



Environmental  
Protection Agency

# 2010 Compliance Assistance Conference



# RTK Intent

## Emergency Planning:

- ★ Information Gathering and Management
- ★ Hazard Analysis (EHS facilities)
- ★ County HazMat Plan Development/Exercise

## Community Right-to-Know:

- ★ The public can request facility specific information



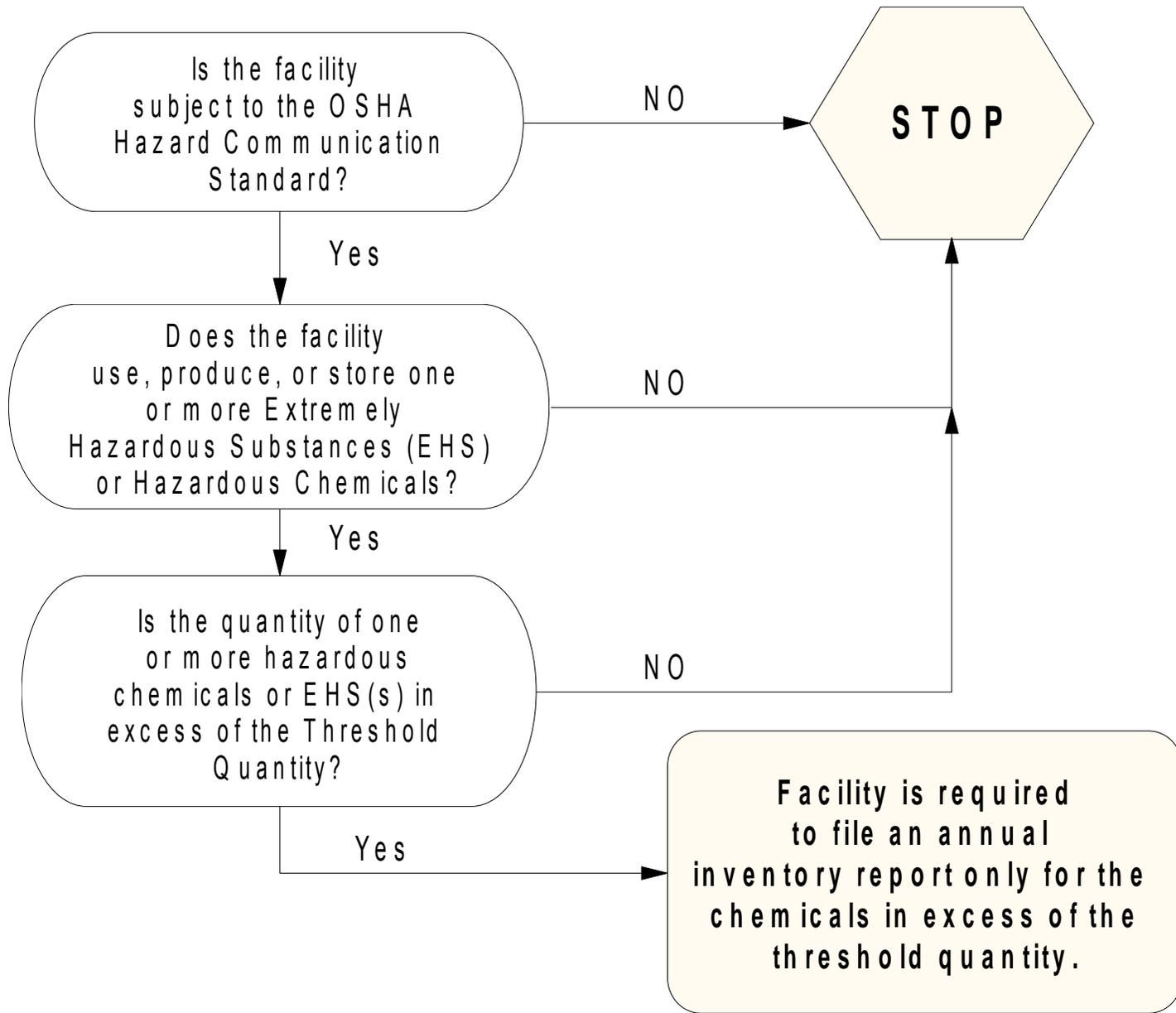
# Who Must Report?

- ★ Facility that is subject to the OSHA Hazard Communication Standard, 1910.1200.
- ★ Facility has one or more Extremely Hazardous Substances (EHS)
  - ★ There is a published list of Extremely Hazardous Chemicals of approximately 360 chemicals
    - ▶ List is available in the Right to Know Reporting Booklet
  - ★ Threshold Quantity ranges from 1 to 500 pounds
    - ▶ Examples include
      - Ammonia (500 pounds)
      - Chlorine (100 pounds)
      - Sarin (10 pounds)
      - Sulfuric Acid (500 pounds)



# Who Must Report Cont'd

- ★ Facility has one or more hazardous chemicals
- ★ There is no comprehensive list of hazardous chemicals.
- ★ The term “Hazardous Chemical” refers to any chemical, chemical compound or mixture with health hazard or physical hazard characteristics
  - ★ **Examine MSDS for words such as:**
    - ▶ **Carcinogen, Irritant, Corrosive, Toxic Agent, Combustible, Compressed Gas, Explosive, Flammable, Organic, Reactive, Unstable (Reactive), Etc.**
  - ★ **Examples of hazardous chemicals include gasoline and 1,1,1-trichloroethane**
- ★ **Threshold Quantity is 10,000 pounds or more**



# Reporting Exemptions

- ★ Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration
- ★ Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use
- ★ Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and used by the general public



# Reporting Exemptions Cont'd

- ★ Any substance to the extent it is in used a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual
- ★ Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer



# Trade Secrets Claims

- ★ Only the specific chemical identity required to be disclosed in sections 303, 311, 312, and 313 submissions may be claimed trade secret on the Title III submittal itself.
  - ★ Ohio law also allows the specific chemical identify to be claimed as trade secret under ORC 3750.09
- ★ At the time of the first submission claiming the chemical identify as a trade secret, the trade secret substantiations must be sent to U.S. EPA



# Trade Secrets Claims

- ★ Trade Secret Substantiation with USEPA includes substantiation form, questions, and certification statement.
- ★ Submitter-Devised Forms will not be accepted
- ★ Must Submit to U.S. EPA a Sanitized and Unsanitized Report to U.S. EPA
  - ★ Please see “Instructions for Completing the EPCRA Trade Secret Substantiation Form”  
<http://www.epa.gov/emergencies/content/epcra/tier2.htm#sub>



# Trade Secrets Claims

- ★ Send Claims to: EPCRA Trade Secret  
c/o CGI Federal, Inc.  
PO Box 10162  
Fairfax, VA 22038
- ★ Must send sanitized copies of the report form and substantiation to state and locals
  - ★ Substantiation may also be sanitized



# Trade Secrets Claims

- ★ Check form to indicate that the chemical identify is being claimed as trade secret.
- ★ Use a generic class or category on the sanitized version as the chemical name.

