

Emergency Planning & Community Right-to-Know

Emergency Planning & Community Right-to-Know



Susan Parker

**Michigan
SARA Title III
Program**

DNRE

April 2010

History of the Regulation

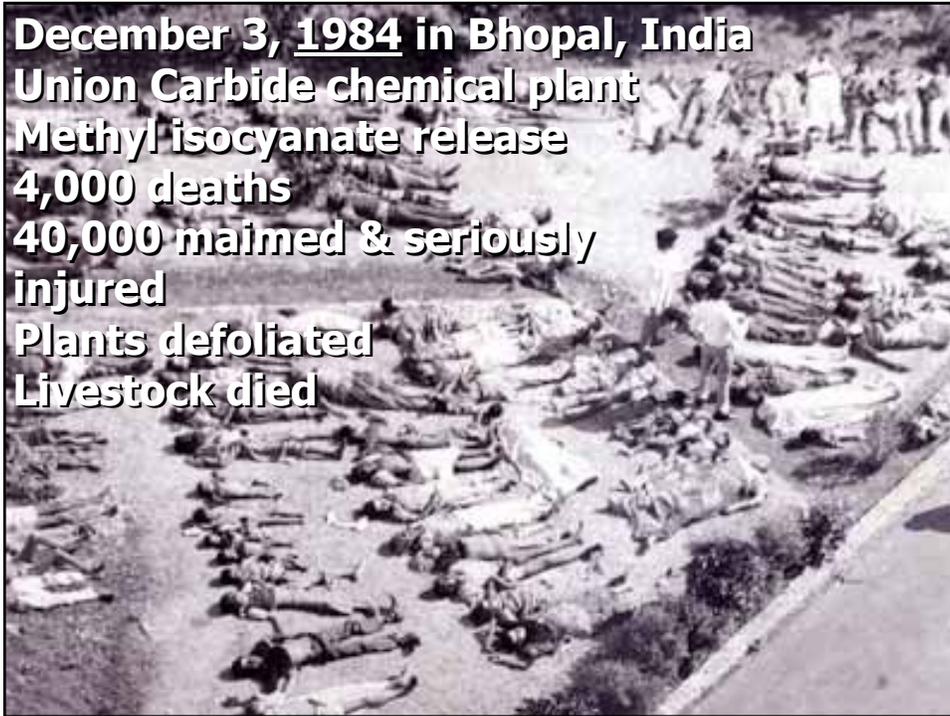
- **Comprehensive Environmental Response, Compensation and Liability Act of 1980**
- **Cleanup hazardous waste disposal sites**
- **Emergency response for hazardous substances released into the environment**

CERCLA = Superfund

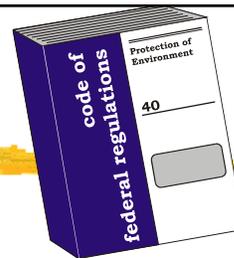
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Emergency Planning & Community Right-to-Know

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)**

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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**

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**

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/sara**

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



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~~

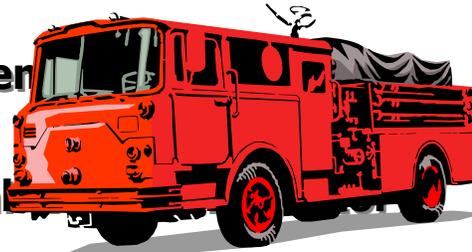


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SARA TITLE III - Components

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



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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 SERC Involvement

Receive Facility Reports

- **DNRE 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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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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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

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SARA TITLE III - Components

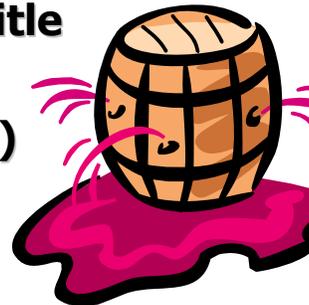
- **Emergency Planning**
- **Emergency Release Notification -304**
- **Hazardous Chemical Inventories**
- **Toxic Chemical Release**



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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 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**

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



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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 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

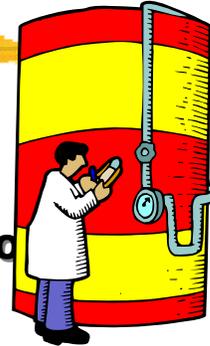


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Emergency Planning & Community Right-to-Know

SARA TITLE III - Components

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



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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

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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  **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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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)

=

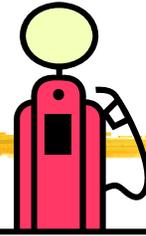
Pounds per gallon of substance



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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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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 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.

