

OhioEPA

2008

Compliance Assistance Conference



Reporting

Right to Know (RTK)

Toxic Release Inventory (TRI)

Risk Management Plan (RMP)



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

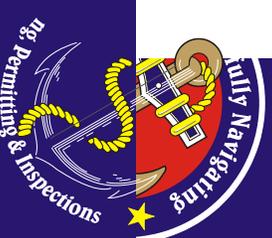
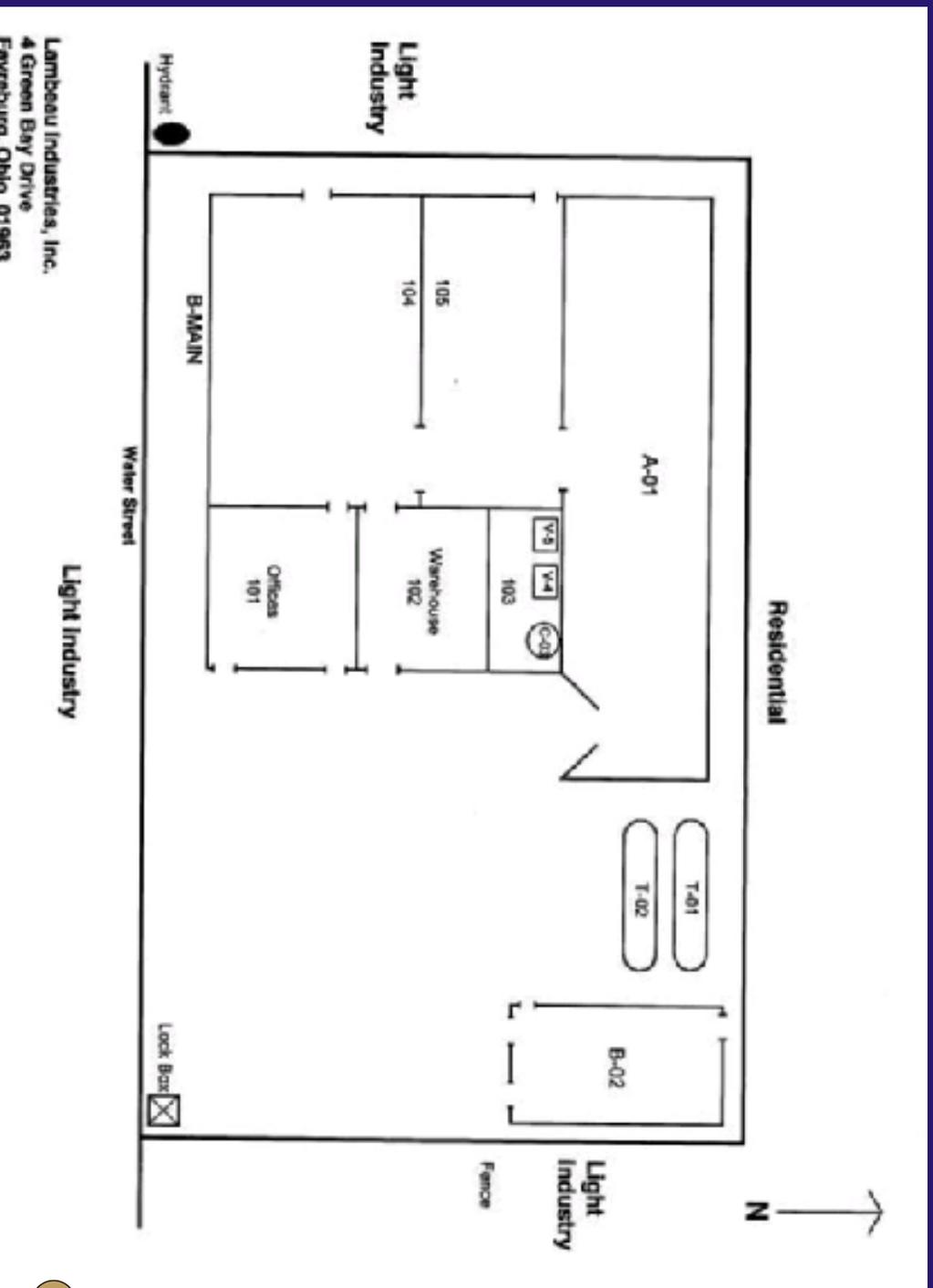


Who Must Report?

