

Emergency Planning & Community Right-to-Know



Susan Parker

**Michigan
SARA Title III
Program**

DNRE

June 2010

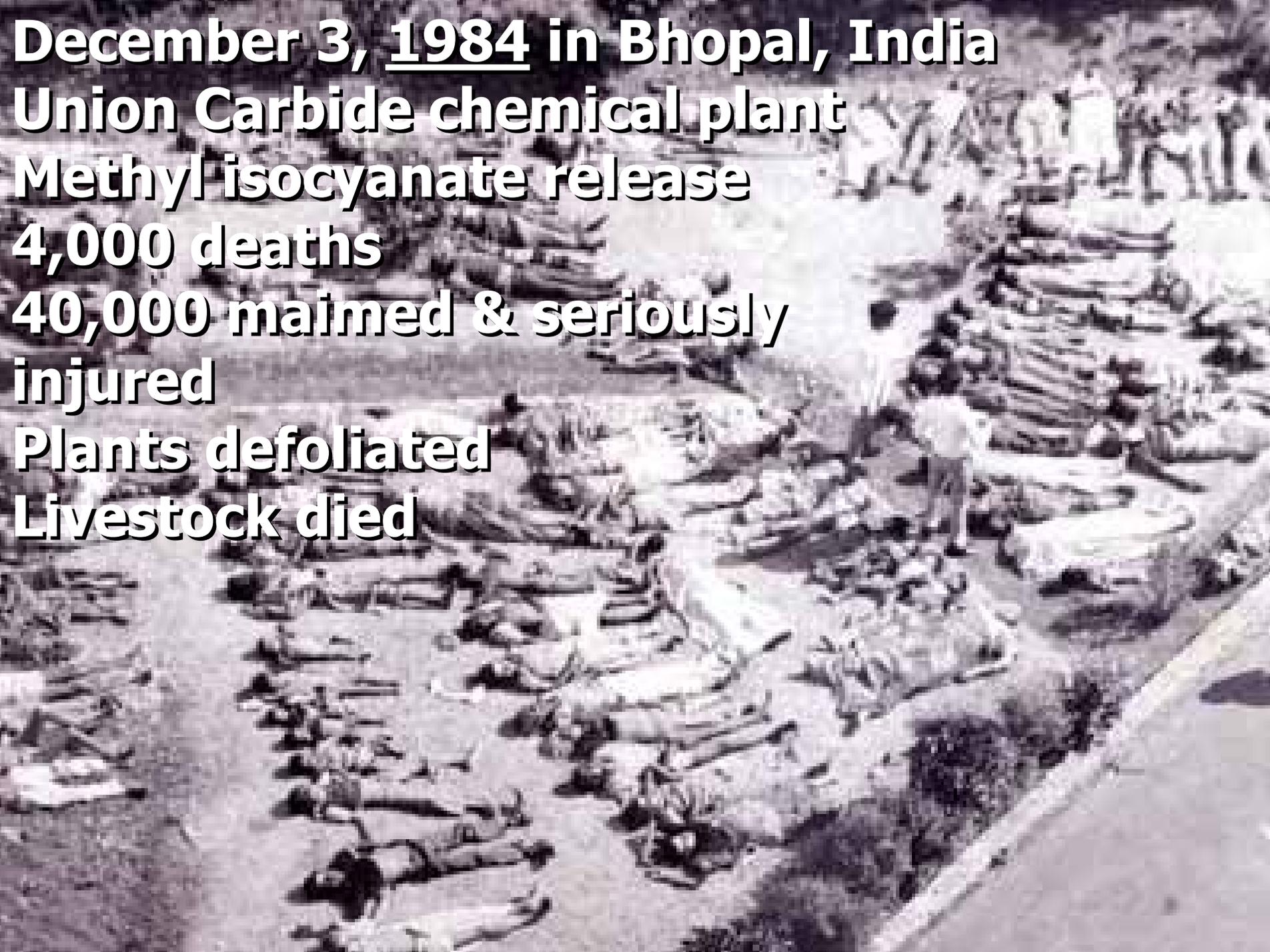
History of the Regulation



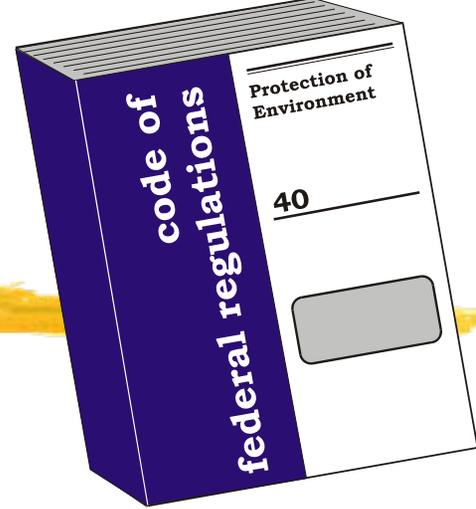
- **Comprehensive Environmental Response, Compensation and Liability Act of 1980**
- **Cleanup hazardous waste disposal sites**
- **Emergency response for hazardous substances released into the environment**

CERCLA = Superfund

December 3, 1984 in Bhopal, India
Union Carbide chemical plant
Methyl isocyanate release
4,000 deaths
40,000 maimed & seriously
injured
Plants defoliated
Livestock died



History of the Regulation



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

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**

PROTECTION OF THE EMPLOYEE

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**

PROTECTION OF THE FIREFIGHTER

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/sara**

PROTECTION OF THE COMMUNITY

Emergency Planning

**State Police Emergency Managers
Act 390 – Emergency Management Act
Emergency Operations Plan
Emergency Action Guidelines**

**Firefighters
MIOSHA
Onsite Response Plan
General &
Site-specific**

**LEPCs
SARA Title III
Offsite Response Plan
Community &
Site-specific**

**Facilities
MIOSHA HAZWOPER
Onsite Response Plan**

SARA Title III in Michigan