Chemical Description								
SPECIFIC CHEMICAL NAME	PURE	MIXTURE	COMPONENTS	EHS CHEMICAL	SOLID	LIQUID	GAS	TRADE SECRET
Olefin Sulfide		X				X		X

# Claiming Storage Location as Confidential

- ★ Location information claimed as confidential is not to be submitted to USEPA. It is a state issue.
- ★ Claim is made on the chemical inventory report that is submitted to SERC, LEPC, and jurisdictional fire department.
- ★ Location information is to be submitted either on inventory report and will be redacted for any public information requests or the facility can provide a sanitized and unsanitized report for file.

# Claiming Storage Location as Confidential

- ★ Check form to indicate that the location is being claimed as confidential

Location of Chemicals					
B, T, OR A BUILDING, TANK OR AREA NO.	DIVISION OR ROOM LETTER	FLOOR	STORAGE TYPE CODE	PRESSURE & TEMPERATURE CONDITIONS	LOCATION- CONFIDENTIAL
					X

# Ohio Trade Secret & Location Confidential Claims

- ★ 19 chemical companies have “Trade Secret Substantiation” claims documented with USEPA, but the Ohio SERC has 80 or so companies claiming “Trade Secret” without USEPA approval.
- ★ 1,342 facilities have requested “Location Confidential” for one or more chemicals being reported at their location.



# Who's Reporting?

Reports received from, but not limited to:

- ★ Large Chemical Manufactures
- ★ Refineries
- ★ Paint Manufacturers
- ★ Hospitals
- ★ Petroleum Distributors
- ★ Trucking Companies
- ★ Liquid Propane (LPG) Distributors
- Concrete Companies
- Cold Storage facilities
- Agricultural Dealers
- Private WWTP/WTP
- Asphalt Plants
- Gasoline Stations
- Oil & Gas Extraction Sites



# Reporting Overview

- ★ Reports are due annually on March 1 for the previous calendar year.
- ★ One report covers the entire facility and includes information on any chemical for which the reporting threshold was exceeded.
- ★ A complete report consists of the following parts:
  - ★ Facility Identification Form
  - ★ Emergency & Hazardous Inventory Form(s)
  - ★ Site Map
  - ★ Annual Filing Fee



# Facility Identification Form

- ★ County
- ★ Parent Company information
- ★ Facility information
- ★ Facility Emergency Contact Names & Phone Numbers
- ★ Permit Numbers
- ★ Certification



# Emergency & Hazardous Inventory Form

- ★ Facility Name/Address
- ★ CAS Registry Number
- ★ Chemical Name(s)
- ★ Physical/Health Hazards
- ★ Specific Storage Location
- ★ Storage Containment Type
- ★ Temperature/Pressure Conditions
- ★ Amount

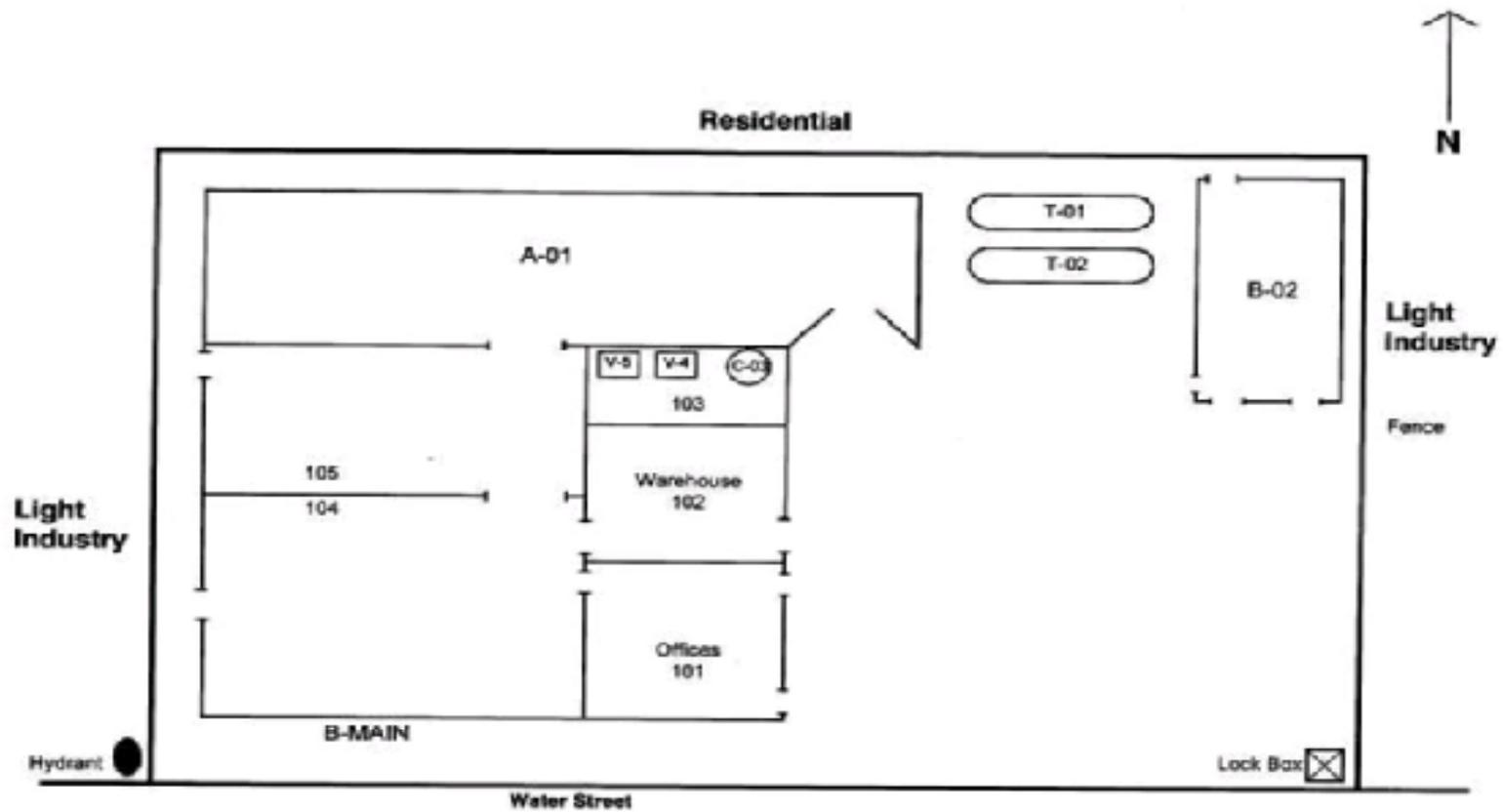


# Reporting Form Cont'd

- ★ You have the option of completing a hard copy form, or U.S. EPA's reporting software (Tier2Submit)
  - ★ Software is FREE and can be downloaded from the internet at [www.epa.gov/emergencies/content/epcra/tier2.htm](http://www.epa.gov/emergencies/content/epcra/tier2.htm)
  - ★ The validation program checks for basic information and data entry errors
  - ★ It is easy to import/export and update data.
  - ★ Software was designed for compatibility with the CAMEO software which is a software program used by emergency responders in the areas of planning, preparedness, and response