- ★ 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)



Site Map



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 Reports 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 2006 (July 1, 2005 thru June 30th, 2006)
- ★ SFY 2005 (July 1, 2004 thru June 30th, 2005)
- ★ SFY 2004 (July 1, 2003 thru June 30th, 2004)

	<u>SFY 2006</u>	<u>SFY 2005</u>	<u>SFY 2004</u>
★ # of EHS Facilities	2,922	2,845	2,909
★ # of Hazardous Chemical Facilities	4,950	4,658	4,867
★ Total	7,872	7,503	7,776
★ Statewide Compliance Rate	91.4%	92.8%	92.1%



INFORMATION MANAGEMENT ASHTABULA COUNTY REPORTING FACILITIES

- ★ Total Number of Reporting Facilities.....94
- ★ # Facilities reporting one (1) or more EHS.....37
- ★ # Facilities reporting one (1) or more hazardous substances.....57



INFORMATION MANAGEMENT ASHTABULA COUNTY TYPE OF FACILITIES

- ★ LPG Distributors (5+/-)
- ★ Service Stations (4+/-)
- ★ Achromatic Corp.
- ★ ASHTA Chemicals
- ★ Delta Chemicals
- ★ Hadlock Plastics
- ★ Praxair
- ★ RMI Titanium
- ★ Western Reserve Farm Co-Op
- ★ Worthington Cylinders Corp



INFORMATION MANAGEMENT ASHTABULA COUNTY INVENTORY REPORTED

★ Extremely Hazardous Substances:

Chlorine (@ 5+ facilities)

Sulfuric Acid (@ 14+ facilities)

Formaldehyde (@ 2 facilities)

Epichlorohydrin

Isophorone Diisocyanate

Titanium Tetrachloride

Benzene, 2,4-dissocyanato-1-methyl

Zinc Sterate



INFORMATION MANAGEMENT ASHTABULA COUNTY HAZARDOUS SUBSTANCES:

- ★ Propane
- ★ Diesel Fuel
- ★ Chromic acid
- ★ Chloro picrin
- ★ Nitromethane
- ★ Calcium Carbide
- ★ 1,3-Dichloropropene
- ★ Aluminum Trihydrate
- ★ Styrene
- ★ Dimethyl phthalate
- ★ 2,2,4-Trimethyl-1,3 Pentanediol
- ★ Sodium Aluminate
- ★ Benzaldehyde,4-(methylthio)
- ★ Liquid Argon



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 Report Facts

	<u>2005</u>	<u>2006</u>	<u>2007</u>
Total # Spills	4,968	4,703	4,763
<u>Spill Source</u>			
Fixed Facility	3,509	3,386	3,483
Transportation	920	877	823
Oil & Gas	59	51	55
Mother Nature	22	18	14
Unknown	415	335	349



Ohio EPA Release Report Facts (Cont'd)

★ <u>Area Affected</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Air	422	410	434
Building	292	222	247
Ground Water	19	24	18
Land	1,762	1,674	1,593
Other	117	98	87
Sanitary Sewer	29	23	25
Surface Water	2,230	2,157	2,282

Hydrocarbons
 Sewage
 Waste Water (NPDES violations)
 Chemicals (Environment)
 Chemicals (Waste)
 Environmental

average of 27.7% of statewide spills
 average of 26.5% of statewide spills
 average of 11.0% of statewide spills
 average of 8.1% of statewide spills
 average of 2.4% of statewide spills
 average of 0.00% of statewide spills