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



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



SARA TITLE III - Components

➤ **Emergency Planning - 302 & 303**

➤ **Emergency Release Notification**

➤ **Hazardous Chemical**

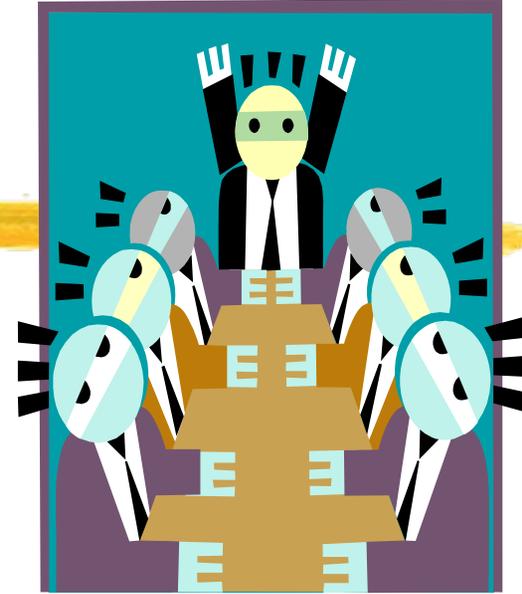
➤ **Toxic Chemical**



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**



Emergency Planning SERC Involvement



Receive Facility Reports

- **DNRE Michigan SARA Title III Program**

Review LEPC Plans

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

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?



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**

Extremely Hazardous Substances at water treatment plants

EHS

Anhydrous Ammonia

Chlorine

Ozone

Sulfur Dioxide

Sulfuric Acid

TPQ in pounds

500

100

100

500

1000



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**

Section 302 Report

[View 302 Report](#)

[Submission Listing](#)

Facility Name: UP City Water Plan

302 Record Number: 6528

Initiated Date: 4/15/2010 11:14:26 AM

Certification Date: 4/15/2010 11:14:31 AM

Certified By: Doug Rascal (Plant Manager)

Works with LEPC to develop offsite emergency response plan



Emergency Contact Information

Name: Doug Rascal

Phone: 906-555-5555

24 Hr Phone: 906-222-2222

Pager:

Email:

Exempt from 302 Reporting:

Company Name: UP City Waterworks Water Plant

Title: Plant Manager

Address: 420 5th Street

City: Marquette

State: MI

Zip: 49841

Chemical Information

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

SARA TITLE III - Components

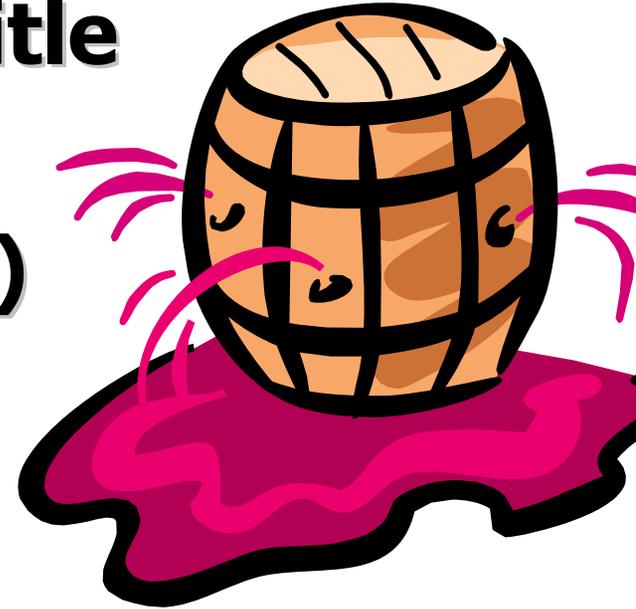
- **Emergency Planning**
- **Emergency Release Notification -304**
- **Hazardous Chemical Inventory**
- **Toxic Chemical Release**



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



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

Emergency Release Notification Facility Requirements

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

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



Written follow-up report due **within 7 days**

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, DNRE (various divisions), NRC, Local Health Dept, DELEG, 911 ... depending on the applicable regulations.**

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**



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:**
 - 1. DNRE-WRD district office**
 - 2. Local Health Dept**
 - 3. Daily newspaper**
 - 4. Affected municipalities**
- **Written follow-up report at end of discharge**



Emergency Release Notification

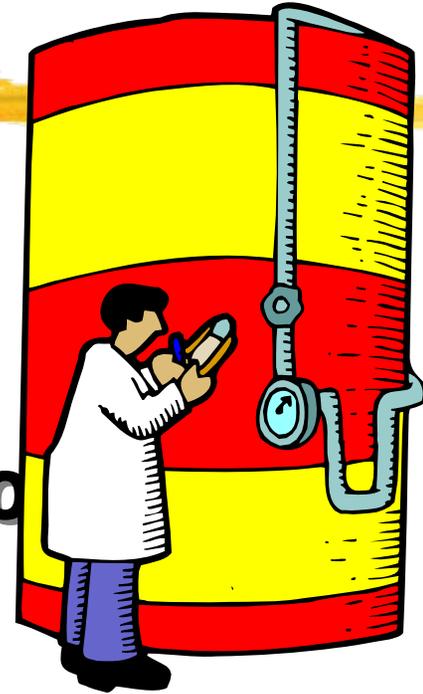
NREPA Part 41 Sewerage Systems

- **Discharge of pollutants from sewerage systems in excess of those authorized by a discharge permit issued by the DNRE to surface water or groundwater as a result of a facility breakdown or emergency.**
- **Promptly report to:**
 - **DNRE-WRD district office**
- **Written follow-up report due within 72 hours**



SARA TITLE III - Components

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



Hazardous Chemical Inventory

Sect 311 & 312

- A Hazardous Chemical Inventory report is required if the threshold amount or more of a hazardous substance/chemical 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

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!



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**

Threshold Determination

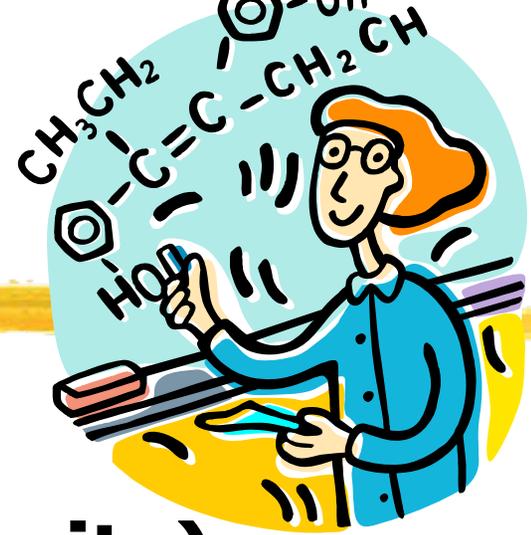
**Amount on site at any given time
in storage and in process.**