# Site Map



Lambeau Industries, Inc.  
4 Green Bay Drive  
Favreburg, Ohio 01963  
(02/23/2005)

(1 inch = approximately 42 feet)

# Filing Fee Schedule

## ★ Industry

- ★ Base Fee of \$150
- ★ Additional fee of \$20 for each hazardous chemical reported
- ★ Additional fee of \$150 for each EHS reported
- ★ Maximum Fee = \$2,500
- ★ Late Fee Penalty – 10% for reports filed after March 31



# Filing Fee Schedule

## ★ Oil & Gas

- ★ Base Fee of \$50
- ★ Additional fee of \$10 for each oil and gas well after the 25th
- ★ Maximum Fee = \$900
- ★ Late Fee Penalty – 10% for reports filed after March 31



# Send Original Report to:

State Emergency Response Commission (SERC)  
50 West Town Street/PO Box 1049  
Columbus, OH 43216-1049

Send copy to:

(County) Local Emergency Planning Committee (LEPC)

Jurisdictional Fire Department



# LEPC COMPLIANCE REPORTS

- ★ SFY 2009 (July 1, 2008 thru June 30th, 2009)
- ★ SFY 2008 (July 1, 2007 thru June 30th, 2008)

	<u>SFY 2009</u>	<u>SFY 2008</u>
★ # of EHS Facilities	2,966	3,014
★ # of Hazardous Chemical Facilities	5,116	4,886
★ Total	8,082	7,956
★ Statewide Compliance Rate	92.9%	91.6%



# INFORMATION MANAGEMENT COSHOCOTON COUNTY REPORTING FACILITIES

- ★ Total Number of Reporting Facilities: 39
- ★ # Facilities reporting one (1) or more EHS: 21
- ★ # Facilities reporting one (1) or more hazardous substances: 18



# INFORMATION MANAGEMENT COSHOCOTON COUNTY TYPE OF FACILITIES

- ★ Propane (+/-4)
- ★ Agricultural (+/-4)
- ★ Communications (9)
- ★ AK Steel
- ★ Cosho, Inc.
- ★ Kraft Foods Global
- ★ Organic Technologies
- ★ Smurfit-Stone Containers
- ★ Tastee Apple
- ★ Wen Mar Farms, Inc.



# INFORMATION MANAGEMENT COSHOCOTON COUNTY INVENTORY REPORTED

## ★ Extremely Hazardous Substances:

Ammonia (5 locations)

Sulfuric Acid (12 facilities)

Hydrogen Fluoride

Propylene Oxide

Trimethyl Chlorosilane



# INFORMATION MANAGEMENT COSHOCOTON COUNTY HAZARDOUS SUBSTANCES:

- ★ Diesel Fuel (4+ locations)
- ★ Gasoline (2+ locations)
- ★ Calcium Nitrate
- ★ Acrylonitrile
- ★ 1-Butene
- ★ Cement dust
- ★ Sodium Bisulfite
- ★ Zinc Sterate
- ★ Acetaldehyde
- ★ Asphalt Cement
- ★ Barium Sulfate



# Release Reporting

## Regulated Substances:

- ★ Extremely Hazardous Substances (40 CFR Part 355)
- ★ CERCLA Hazardous Substances (40 CFR Part 302)
- ★ Oil
  - ★ Reportable Quantity (RQ) - a visible sheen on navigable waters
  - ★ RQ - 25 gallons or more on land



# Verbal Notification

- ★ Within 30 minutes upon discovery and/or knowledge
- ★ Verbal notification must be made to:
  - ★ Jurisdictional Fire Department
  - ★ Ohio EPA Emergency Response (1-800-282-9378)
  - ★ Local Emergency Planning Committee (LEPC) Emergency Coordinator



# Written Follow-Up Report

- ★ “Due within 30 days of release”
- ★ A written follow-up report must be submitted to:
  - ★ **Ohio EPA/DERR/Emergency Response**  
**Attention ER Records Management**  
**Lazarus Government Center**  
**50 West Town Street**  
**P.O. Box 1049**  
**Columbus, OH 43216-1049**
  - ★ **Local Emergency Planning Committee Emergency Coordinator**

# Ohio EPA Release Reporting Facts

	<u>2007</u>	<u>2008</u>	<u>2009</u>
<b>Total # Spills</b>	<b>4,724</b>	<b>4,784</b>	<b>3,560</b>
<b><u>Spill Source</u></b>			
<b>Fixed Facility</b>	<b>3,483</b>	<b>3,560</b>	<b>2,504</b>
<b>Transportation</b>	<b>823</b>	<b>818</b>	<b>705</b>
<b>Oil &amp; Gas</b>	<b>55</b>	<b>59</b>	<b>58</b>
<b>Mother Nature</b>	<b>14</b>	<b>20</b>	<b>13</b>
<b>Unknown</b>	<b>349</b>	<b>327</b>	<b>280</b>



# Ohio EPA Release Report Facts (Cont'd)

★ <u>Area Affected</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Air	434	396	336
Building	247	214	210
Ground Water	18	17	16
Land	1,593	1,579	1,496
Other	87	75	58
Sanitary Sewer	25	21	19
Surface Water	2,282	2,429	1,399

**Hydrocarbons**

**average of 32.5% of statewide spills**

**Sewage**

**average of 24.0% of statewide spills**

**Waste Water (NPDES violations)**

**average of 2.0% of statewide spills**

**Chemicals (Environment)**

**average of 7.6% of statewide spills**

**Chemicals (Waste)**

**average of 2.7% of statewide spills**

**Farm Chemicals**

**average of 0.8% of statewide spills**

# INFORMATION MANAGEMENT COSHOCOTON COUNTY SPILLS/RELEASES

**2008/2009**

**11 spills/releases reported 2008/14 spills/releases 2009**

★ Diesel Fuel	1,500 gallons
★ Diesel Fuel	2,000 gallons
★ Diesel Fuel	unknown amount
★ Chicken Manure	unknown amount
★ Orphan Drum (2)	unknown amount
★ Crude Oil (4)	unknown amount
★ Waste Water Vacuum	9,000 gallons
★ Hydraulic Oil	15 gallons
★ Creamy Foam	unknown amount
★ Mercury	unknown amount
★ Open Burning	unknown amount
★ Sulfur Dioxide	unknown amount