INFORMATION MANAGEMENT ASHTABULA COUNTY SPILLS/RELEASES

2007

103 spills/releases reported to date

- ★ Diesel Fuel 40 gallons
- ★ Mercury unknown amount
- ★ Activated Carbon unknown amount
- ★ Carbonyl Sulfide 129 pounds
- ★ Sewage unknown amount
- ★ Chlorine unknown amount
- ★ Ammonia 10 pounds
- ★ K106 Waste 10 pounds
- ★ Diesel Fuel 350 gallons
- ★ Hydraulic Fluid 100 gallons
- ★ Drums unknown amount
- ★ Acidic Process Water unknown amount



For Additional Information

- ★ Right to Know Contacts at Ohio EPA
 - ★ Jeff Beattie – jeff.beattie@epa.state.oh.us
 - ★ 1-888-644-2260 (toll free)
 - ★ 1-644-2260
 - ★ www.epa.state.oh.us/dapc/serc/
- ★ U.S. EPA Software Assistance
 - ★ (301) 429-5018
 - ★ usermp.usersupport@csc.com



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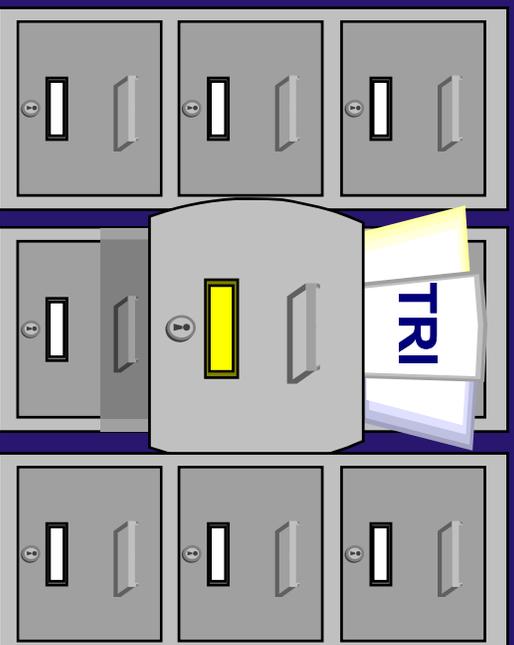
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Toxic Release Inventory

- ★ 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.



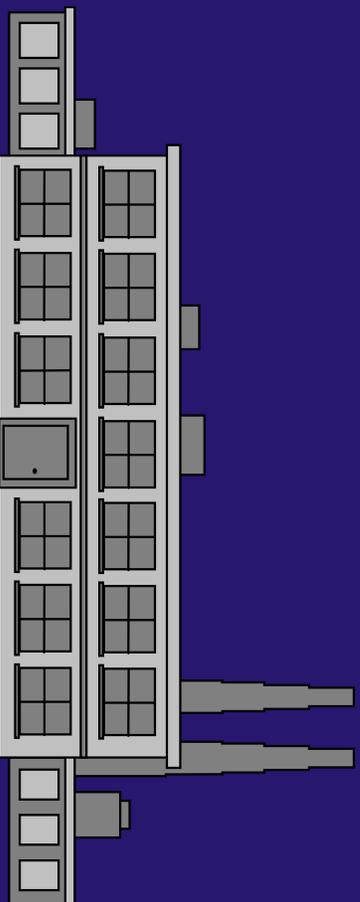
Limitations of TRI Data

- ★ 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 Standard Industrial Classification Code; 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

Industrial Sector	Primary SIC Code
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
- Petroleum Refineries (SIC 2911).....NAICS 324110
- Petroleum Bulk Terminals (SIC 5171).....NAICS 424710

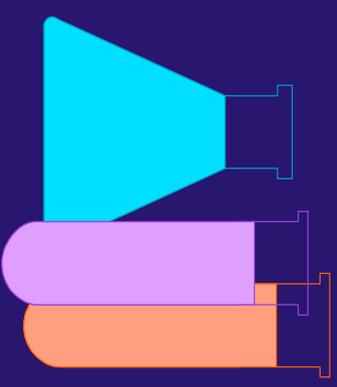


Employee Threshold

- ★ **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/chemical/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