➤ **Threshold is in *pounds*.**

**Gallons must be converted to
pounds.**



Formula for Conversion



Specific Gravity (Relative Density)

from MSDS

X

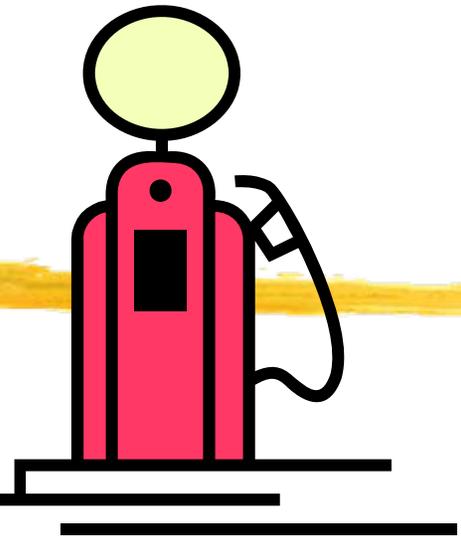
Weight of Water (8.34 lbs per gal)

=

Pounds per gallon of substance



Conversion Example



2000 gallons of gasoline

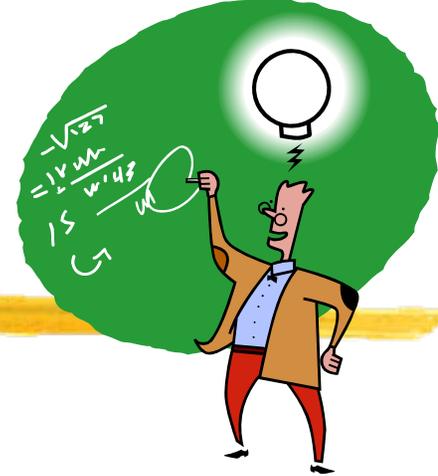
How much does it weigh?

From MSDS:

Specific gravity = 0.72 – 0.75

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

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?

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**

Hazardous Chemical Inventory

Sect 312



- **ANNUAL REPORT by March 1st**
- **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.

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

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

Test Your Understanding



What is the Tier Two reporting threshold for

- **Sulfuric Acid?** 500 lbs
- **Distilled Water?** Not reportable
- **Chlorine gas?** 100 lbs
- **Diesel Fuel?** 10,000 lbs

Online Reporting



Access the **ONLINE reporting** program:

www.michigan.gov/sara

➔ **SARA Title III Hazardous Chemical Inventory**

➔ **Click on the “big brown button”**



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.

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 ever
reported ...



