- Hazardous Chemical Inventor
- Toxic Chemical Release



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## Emergency Release Notification Sect 304

- ≈ 770 Hazardous Substances (CERCLA - published list)
- 355 Extremely Hazardous Substances (EHS) (SARA Title III- published list)
- "Reportable Quantity" (RQ)
- List of Lists has reportable chemicals and RQs



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## Emergency Release Notification Sect 304

<u>Chemical</u>	<u>RQ in pounds</u>
Aluminum Sulfate.....	5000
Anhydrous Ammonia.....	100
Calcium Hypochlorite.....	10
Chlorine.....	10
Ferric Chloride.....	1000
Ferrous Chloride.....	100
Ozone.....	100
Phosphoric Acid.....	5000
Potassium Permanganate.....	100
Sodium Hydroxide.....	1000
Sodium Hypochlorite.....	100
Sulfur Dioxide.....	500
Sulfuric Acid.....	1000

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# Emergency Planning & Community Right-to-Know

## Emergency Release Notification Facility Requirements

Immediate (**within 15 minutes**) notification to:

- LEPC
- SERC - Pollution Emergency Alerting System (PEAS)
- U.S. Coast Guard National Response Center (NRC)



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## Emergency Release Notification – Additional Facility Requirements

- Potentially required to report releases under **27** state and federal regulations, in addition to permits, licenses, contingency plans....
- Potentially required to report releases to LEPC, SERC, PEAS, DEQ (various divisions), NRC, Local Health Dept, DELEG, 911 ... depending on the applicable regulations.

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## BOTTOM LINE for Facilities

If there is a release, **IMMEDIATELY** notify:

- LOCAL – 911
- STATE – PEAS (800-292-4706)
- FEDERAL – NRC (800-424-8802)

Then assess the situation and make additional notifications as required



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# Emergency Planning & Community Right-to-Know

## Emergency Release Notification NREPA Part 31 Water Resources Protection

- Discharge of untreated sewage or partially treated sewage from a sewer system onto land or into the waters of the state.
- Within 24 hours report to:
  - DEQ-WB district office
  - Local Health Dept
  - Daily newspaper
  - Affected municipalities



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## Emergency Release Notification NREPA Part 41 Sewerage Systems

- Discharge of pollutants from sewerage systems in excess of those authorized by a discharge permit issued by the DEQ to surface water or groundwater as a result of a facility breakdown or emergency.
- Promptly report to:
  - DEQ-WB district office



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## SARA TITLE III - Components

- Emergency Planning
- Emergency Release Notification
- **Hazardous Chemical Inventory**  
- 311 & 312
- Toxic Chemical Release Inventory



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# Emergency Planning & Community Right-to-Know

## Hazardous Chemical Inventory Sect 311 & 312

- A Hazardous Chemical Inventory report is required if the **threshold** amount or more of a **hazardous substance** was present at the facility at any time during the past calendar year.
- Submitted annually to state and local Officials
- Made available to the public upon request

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## Hazardous Chemical Inventory Sect 311 & 312

- Hazardous Chemicals = all substances for which the **OSHA Hazard Communication Standard** requires the facility to maintain **MSDSs** (Employee Right-to-Know).
- There is **NO LIST** of OSHA Hazardous Chemicals!

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## Hazardous Chemical Inventory Sect 311 & 312

- Thresholds for reporting:
  - **OSHA hazardous** substances = **10,000** pounds
  - **EHS** = **500** pounds or **TPQ** (whichever is lower)
  - **Requests** by LEPC/Fire Dept = **zero** pounds

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# Emergency Planning & Community Right-to-Know

## Threshold Determination



Amount on site at any given time in storage and in process.

➤ Threshold is in **pounds**.

Gallons must be converted to pounds.

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## Formula for Conversion



Specific Gravity (Relative Density)  
from MSDS

X

Weight of Water (8.34 lbs per gal)

=

Pounds per gallon of substance

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## Conversion Example



2000 gallons of gasoline  
How much does it weigh?

From MSDS:

Specific gravity = 0.72 - 0.75

If the specific gravity is reported as a range,  
use the larger number.

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# Emergency Planning & Community Right-to-Know

## Conversion Answer



Calculate lb/gal of gasoline

$$0.75 \times 8.34 \text{ lb/gal wtr} = 6.3 \text{ lb/gal gasoline}$$

Total weight of gasoline =

$$6.3 \text{ lb/gal} \times 2000 \text{ gal} = 12,600 \text{ lbs}$$

Does this gasoline meet the threshold for sect 311 & 312?