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Chemicals reported by water treatment plants

Activated Carbon Powder	<u>Lead-acid Batteries</u>
Alum or Aluminum Sulfate	Oxygen – Gas & Liquid
<u>Anhydrous Ammonia</u>	<u>Ozone</u>
Calcium Chloride	Phosphoric Acid
Calcium Hydroxide or Lime	Potassium Permanganate
Calcium Hypochlorite	Road Salt
Carbon Dioxide – liquid	Sodium Bisulfate
<u>Chlorine</u>	Sodium Bisulfite
Copper Sulfate Pentahydrate	Sodium Carbonate or Soda Ash
Ferric Chloride	Sodium Hydroxide or Caustic Soda
Ferrous Chloride	Sodium Hypochlorite
Ferrous Sulfate	Sodium Permanganate
Fuel Oil or Diesel Fuel	<u>Sulfur Dioxide</u>
Gasoline	<u>Sulfuric Acid</u>
Hydrofluorosilicic Acid	
Hydrogen Peroxide 35%	

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

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Online Reporting



Access the ONLINE reporting program:

www.michigan.gov/sara

➔ **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 ever reported ...



Contact **Susan Parker**
517-335-4650 or parkers5@michigan.gov

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Emergency Planning & Community Right-to-Know

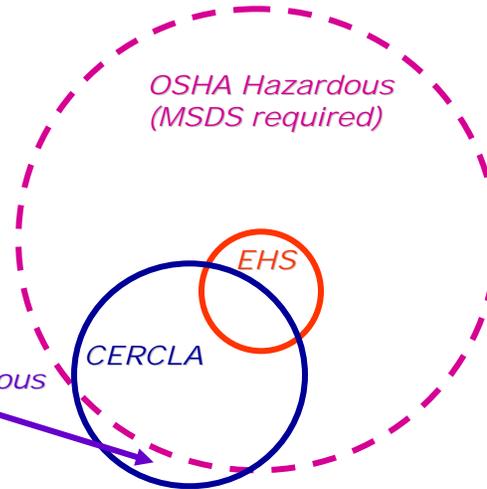
Hazardous Substances covered by SARA Title III

OSHA: Tier Two

EHS: Emergency Plan & Release Report

CERCLA: Release Report

RCRA hazardous waste



CERCLA & EHS are in the List of Lists

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www.michigan.gov/sara

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

Department of NATURAL RESOURCES and ENVIRONMENT

MICHIGAN.GOV Michigan's Official Web Site

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

DEQ Calendar | DEQ Military Salute | DEQ Who Does What List | DEQ Publications | DEQ Laws and Rules | DEQ Acronyms | DEQ Shortcuts | Public Comment Opportunities | DEQ Staff Spotlight | DEQ Forms | DEQ Training & Workshops

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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, Emergency Release Notification, Hazardous Chemical Inventory (Tier Two report), and Toxic Chemical Release Inventory (TRI).

For details of the Emergency Planning requirements in SARA Title III as well as in other regulations, go to www.michigan.gov/deqemergencyplan. For details of the Release Reporting requirements in SARA Title III as well as in other regulations, go to www.michigan.gov/deqrelease.

IMPORTANT NOTICE: TRI SUBMISSIONS DUE JULY 1. USEPA has released the TRI-MEweb application for the 2009 TRI reports. The reports are due on or before July 1. TRI-MEweb resources, tutorials and assistance are on the USEPA TRI Program website. TRI live training is scheduled for May 6; see www.michigan.gov/deqworkshops for information. USEPA online training modules available at www.epa.gov/tri, then select 2010 TRI Training and select the module. TRI web-based training is available; see www.ablassociates.com/tritraining for information and to register.

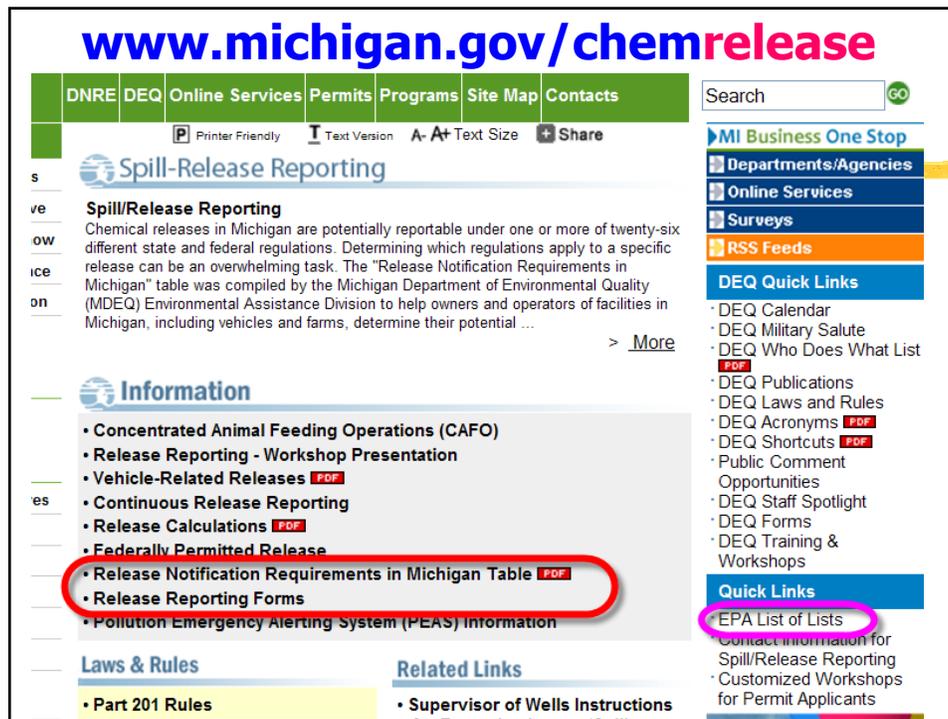
SARA Title III
Click here for information about Michigan's program to implement the Emergency Planning and Community Right-to-Know Act.