# For Additional Information

- ★ Right to Know Contacts at Ohio EPA
  - ★ Jeff Beattie – [jeff.beattie@epa.state.oh.us](mailto:jeff.beattie@epa.state.oh.us)
  - ★ 1-888-644-2260 (toll free)
  - ★ 1-644-2260
  - ★ [www.epa.state.oh.us/dapc/serc/index.aspx](http://www.epa.state.oh.us/dapc/serc/index.aspx)
- ★ U.S. EPA Software Assistance
  - ★ (703) 227-7650
  - ★ [userrmp.usersupport@csc.com](mailto:userrmp.usersupport@csc.com)





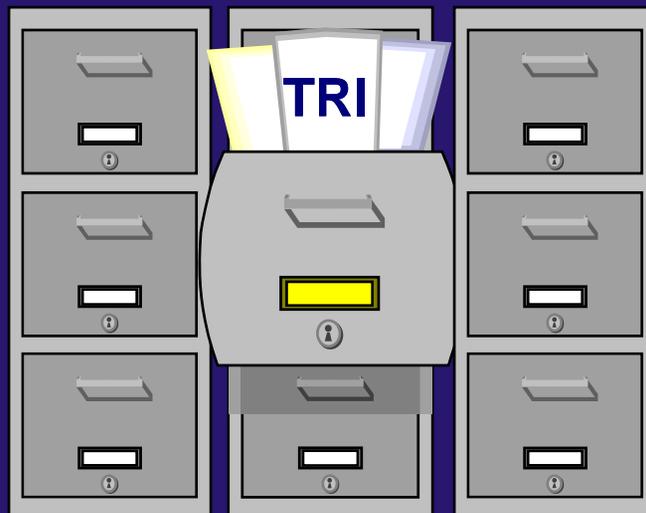
Environmental  
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# 2010 Compliance Assistance Conference



# Toxic Release Inventory

- ★ TRI
- ★ Section 313
- ★ Emergency Planning and Community Right-to-Know Act (EPCRA)



# Purpose of TRI Reporting

- ★ To provide the public and authorities with information on releases and other waste management of the Section 313 toxic chemicals and chemical categories in the communities.
- ★ To provide EPA with such information for yearly trend data and comparison and to assist in determining the need for future regulations.



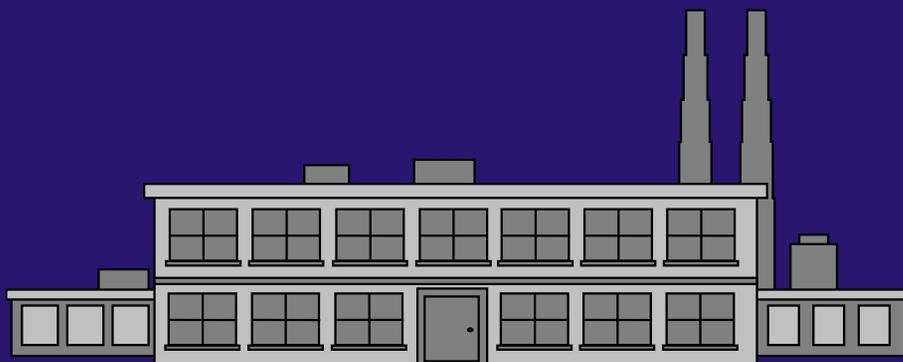
# Limitations of TRI Data

- ★ TRI data reflect releases and other waste management of chemicals, NOT exposures of the public to those chemicals.
- ★ The TRI Program does not cover ALL sources of releases and other waste management activities such as automobile emissions, and does not cover ALL toxic chemicals or industry sectors.



# Who Must Report

- ★ Facilities must meet 3 criteria to trigger reporting:
  - ★ It must conduct operations in a covered North American Industry Classification Codes (NAICS); and
  - ★ It must have 10 or more employees; and
  - ★ It manufacture, processes or otherwise uses any listed toxic chemical in amounts greater than the “threshold” quantity.



# Covered SIC Codes

<b>Industrial Sector</b>	<b>Primary SIC Code</b>
Manufacturing	20-39
Metal Mining	10 (except 1011, 1081, and 1094)
Coal Mining	12 (except 1241)
Electric Utilities	3911, 4931 and 4939, limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce
Treatment, Storage, and Disposal Facilities	4953, (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C)
Solvent Recovery Services	7389, limited to facilities primarily engaged in solvent recovery services on a contract
Chemical Distribution	5169
Petroleum Bulk Terminals	5171



# NORTH AMERICAN INDUSTRY CLASSIFICATION CODES (NAICS)

- ★ Requires facilities reporting to TRI to use NAICS in place of SIC codes.
- ★ Cross-walk available at:  
[www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html)

Petroleum Refineries (SIC 2911).....NAICS 324110

Petroleum Bulk Terminals (SIC 5171)....NAICS 424710

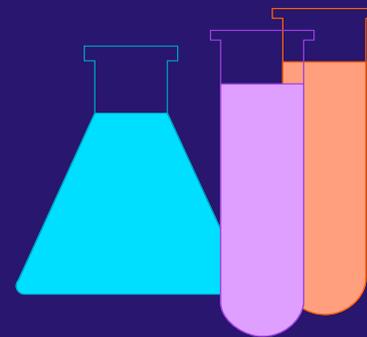


# Employee Threshold

- ★ **10 full-time employees (20,000 hours)**
  - ★ **Worked at or directly for facility**
  - ★ **Includes operational staff, administrative staff, contractors, dedicated sales staff, company drivers, off-site direct corporate support**
  - ★ **Does NOT include contract drivers or janitorial contractors**
  - ★ **Determinations based on available time management systems/data**



# Listed TRI Chemicals



- ★ Over 600 toxic chemicals and chemical categories listed
- ★ [www.epa.gov/tri/trichemicals/index.htm](http://www.epa.gov/tri/trichemicals/index.htm) and select “Current Year List of TRI Chemicals.”
- ★ Some chemicals have “qualifiers”