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## Hazardous Chemical Inventory Sect 311

- **INITIAL REPORT** within 3 months after threshold reached
- Submit **MSDSs** or
- **List** of hazardous substances and associated hazards to:
  1. Michigan SARA Title III Program
  2. LEPC
  3. Fire Department

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## Hazardous Chemical Inventory Sect 312

- **ANNUAL REPORT** by March 1<sup>st</sup>
- Submit **Tier Two** Emergency and Hazardous Chemical Inventory to:
  1. Michigan SARA Title III Program
  2. LEPC
  3. Fire Department

Report on **PREVIOUS** full calendar year.

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# Emergency Planning & Community Right-to-Know

## Chemicals reported by water treatment plants

Activated Carbon Powder  
Alum or Aluminum Sulfate  
**Anhydrous Ammonia**  
Calcium Chloride  
Calcium Hydroxide or Lime  
Calcium Hypochlorite  
Carbon Dioxide – liquid  
**Chlorine**  
Copper Sulfate Pentahydrate  
Ferric Chloride  
Ferrous Chloride  
Ferrous Sulfate  
Fuel Oil or Diesel Fuel  
Gasoline  
Hydrofluorosilicic Acid  
Hydrogen Peroxide 35%

**Lead-acid Batteries**  
Oxygen – Gas & Liquid  
**Ozone**  
Phosphoric Acid  
Potassium Permanganate  
Road Salt  
Sodium Bisulfate  
Sodium Bisulfite  
Sodium Carbonate or Soda Ash  
Sodium Hydroxide or Caustic Soda  
Sodium Hypochlorite  
Sodium Permanganate  
**Sulfur Dioxide**  
**Sulfuric Acid**

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## Sect 311 & 312 Threshold Review



Threshold for  
Extremely Hazardous Substances (EHS)  
= the lower of:

- 500 pounds or
- threshold planning quantity (TPQ)

All other OSHA Hazardous Substances =  
10,000 pounds

EHSs and TPQs are on slide 16

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## Test Your Understanding

What is the Tier Two reporting  
threshold for

- Sulfuric Acid? \_\_\_\_\_
- Distilled Water? \_\_\_\_\_
- Chlorine gas? \_\_\_\_\_
- Diesel Fuel? \_\_\_\_\_

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# Emergency Planning & Community Right-to-Know

## Online Reporting

Access the ONLINE reporting program:

[www.michigan.gov/deqsara](http://www.michigan.gov/deqsara)

➔ SARA Title III Hazardous Chemical Inventory

➔ Click on the "big brown button"



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## Online Reporting



Facilities submit reports online to the Michigan SARA Title III Program:

➤ Sect 302 Emergency Planning

➤ Sects 311 & 312 Hazardous Chemical Inventory

Then print hard copies and send to the LEPC and Fire Department.

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## If Your Facility is Not Reporting ...

And it is subject ...

or might be subject ...

or you need help ...

or you need instructions ...

or you are not sure if anyone has reported ...

Contact Susan Parker

517-335-4650 or [parkers5@michigan.gov](mailto:parkers5@michigan.gov)

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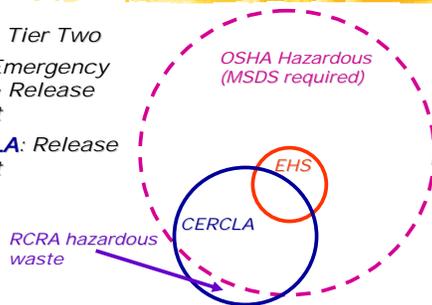
# Emergency Planning & Community Right-to-Know

## Hazardous Substances covered by SARA Title III

OSHA: Tier Two

EHS: Emergency Plan & Release Report

CERCLA: Release Report



CERCLA & EHS are in the List of Lists

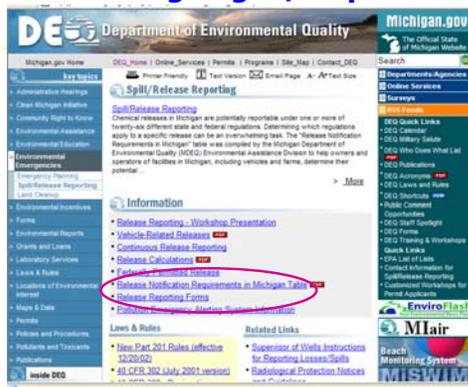
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## www.michigan.gov/deqsara



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## www.michigan.gov/deqrelease



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