SARA Title III - Hazardous Chemical Inventory
Click here for Tier Two hazardous chemical inventory report form information and online reporting.

SARA Title III - Toxic Chemical Release Inventory
Click here for TRI data, reports, and report information.

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Emergency Planning & Community Right-to-Know



The screenshot shows the website www.michigan.gov/chemrelease. The main navigation bar includes links for DNRE, DEQ, Online Services, Permits, Programs, Site Map, and Contacts. A search bar is located on the right. The page title is "Spill-Release Reporting". The main content area features a section titled "Spill/Release Reporting" with a brief description and a "More" link. Below this is an "Information" section with a list of links, including "Release Notification Requirements in Michigan Table" which is circled in red. Other links include "Concentrated Animal Feeding Operations (CAFO)", "Release Reporting - Workshop Presentation", "Vehicle-Related Releases", "Continuous Release Reporting", "Release Calculations", "Federally Permitted Release", "Release Reporting Forms", and "Pollution Emergency Alerting System (PEAS) Information". A "Laws & Rules" section lists "Part 201 Rules". A "Related Links" section lists "Supervisor of Wells Instructions". On the right side, there is a "DEQ Quick Links" section with various links like "DEQ Calendar", "DEQ Military Salute", "DEQ Who Does What List", "DEQ Publications", "DEQ Laws and Rules", "DEQ Acronyms", "DEQ Shortcuts", "Public Comment Opportunities", "DEQ Staff Spotlight", "DEQ Forms", and "DEQ Training & Workshops". Below this is a "Quick Links" section with "EPA List of Lists" circled in pink, and "Contact information for Spill/Release Reporting", "Customized Workshops for Permit Applicants".



The screenshot shows the website www.michigan.gov/dnre-emergencyplan. The main navigation bar includes links for Departments/Agencies, Online Services, Surveys, RSS Feeds, DEQ Quick Links, and Quick Links. The page title is "Emergency Planning". The main content area features a section titled "Emergency Planning" with a brief description and a "More" link. Below this is an "Information" section with a list of links, including "Water and Wastewater Security" circled in red, "Security Plan for the Highway Transportation of Hazardous Materials", "Federal Site Security Plans (for Chemicals of Interest)", "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", "Hazardous Waste Emergency Poster and Guidance", "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" circled in blue, "Farm Security and Emergency Planning", and "Guide to the Guide". On the right side, there is a "DEQ Quick Links" section with various links like "DEQ Calendar", "DEQ Military Salute", "DEQ Who Does What List", "DEQ Publications", "DEQ Laws and Rules", "DEQ Acronyms", "DEQ Shortcuts", "Public Comment Opportunities", "DEQ Staff Spotlight", "DEQ Forms", and "DEQ Training & Workshops". Below this is a "Quick Links" section with "EPA List of Lists" circled in pink, and "Contact information for Emergency Planning", "Customized Workshops for Permit Applicants". At the bottom right, there is a "Beach Monitoring System" logo and "MISWIM Surface Water Information" logo.

Michigan SARA Title III Program Staff



Database Manager: Tonya Schelter

TRI Reporting: Ruth Borgelt

Reporting (except TRI): Susan Parker

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SARA Title III – Reporting Questions?



**MICHIGAN SARA TITLE III
PROGRAM**

517-373-8481

deq-ead-sara@michigan.gov

www.michigan.gov/sara

Emergency Planning & Community Right-to-Know

**Environmental Program
Questions?**



**DNRE ENVIRONMENTAL
ASSISTANCE CENTER**

800-662-9278

deq-ead-env-assist@michigan.gov

www.michigan.gov/dnre