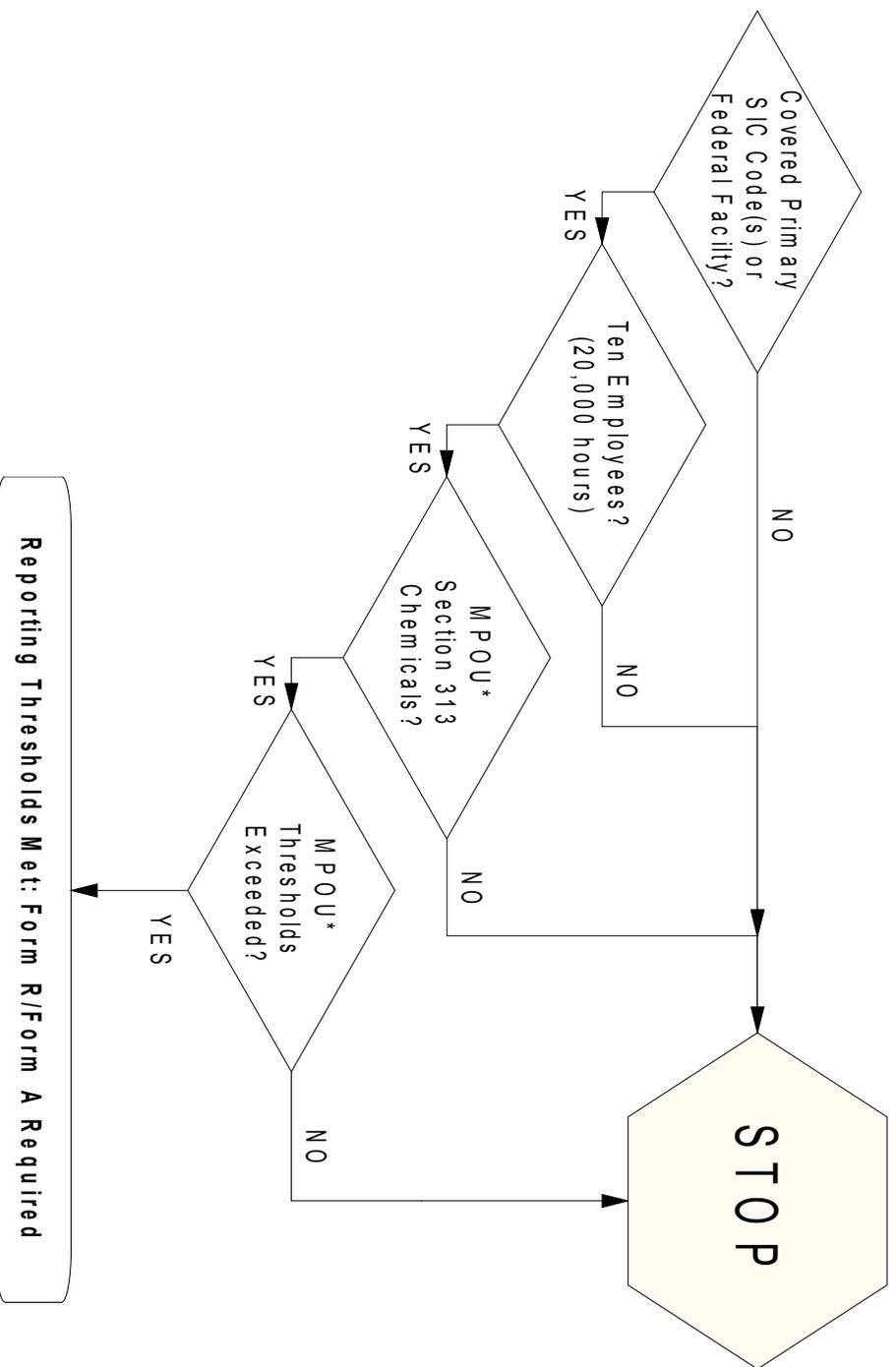




Section 313 Chemicals (non-PBT) Thresholds

- ★ 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



*MPOU: Manufacture (including import), process or otherwise use

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)

★ Rule Expands:

- ★ Non-PBT chemical eligibility for Form A by raising the eligibility threshold to 5,000 pounds of annual waste management provided total annual releases of the non-PBT chemical compromise no more than 2,000 pounds of the 5,000 pound total waste limit.