Contact **Susan Parker**

517-335-4650 or parkers5@michigan.gov

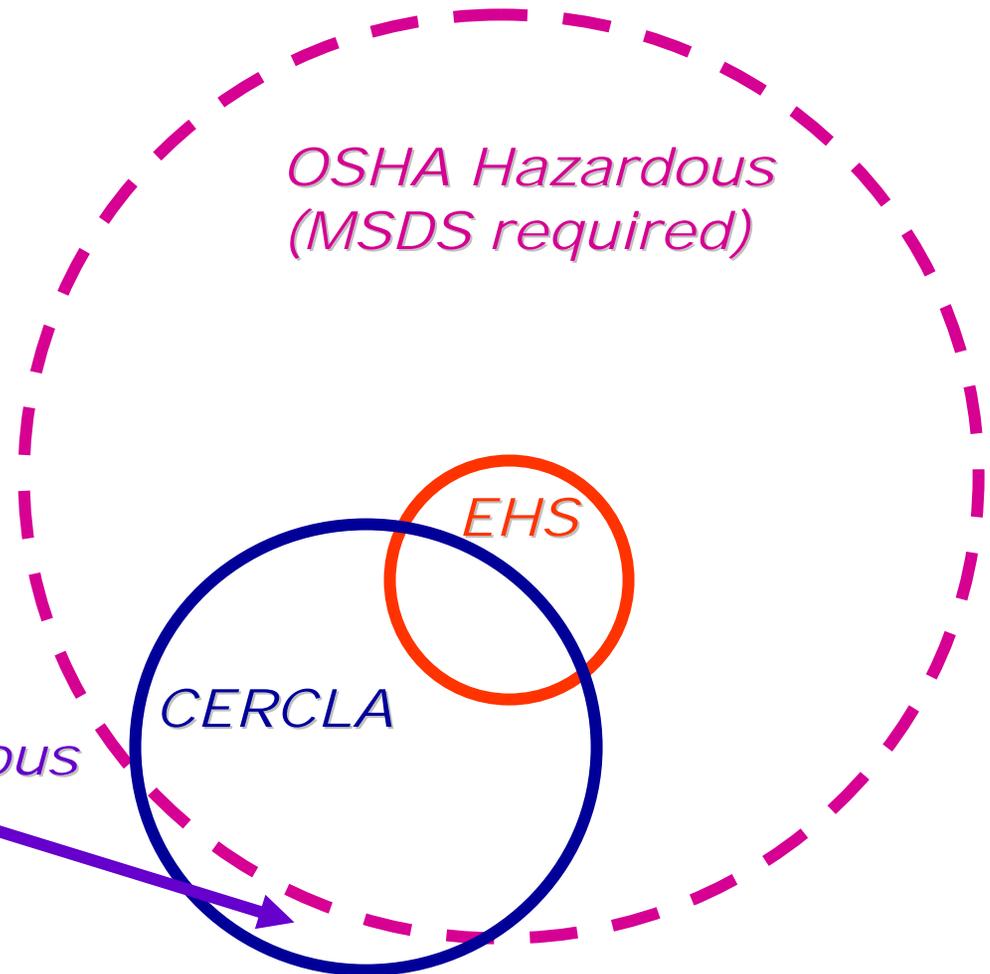
Hazardous Substances covered by SARA Title III

OSHA: Tier Two

EHS: Emergency Plan & Release Report

CERCLA: Release Report

RCRA hazardous waste



CERCLA & EHS are in the List of Lists



- Michigan.gov Home
- DNRE
- DEQ
- Online Services
- Permits
- Programs
- Site Map
- Contacts

Key Topics

- Administrative Hearings
- Clean Michigan Initiative
- Community Right to Know
 - SARA Title III
 - SARA Title III Announcements
 - SARA Title III -Toxic Chemical Release Inventory
 - SARA Title III - Hazardous Chemical Inventory
 - SARA Title III Emergency Planning & Notification
 - SARA Title III Release Reporting
- Environmental Assistance
- Environmental Education
- Environmental Emergencies
- Environmental Incentives
- Forms
- Environmental Reports
- Grants and Loans
- Laboratory Services

- Printer Friendly
- Text Version
- Text Size
- Share

Emergency Planning & Community Right-to-Know

Title III of the Superfund Amendments and Reauthorization Act ("SARA Title III") is also known as the Emergency Planning and Community Right-to-Know Act (EPCRA). This act has four main components:

- Emergency Planning & Notification (sections 302 & 303)
- Emergency Release Notification (section 304)
- Hazardous Chemical Inventory (sections 311 & 312)
- Toxic Chemical Release Inventory (section 313)

For other facility Emergency Planning requirements, go to www.michigan.gov/dnre-emergencyplan.

For Employee Right-to-Know requirements, go to www.osha.gov or view the [Hazard Communication Standard fact sheet](#).

For Firefighter Right-to-Know requirements, see [Fire Marshal Bulletin 9](#).

SARA Title III
[Click here for](#) information about Michigan's program to implement the Emergency Planning and Community Right-to-Know Act.

SARA Title III Announcements
[Click here for](#) SARA Title III Announcements and training opportunities.

SARA Title III -Toxic Chemical Release Inventory
[Click here for](#) TRI data, reports, and report information.

SARA Title III - Hazardous Chemical Inventory
[Click here for](#) Tier Two hazardous chemical inventory report information and online reporting.

SARA Title III Emergency Planning & Notification
[Click here for](#) SARA Title III Emergency Planning & Notification requirements

SARA Title III Release Reporting
[Click here for](#) Release Reporting requirements in SARA Title III and other state and federal regulations.