Aluminum.....only fume or dust

Hydrochloric Acid.....acid aerosols only

Nitrate Compounds....only in aqueous solution

Phosphorus....only the yellow or white form



# Persistent Bioaccumulative Toxic (PBT) Chemicals

- ★ Within the list of 600 chemicals and chemical categories, there is a subset of chemicals designated as PBT chemicals.
  - ★ **Persistent, Bioaccumulative Toxic Chemicals remain (persist) in the environment over a long period of time.**
  - ★ **PBT Chemicals include**
    - ▶ **Aromatics, such as Dioxin, Polycyclic Aromatic Compounds**
    - ▶ **Metals, such as Mercury and Lead**
    - ▶ **Pesticides, such as Chlordane**
- ★ For PBT chemicals, U.S. EPA has adopted lower thresholds of either 100 pounds, 10 pounds, or 0.1 gram for dioxin and dioxin like compounds



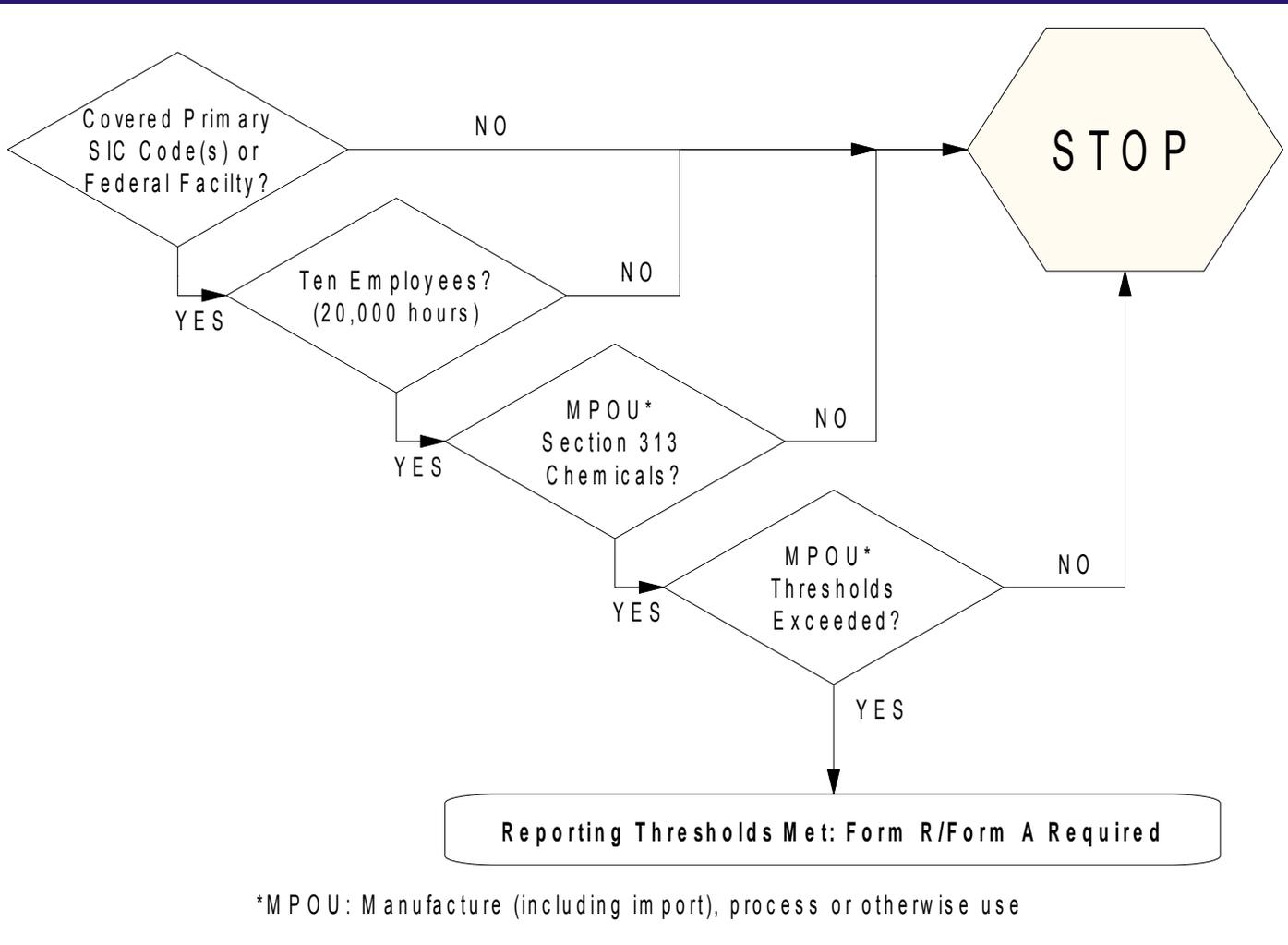
# Section 313 Chemicals (non-PBT) Thresholds



- ★ A facility meeting all applicability criteria must file a Form R report for a non-PBT Section 313 chemical if the facility:
  - ★ Manufactured (including imported) more than 25,000 pounds of the chemical in the reporting year, or
  - ★ Processed more than 25,000 pounds of the chemical in the reporting year, or
  - ★ Otherwise Used more than 10,000 pounds of the chemical in the reporting year



# TRI Reporting Process



# USE EXEMPTIONS

## ★ Types of exemptions

- ★ *De minimis*

- ★ Article

- ★ Laboratory activities

- ★ Otherwise Use exemptions

  - ▶ Motor vehicle maintenance

  - ▶ Routine janitorial or facility grounds maintenance

  - ▶ Structural components

  - ▶ Personal use

  - ▶ Intake water and air



# Common Misapplication of Exemptions

- ★ De Minimis Exemption– Applies to the starting material only. Diluting a chemical does not get you out of reporting.
- ★ Article Exemption
  - ★ An Article must meet three criteria
    - ▶ formed into a specific shape or design during manufacture; and
    - ▶ Has end-use functions dependent in whole or in part on its shape or design during end-use; and
    - ▶ Does NOT release a Section 313 chemical under normal processing or use at a facility
  - ★ The manufacturing of an article is not exempt.
  - ★ If there are any releases of a TRI chemical from the articles (from grinding, etc,) the item is not exempt.



# Reporting Under TRI

- ★ The reporting forms are called Form R and Form A
- ★ Form R consists of a five (5) page report
  - ★ **Part I, Facility Identification Information**
  - ★ **Part II, Chemical-Specific Information**
  - ★ A Form R is submitted for each chemical for which the reporting threshold was exceeded.
- ★ **Form A**
  - ★ Used by facilities with small quantities of TRI chemicals released or managed as a waste.
  - ★ Multiple chemicals can be reported on a Form A



# Toxic Release Inventory Burden Reduction (Final Rule; Dec. 22, 2006) REVERSED

- ★ Omnibus Appropriations Act of 2009 (4/27/2009)
- ★ Returned the TRI reporting requirements back to rules in effect prior to 12/22/2006.
- ★ Requires PBT chemicals on Form R.
- ★ TRI chemicals, the shorter “Form A” may only be used if the annual reporting amount is 500 pounds or less and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds.