(Note: Waste Management includes releases, recycling, energy recovery and treatment).



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

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 are encouraged to use U.S. EPA's reporting software (TRI-ME) to prepare and submit reports.
- ★ 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 reporting 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:
<http://www.epa.gov/triinter/report/index.htm>
- ★ Ohio EPA's Fee Sheet can be downloaded at:
<http://www.epa.state.oh.us/dapcc/tri/tri.html>



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
 - ★ TRI Envirofacts
 - ▶ 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



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 enters the data, or uploads the data from disks
 - ★ 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 2006 TRI Data

- ★ **22,880 Industry and Federal Facilities Reported.**
- ★ **650 Plus Chemicals and Chemical Categories.**
- ★ **4.25 Billion Pounds Managed Through Disposal or Releases or Recycling, Energy Recovery, or Treatment.**
- ★ **88% On-Site**
- ★ **12% Off-Site**



2006 Ohio TRI Data

- ★ 1,552 TRI Reporting facilities
- ★ 315 TRI Chemicals Reported
- ★ 5,409 Form Rs Submitted (946 for PBTs)
- ★ 853 Form As Submitted
- ★ 1/3 facilities reported 1 chemical
- ★ Avg. # chemical reported.....4



Ohio's National Rank

Based on the Calendar Year 2006 TRI Data

- ★ Air Releases.....#1.....(119,704,450 pounds)
- ★ Water Releases.....#13.....(8,354,562 pounds)
- ★ Land On-Site Releases.....#6.....(79,628,640 pounds)
- ★ Deep Well Injection.....#4.....(22,499,123 pounds)
- ★ Approximately 322 million pounds of TRI toxic chemicals were reported as released to the environment or transferred off-site for treatment or disposal in Ohio.



Ohio 2006 TRI Data

Total Releases and Transfers

Top 10 County's

- ★ Lucas
- ★ Jefferson
- ★ Washington
- ★ Stark
- ★ Cuyahoga
- ★ Adams
- ★ Allen
- ★ Hamilton
- ★ Ashtabula
- ★ Coshocton



Ohio 2006 TRI Data Top 10 Chemicals

- ★ Zinc and Zinc Compounds
- ★ Hydrochloric Acid (Aerosols)
- ★ Manganese and Manganese Compounds
- ★ Nitrate Compounds
- ★ Sulfuric Acid (Aerosols)
- ★ Methanol
- ★ Ammonia
- ★ Barium and Barium Compounds
- ★ Hydrogen Fluoride
- ★ Chromium and Chromium Compounds



Ohio 2006 TRI Data Top 10 Facilities Total Releases and Transfers

- ★ **Envirosafe Services of Ohio (Lucas)**
- ★ **Wheeling-Pittsburgh Steel (Jefferson)**
- ★ **DP&L J.M. Stuart Station (Adams)**
- ★ **AEP Cardinal Plant (Jefferson)**
- ★ **INEOS USA (Allen)**
- ★ **W.H. Sammis Plant (Jefferson)**
- ★ **Vickery Environmental (Sandusky)**
- ★ **Muskingum River Plant (Washington)**
- ★ **The Timken Co. (Stark)**
- ★ **Millennium Inorganic Chemicals (Ashtabula)**



Tox-Minus

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 (air, land, water...); and
 - ★ County summaries
- ★ Copies of the reports are available at <http://www.epa.state.oh.us/dapc/tri/reptsdb.html>
- ★ Facilities named in the report as a “top facility” receive an advanced copy of the report.