- MI Business One Stop
- Departments/Agencies
- Online Services
- Surveys
- RSS Feeds
- DEQ Quick Links

- DEQ Calendar
- DEQ Military Salute
- DEQ Who Does What List [PDF](#)
- DEQ Publications
- DEQ Laws and Rules
- DEQ Acronyms [PDF](#)
- DEQ Shortcuts [PDF](#)
- Public Comment Opportunities
- DEQ Staff Spotlight
- DEQ Forms
- DEQ Training & Workshops

Beach Monitoring System

MISWIM
Surface Water Information Management System

EnviroFlash
Your Environmental News Flash

MIair

Find us on Facebook

AGENCY SPENDING INFORMATION

- DEQ Calendar
- DEQ Military Salute
- DEQ Who Does What List **PDF**
- DEQ Publications
- DEQ Laws and Rules
- DEQ Acronyms **PDF**
- DEQ Shortcuts **PDF**
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- DEQ Staff Spotlight
- DEQ Forms
- DEQ Training & Workshops

- EPA List of Lists
- Contact information for Spill/Release Reporting
- Customized Workshops for Permit Applicants

Spill-Release Reporting

Spill/Release Reporting

Chemical releases in Michigan are potentially reportable under one or more of twenty-six different state and federal regulations. Determining which regulations apply to a specific release can be an overwhelming task. The "Release Notification Requirements in Michigan" table was compiled by the Michigan Department of Environmental Quality (MDEQ) Environmental Assistance Division to help owners and operators of facilities in Michigan, including vehicles and farms, determine their potential ...

> [More](#)

Information

- Concentrated Animal Feeding Operations (CAFO)
- Release Reporting - Workshop Presentation
- Vehicle-Related Releases **PDF**
- Continuous Release Reporting
- Release Calculations **PDF**
- Federally Permitted Release
- Release Notification Requirements in Michigan Table **PDF**
- Release Reporting Forms
- Pollution Emergency Alerting System (PEAS) Information

Laws & Rules

- Part 201 Rules

Related Links

- Supervisor of Wells Instructions

Emergency Planning

Emergency Planning

There are thousands of facilities in Michigan that handle substances that pose a potential threat to the environment and human health. To address the possibility of chemical releases, many federal and state regulations require emergency planning. Emergency plans can include measures taken to prevent a release to the environment, preparation for a release, and release response actions. Facilities, Local Emergency Planning Committees, fire departments, and police departments all have emergency ...

> [More](#)

Information

- Security Plan for the Highway Transportation of Hazardous Materials
- Federal Site Security Plans (for Chemicals of Interest)
- **Water and Wastewater Security**
- Submittal Guidance for Contingency Plans
- Integrated Contingency Plan Guidance
- Storm Water Industrial Program - Storm Water Pollution Prevention Plan
- Contacts for Help
- Hazardous Waste Contingency Plan and Emergency Procedures and Arrangements with Local Emergency Services for Large Quantity Generators [PDF](#)
- Hazardous Waste Emergency Poster and Guidance [PDF](#)
- Risk Management Plan
- Pollution Incident Prevention Plan (PIPP) and Part 5 Rules
- Spill Prevention, Control, and Countermeasures (SPCC) Plan
- SARA Title III Emergency Planning & Notification
- Farm Security and Emergency Planning

 [Departments/Agencies](#)

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DEQ Quick Links

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- * [DEQ Training & Workshops](#)

Quick Links

- * [EPA List of Lists](#)
- * [Contact Information for Emergency Planning](#)
- * [Customized Workshops for Permit Applicants](#)



Michigan SARA Title III Program Staff



Database Manager: Tonya Schelter

TRI Reporting: Ruth Borgelt

Reporting (except TRI): Susan Parker

SARA Title III – Reporting Questions?



MICHIGAN SARA TITLE III PROGRAM

517-373-8481

deq-ead-sara@michigan.gov

www.michigan.gov/sara

Environmental Program Questions?



**DNRE ENVIRONMENTAL
ASSISTANCE CENTER**

800-662-9278

deq-ead-env-assist@michigan.gov

www.michigan.gov/dnre