# Reporting Releases

- ★ Release to Air
  - ★ Identifies fugitive and point-source(stack) emissions to the air
- ★ Release to Water
  - ★ Identifies the release amount and the stream of water body name
- ★ Deepwell Injection
  - ★ Identifies quantity injected by the facility and whether the well is Class I or Class II-V
- ★ Release to Land On-site
  - ★ Identifies whether the released amount was to RCRA Subtitle C landfill, other landfill, land treatment, RCRA Subtitle C surface impoundment, other surface impoundment or other disposal



# Reporting Releases

- ★ Discharges to POTW
  - ★ Identifies the amount released to POTWs and their names and addresses
- ★ Off-Site Disposal/Treatment
  - ★ Quantity and off-site location information (address, RCRA ID etc.) of chemicals shipped off-site for disposal/treatment
- ★ Energy Recovery On/Off-Site
  - ★ Identifies quantities of the listed chemical that have been used for energy recovery and whether the use was on-site or off-site
- ★ Recycled On/Off-Site
  - ★ Identifies quantities of the listed chemical that have been recycled and whether the recycling occurred on-site or off-site
- ★ Treatment On-Site
  - ★ Identifies quantities of the listed chemical that have been treated and whether the treatment took place on-site or off-site

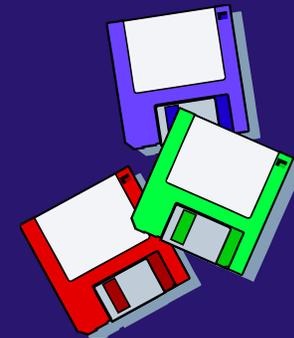


# Submitting TRI Reports

- ★ Reports are due July 1
  - ★ The report summarizes the releases which occurred in the previous calendar year.
- ★ TRI reports must be submitted to both Ohio EPA and U.S. EPA.
- ★ Ohio EPA also collects an annual filing fee
  - ★ Base \$50.00 (not required if only filing Form “A”)
  - ★ Additional \$15.00 for each Form “R” submitted
  - ★ Fee Cap \$500.00 Late Fee Penalty 15% after August 1st



# Submitting TRI Reports



- ★ Facilities report using “TRI-MEweb”, a web-based application that requires no downloads or software installations.
  - ★ Software leads user through series of logical questions and streamlines the analysis needed to determine if a user must complete a Form “R” or Form “A” for a particular chemical
  - ★ Built in edit checks eliminate many errors.
  - ★ Reports prepared electronically can be filed simultaneously to USEPA and Ohio EPA through the Federal Central Data Exchange (CDX).
  - ★ This eliminates diskette submittal to Ohio.



# Reports and Forms

- ★ U.S. EPA no longer mails the TRI reporting manual and software to facilities each year.
- ★ Reporting Materials and Guidance can be downloaded at:  
[www.epa.gov/triinter/report/index.htm](http://www.epa.gov/triinter/report/index.htm)
- ★ Ohio EPA's Fee Sheet can be downloaded at:  
[www.epa.ohio.gov/dapc/tri/tri.aspx](http://www.epa.ohio.gov/dapc/tri/tri.aspx)



# USEPA Database Toxic Release Inventory

- ★ U.S. EPA compiles all the reports into a database that can be accessed over the internet.
  - ★ **TRI Explorer**
    - ▶ [www.epa.gov/triexplorer/](http://www.epa.gov/triexplorer/)
  - ★ **TRI Envirofacts**
    - ▶ [www.epa.gov/enviro/](http://www.epa.gov/enviro/)
  - ★ The TRI data is also available on U.S. EPA's compliance website, along with the compliance history of facilities.
    - ▶ [www.epa.gov/echo](http://www.epa.gov/echo)



# Negative Reports

- ★ Facilities can fall in and out of reporting based on chemical usage and the number of employees.
- ★ Ohio EPA created a voluntary negative form in response to requests from facilities who wanted to notify the agency that they did not have to report.
- ★ Submission of the negative report is voluntary
- ★ There is no fee for submitting the form



# What Happens After You Submit Your TRI Report to Ohio EPA?

- ★ You can relax
- ★ Ohio EPA receives your submission from the federal CDX
  - ★ **Midpoints are entered for range codes**
- ★ Ohio EPA reviews your forms
  - ★ **for completeness and technical errors**
- ★ Ohio EPA contacts you with questions or requests revisions
  - ★ **Large increasers and decreasers will receive letters**
- ★ Ohio EPA releases an annual report



# USEPA 2009 TRI Data

- ★ **21,695 Industry and Federal Facilities Reported.**
- ★ **650 Plus Chemicals and Chemical Categories.**
- ★ **3.9 Billion Pounds Managed Through Disposal or Releases or Recycling, Energy Recovery, or Treatment.**
- ★ **87% On-Site**
- ★ **13% Off-Site**



# 2009 Ohio TRI Data

- ★ 1,458 TRI Reporting facilities
- ★ 310 TRI Chemicals Reported
- ★ 5,208 Form Rs Submitted (886 for PBTs)
- ★ 618 Form As Submitted
  
- ★ 1/3 facilities reported 1 chemical
- ★ Avg. # chemical reported: 4



# Ohio's National Rank

Based on the Calendar Year 2009 TRI Data

- ★ Air Releases: #1 (90,143,152 pounds)
- ★ Water Releases: #13 (8,504,345 pounds)
- ★ Land On-Site Releases: #5 (58,024,469 pounds)
- ★ Deep Well Injection: #3 (22,940,948 pounds)
  
- ★ Approximately 223 million pounds of TRI toxic chemicals were reported as released to the environment or transferred off-site for treatment or disposal in Ohio.