Technical Assistance



- ★ U.S. EPA Reporting Center
(301) 429-5005
1-800-424-9346

www.epa.gov/tri/

- ★ Ohio EPA TRI Unit
Muhammad Elsalahat
muhammad.elsalahat@epa.state.oh.us
Mark Besel mark.besel@epa.state.oh.us

614-644-2070



In Closing

- ★ TRI can be looked at a public “report card” for the industry community.
- ★ Community 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.





Risk Management Plan (RMP) Program



Reason for Risk Management Program (Union Carbide)



Bhopal

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



Bhopal cont.



Photo - Courtesy : Fabio Bartholomeu/
Copyright © 1985 All Right Reserved - Fabio Bartholomeu / Gamma - Liaison Network

Bhopal cont.

- ★ Health Issues
 - ★ Damage to lungs, eyes, immune system
 - ★ Spontaneous abortions
 - ★ Disfigured born children (stunted upper body growth and internal organs)



Bhopal cont.

- ★ As we speak
 - ★ New illnesses being observed
 - ★ Death toll still rising
 - ★ Future horrors in store for those exposed
- ★ Dow has since bought Union Carbide and the gov. of Bhopal wants them to be responsible for clean up and medical costs



Bhopal cont.

- ★ 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



Bhopal cont.

- ★ Safety Hazard Regulations
 - ★ There are none in developing countries
 - ★ Union Carbide internal audit found over 12 safety hazards before the accident
 - ★ In 1986 EPA and stakeholders-Emergency Plan RTK
 - ★ In 1986 Congress –Emer. Planning RTK or EPCRA
 - ★ EPA-RMP in 1999



Risk Management Program



Risk Management Program

Accidents in the U.S.

- ★ “Runaway” exothermic reactions
 - ★ 1998 Morton International N.J.
 - ★ 2004 MFG Chemical Co. GA
 - ★ 90,000 lbs MIC (similar to Bhopal)



Risk Management Plan (RMP)

- ★ Clean Air Act of 1990 (Section 112r)
- ★ June 21, 1999 initial RMP due to the U.S. EPA
- ★ Ohio EPA received delegation in January 2000
 - ★ Ohio EPA began auditing subject facilities
 - ★ Kimberly Joseph and Sherri Swihart
 - ★ Approx. 500 Facilities

* Guidance for RMP is on the U.S. EPA and Ohio website



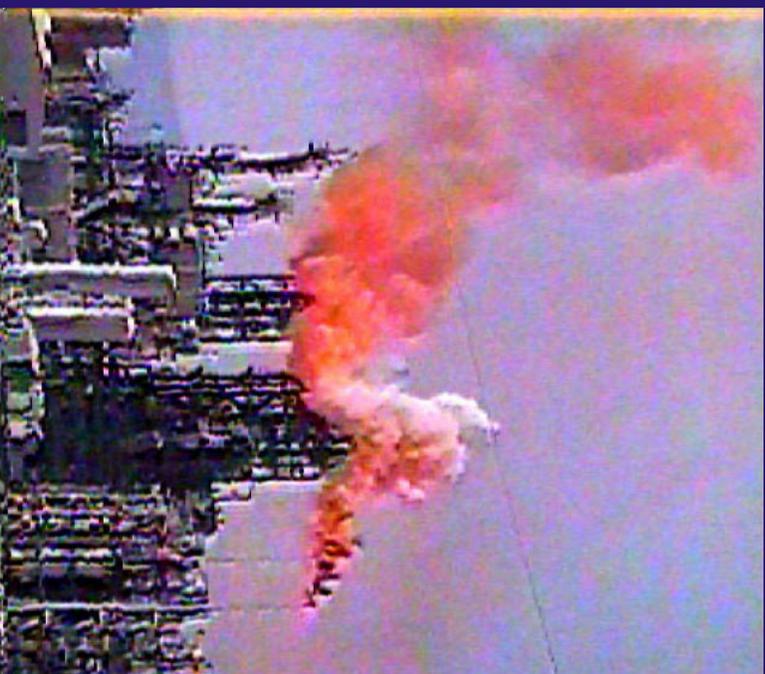
RMP Regulation

- ★ What facilities are covered?
 - ★ Approximately 500 facilities in Ohio including
 - ▶ Anhydrous ammonia retailers
 - ▶ Water and wastewater plants
 - ▶ Ammonia refrigeration
 - ▶ Chemical distributors
 - ▶ Manufacturers of plastics, resins, and organic chemicals
 - ▶ Refineries
 - ▶ Manufacturers of inorganic chemicals and industrial gases
 - ▶ Pulp and paper mills