# Ohio 2009 TRI Data

## Total Releases and Transfers

### Top 10 County's

- ★ Lucas (32,508,411 pounds)
- ★ Jefferson (28,517,970 pounds)
- ★ Washington (21,749,250 pounds)
- ★ Hamilton (14,944,149 pounds)
- ★ Allen (14,568,920 pounds)
- ★ Ashtabula (13,965,606 pounds)
- ★ Sandusky (12,983,802 pounds)
- ★ Cuyahoga (12,362,792 pounds)
- ★ Coshocton (11,665,792 pounds)
- ★ Adams (8,452,243 pounds)



# Ohio 2009 TRI Data Top 10 Chemicals

- ★ Zinc and Zinc Compounds
- ★ Hydrochloric Acid (Aerosols)
- ★ Manganese and Manganese Compounds
- ★ Nitrate Compounds
- ★ Sulfuric Acid (Aerosols)
- ★ Barium and Barium Compounds
- ★ Hydrogen Fluoride
- ★ Ammonia
- ★ Nitric Acid
- ★ Carbonyl Sulfide



# Ohio 2009 TRI Data

## Top 10 Facilities

### Total Releases and Transfers

- ★ **Envirosafe Services of Ohio (Lucas)**
- ★ **Vickery Environmental (Sandusky)**
- ★ **Severstal Wheeling, Inc. (Jefferson)**
- ★ **W.H. Sammis Plant (Jefferson)**
- ★ **INEOS USA, LLC (Allen)**
- ★ **AEP-Muskingum River Plant (Washington)**
- ★ **Millennium Inorganic Chemicals (Ashtabula)**
- ★ **DP&L-J.M. Stuart Station (Adams)**
- ★ **Shepherd Chemical Company (Hamilton)**
- ★ **AEP-Conesville Plant (Coshocton)**



# Tox-Minus

## 2007 Voluntary Reduction Initiative

- ★ Ohio EPA Director determined to reduce Ohio TRI numbers.
- ★ Encourage Ohio facilities to reduce pollutants they release.
- ★ Focus on top 100 TRI reporters.
- ★ Office of Compliance Assistance and Pollution Prevention shall coordinate. Strong efforts in pollution reduction.



# Ohio's Annual TRI Report

- ★ Ohio EPA's annual TRI report includes:
  - ★ The top releasing facilities;
  - ★ The quantity of chemicals released to each media (e.g., air, land, water); and
  - ★ County summaries
- ★ Copies of the reports are available at [www.epa.ohio.gov/dapc/tri/reptsdb.aspx](http://www.epa.ohio.gov/dapc/tri/reptsdb.aspx)
- ★ Facilities named in the report as a “top facility” receive an advanced copy of the report.



# Technical Assistance

- ★ **Regulatory Assistance**

  - ★ 800-424-9346 (option 3)

- ★ **CDX**

  - ★ 888-890-1995

- ★ **TRI Reporting Assistance**

  - ★ 703-227-7644

  - ★ [www.epa.gov/tri/](http://www.epa.gov/tri/)

- ★ **Ohio EPA TRI Unit**

**Muhammad Elsalahat**

[muhammad.elsalahat@epa.state.oh.us](mailto:muhammad.elsalahat@epa.state.oh.us)



# In Closing

- ★ TRI can be looked at as a public “report card” for the industry community.
- ★ Communities can use the TRI data to evaluate local facilities through comparisons and can learn more about how toxic chemicals are being managed and with other information can identify and evaluate potential health risks within their neighborhoods and communities.





Environmental  
Protection Agency

# Risk Management Plan (RMP) Program



# Reason for Risk Management Program (Union Carbide)



# Bhopal, India Incident

- ★ 90,000 lbs of methylisocyanate (MIC) released
- ★ 200,000 exposed
- ★ 6,500 died
- ★ 20,000-50,000 injured



# Bhopal, India Incident

## ★ Root cause

- Inferior safety controls due to design
- Shortage of experienced workers (layoffs)
- Refrigeration to MIC tank was shut off
- Corroded pipe on flare tower not replaced
- No caustic tower for neutralization



# Risk Management Plan Intent

- ★ Facilities that produces, processes, distributes, or stores certain chemicals must develop and report to EPA an accident prevention plan that includes, but not limited to, hazard assessment, prevention history, and an emergency response plan.
- ★ Goal is to maintain a safe facility that takes steps to prevent/reduce releases and to minimize the consequences of an accidental release which do occur.



# Risk Management Plan (RMP)

- ★ Clean Air Act of 1990 (Section 112r)
- ★ 40 CFR Part 68
  
- ★ June 21, 1999 initial RMP due to the U.S. EPA
  - ★ 445 +/- RMP facilities in Ohio
  
- ★ Ohio EPA received delegation of the program in January 2000
  - ★ Ohio EPA began auditing subject facilities
  - ★ Kimberly Joseph and Sherri Swihart are the Ohio EPA RMP auditors



# RMP Chemicals

- ★ 40 CFR Part 68, Section 68.130 contains the List of Toxic Chemicals (77) and Flammables (63).
- ★ USEPA's "List of Lists"
  - ★ Consolidated listing of chemicals subject to EPCRA and RMP is a reference tool.
  - ★ [www.epa.gov/emergencies/tools.htm#lol](http://www.epa.gov/emergencies/tools.htm#lol)



# RMP Toxic Chemicals Examples

- ★ 500 pounds (Hydrogen Selenide & Phosgene)
- ★ 1,000 pounds (Nickel Carbonyl & Fluorine)
- ★ 2,500 pounds (Chlorine & Hydrocyanic Acid)
- ★ 5,000 pounds (Sulfur Dioxide & Hydrogen Chloride-  
both in anhydrous form)
- ★ 10,000 pounds (Anhydrous Ammonia & Ethylene Oxide)
- ★ 15,000 pounds (Formaldehyde & Hydrochloric Acid)
- ★ 20,000 pounds (Methyl Thiocyanate)



# RMP Flammables

- ★ 10,000 pounds thresholds
- ★ Examples include:

Propane

Vinyl Chloride

Isobutene

Methane

Methyl Ether

Ethylene

Isoprene

Acetaldehyde

Ethyl Chloride



# RMP Regulation

## ★ What facilities are covered?

- ★ 450 +/- RMP reporting facilities in Ohio that include
  - ▶ Agricultural retailers
  - ▶ Water and wastewater treatment plants
  - ▶ Food businesses and refrigerated warehouses
  - ▶ Chemical distributors
  - ▶ Manufacturers of plastics, resins, and organic chemicals
  - ▶ Petroleum refineries and gas processing plants
  - ▶ Manufacturers of inorganic chemicals and industrial gases
  - ▶ Pulp and paper mills



# Subjectivity to a Program

- ★ A facility (called a stationary source in the regulations) is covered by the RMP regulation if:
  - ★ It has a regulated substance (77 toxic substances/63 flammables)
  - ★ over the threshold quantity
  - ★ in a process

[www.epa.ohio.gov/dapc/atu/112r/whois.aspx](http://www.epa.ohio.gov/dapc/atu/112r/whois.aspx)



# Process

- ★ A process is any activity involving a regulated substance, including any use, storage, manufacturing, handling, or on-site movement, or any combination of these activities.
- ★ Any group of vessels that are interconnected or separate vessels that are located such that a regulated substance could be involved in a potential release, is considered a process.