Subjectivity to a Program

- ★ Stationary Source in a Single Process
- ★ List of Regulated Substances
- ★ Threshold Quantities
 - ★ 63 Flammables
 - ★ 77 Toxic Substances



List of lists at:

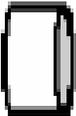
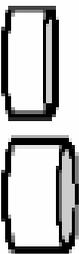
<http://www.epa.state.oh.us/dapc/atu/112%28r%29/list.pdf>

Process

- ★ A process is any activity involving a regulated substance, including any use, storage, manuf. 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



Process Description

Soft control: Regulator location	Description	Interpretation
	1 record 1 regulated substance above TQ	1 process
	2 or more controlled vessels same regulated substance above TQ	1 process
	2 or more controlled vessels different regulated substances each above TQ	1 process
	Pipe-line feeding multiple vessels total above TQ	1 process
	2 or more vessels co-located same substance total above TQ	1 process
	2 vessels, located so they're not involved in a single release event or different substances each above TQ	2 processes
	2 vessels with regulator substances each above TQ	1 or 2 processes depending on distance
	1 vessel or 1 vessel control vessel is same or different substance as above TQ's plus a co-located storage vessel containing flammable	1 process

RMP Program Level

- ★ Program 1
 - ★ No history of offsite accidents
 - ★ No public receptors
 - ★ ER coordinated w/ local emergency organizations
- ★ i.e., a chemical plant in Butler Co. uses TDI (not an OSHA chemical), located away from any population



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 manuf.
- * i.e., anhydrous ammonia retailers



RMP Program Level

★ Program 3

- ★ Industries subject to OSHA Process Safety Management
- ★ Complex processes
- * i.e., NH3 refrigeration, refineries, pulp & paper mills, fertilizer manuf., 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 (except chemicals added to ethanol)
- ★ Chemicals in transportation, including storage incident to transportation
- ★ Laboratory chemicals



Content of Program

- ★ Hazard Assessment
- ★ 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
- ★ (Download RMP COMP on the RMP submit site to model)

Contents of Program cont.

★ Prevention Program

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



Content of Program cont.

- ★ 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
	Alternatnive release analysis	Alternatnive release analysis
5 year accident history	5-year accident history	5-year accident history
	Document management system	Document management system

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

Program Levels cont.

Program 1	Program 2	Program 3
Coordinate with local responders	Develop plan and program (if applicable) and coordinate with local responders	Develop plan and program (if applicable) and coordinate with local responders
Submit One Risk Management Plan for all Covered Processes	Submit One Risk Management Plan for all Covered Processes	Submit One Risk Management Plan for all Covered Processes

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
- ★ Approx 24 cases from 2002-2007
- ★ Settlements from \$5,000 to \$50,000
- ★ More stringent after first five year audit
- ★ More enforcement cases starting in 2008



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
- ★ Small businesses don't have fees



Risk Management Plan Updates

- ★ Required to resubmit
 - ★ Within five consecutive years of its 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

Risk Management Plan Changes

★ As of 2004 new rules via (CDX)

- ★ Include e-mail address
- ★ Change emergency contact within one month
- ★ Report accident within six months

(Resulted in deaths, injuries, significant property damage, on site, know offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage.)

Reporting in 2009

- ★ Systems change
 - ★ Internet–based submission for 2009 submission cycle using the CDX system (will include OCA)
 - ★ RMP will remain in system for modifications



Additional Information

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