# RMP Program Level

## ★ Program 1

- ★ Processes are less complex.
  - ★ Pose less risk to the public.
  - ★ Have had no accidents with off-site consequences.
  - ★ Must include at least one worst-case release scenario.
- ★ Compliance requirements are less stringent than for Program 2 & 3.



# RMP Program Level

## ★ Program 2

- ★ Not eligible for Program 1 or 3
- ★ Bulk Storage and distribution of chemicals, fertilizer wholesalers, frozen food and dehydrated food manufacturers.

\* Example: anhydrous ammonia retailers



# RMP Program Level

## ★ Program 3

- ★ Industries subject to OSHA Process Safety Management
- ★ Complex processes

\* Examples: NH<sub>3</sub> refrigeration, refineries, pulp & paper mills, fertilizer manufacturers, and WTP/WWTP



# Exemptions to Program

- ★ Farmers using ammonia fertilizer
- ★ Flammable substances used as fuel or held for sale as a fuel at a retail facility; which is defined as more than 1/2 of the income is obtained from direct sales to end users or at which more than 1/2 of fuel sold by volume, is sold through a cylinder exchange program.
- ★ Chemicals in transportation, including storage incident to transportation
- ★ Laboratory chemicals



# RMP Contents

- ★ Offsite Consequence Analysis
- ★ Worst Case Scenario - The potential total release of the largest vessel closest to the boundary with the greatest offsite distance to the endpoint
- ★ Alternative Release Scenario - more probable release that goes offsite unless no such scenario exists



# RMP Content Continued

- ★ Prevention Program

- ★ Safety precautions and maintenance, employee training, internal compliance audits, monitoring and accident history

- ★ Five-Year Accident History

- ★ Emergency Response

- ★ Health care, employee training measures and procedures for informing the public, response agencies, and hospital



# Program Levels

Program 1	Program 2	Program 3
Worst-case release analysis	Worst-case release analysis	Worst –case release analysis
	Alternative release analysis	Alternative release analysis
5 year accident history	5-year accident history	5-year accident history
	Document management system	Document management system



<b>Program 1</b>	<b>Program 2</b>	<b>Program 3</b>
<b>Certify no additional</b>	<b>Safety Information</b>	<b>Safety Information</b>
	<b>Hazard Review</b>	<b>Hazard Review</b>
	<b>Operating Procedures</b>	<b>Operating Procedures</b>
	<b>Training</b>	<b>Training</b>
	<b>Maintenance</b>	<b>Maintenance</b>
	<b>Incident Investigations</b>	<b>Incident Investigations</b>
	<b>Compliance Audit</b>	<b>Compliance Audit</b>
		<b>Management of Change</b>
		<b>Pre-Startup Review</b>
		<b>Contractors</b>
		<b>Employee Participation</b>
		<b>Hot Work Permits</b>



# Ohio EPA RMP Audits

- ★ Audit each facility at least every 5 years
  - ★ Review supporting documentation for hazard assessment & prevention program (Must retain for 5 years)
  - ★ Issue deficiency letter to facility
  - ★ Submit missing documentation to Ohio EPA
  - ★ Follow-up inspection
  - ★ Enforcement



# Enforcement

- ★ Enforcement Summary
- ★ Approximately 39 cases from 2002-2010
- ★ Settlements from \$2,500 to \$50,000
- ★ Based on several factors such as: total number of deficiencies, amount of chemicals, time line of non-compliance, and risk factors to environment and public receptors.



# Annual RMP Fee Schedule

- ★ Invoices sent out in August every year
  - \$50 initial registration fee for facility
  - \$65 for propane; if it is the only regulated substance on site
  - \$65 for anhydrous ammonia sold for use as an agricultural ingredient
  - \$200 for all other regulated substances

2008- \$108,354

2009- \$108,032



# Small Business Fee Exemption

- ★ Facilities that meet the definition of a “small business” (independently owned and operated with less than 100 full-time employees) are exempt from fees.
- ★ If you are not sure whether your facility meets this definition, call the Small Business Assistance Program at (614)644-4830.



# Risk Management Plan Updates

## ★ Required to resubmit:

- ★ Within five consecutive years of it's initial submission and every five years thereafter
- ★ No later than the date on which a regulated substance is first present above a threshold quantity
- ★ Within six months of a change that requires a revised PHA



# Risk Management Plan

- ★ Within six months of a change that requires a revised OCA when the distance to the endpoint is increased or decreased by a factor of two or more
- ★ Within six months of a change that changes the applicability level of the process (Program 1,2,3)
- ★ Within six months of the date a stationary source is no longer subject to this rule, the owner or operator shall submit a revised registration to the U.S. EPA



# E-Submit Reporting

- ★ In 2009, RMPs were submitted online using system called “RMP\*eSubmit”
  - ★ It is a secured on-line database tool for reporting and replaces the old RMP reporting system.
  - ★ It can access your RMP on-line anytime and it's FREE!!!!!!



# RMP\*eSubmit

- ★ View the current version of RMP
- ★ Create new RMP on-line
- ★ Make corrections to, or create a new resubmission
- ★ Help screens to assist in reporting properly
- ★ Must register as a preparer and/or certifier in the CDX-RMP Program to use.
- ★ [www.cdx.epa.gov/epa\\_home.asp](http://www.cdx.epa.gov/epa_home.asp)



# RMP\*eSubmit

- ★ RMP Facility ID# from USEPA Reporting Center
- ★ 12 digit number
- ★ EPA Reporting Center 703-227-7650



# Ohio RMP Program

## ★ Inspections:

★ 2008- 62

★ 2009- 51

## ★ Enforcement

★ 2008- 7 cases (\$96,250)

★ 2009- 5 cases (\$95,417)



# Common RMP Reporting Errors

- ★ Not completing the recommendations from the process hazard analysis.
- ★ Not annually reviewing the operating procedures
- ★ Not conducting refresher training every three years.
- ★ Not implementing a regular scheduled preventative maintenance program according to API standards.
- ★ Not maintaining a contractor program



# Additional information

- ★ U.S. EPA website
- ★ <http://www.epa.gov/emergencies/content/rmp/index.htm>
- ★ Ohio EPA website
  - ★ <http://www.epa.ohio.gov/dapc/atu/112r/new.aspx>
- ★ Sherri Swihart
  - ★ [Sherri.swihart@epa.state.oh.us](mailto:Sherri.swihart@epa.state.oh.us)
  - ★ 614-644-3594
- ★ Kim Joseph
  - ★ [Kim.joseph@epa.state.oh.us](mailto:Kim.joseph@epa.state.oh.us)
  - ★ 614-644-2187

