

2013 Compliance Assistance Conference

Toxic Release Inventory



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Division of Air Pollution Control

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 manufactures, 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

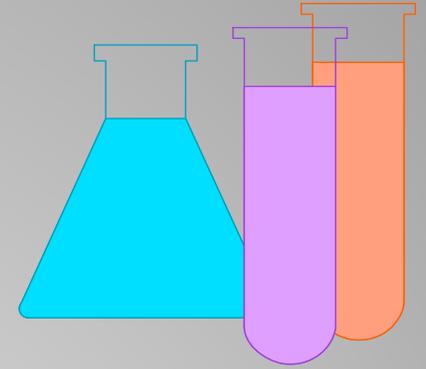
North American Industry Classification Codes (NAICS)

- 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/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

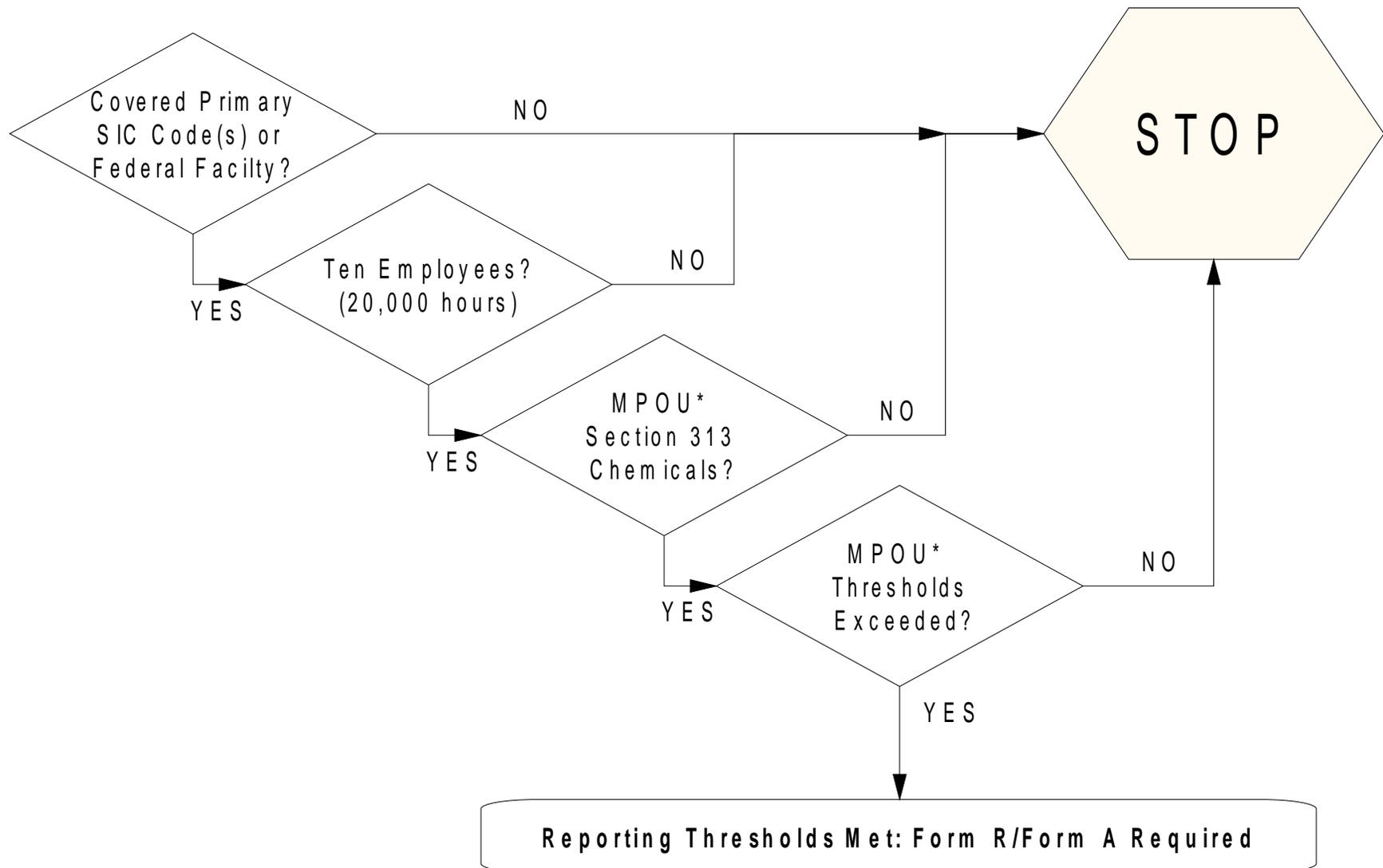
- Within the list of 600 chemicals and chemical categories, there is a subset of chemicals designated as PBT chemicals.
 - Persistent, Bioaccumulative Toxic Chemicals remain (persist) in the environment over a long period of time.
 - PBT Chemicals include
 - Aromatics, such as Dioxin, Polycyclic Aromatic 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



*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) 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

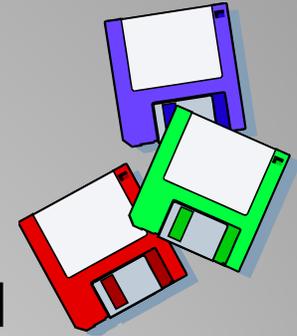
Reporting Releases

- 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.

TRI Training Modules

<http://www.epa.gov/tri/training/index.htm>

Basic Concepts Course

This course will help you determine:

- If your facility is covered by EPCRA Section 313 (the Toxic Release Inventory); and
- If your facility is covered, for which chemicals your facility must submit a TRI report.

Basic Concepts Course cont.

You will also learn about:

- Information on making the release and other waste management calculations and estimates;
- When the Form A Certification statement can be used instead of the Form R;
- Reporting exemptions (i.e., particular uses of TRI chemicals that don't have to be included in TRI reports); and
- General TRI program and process information.

Advanced Concepts Course

If your facility must report to TRI, this course will help you understand:

- Advanced issues related to threshold determinations, TRI reporting, and exemptions;
- Information on reporting requirements for PBTs (such as lead, mercury, PACs, etc.) and other chemicals (such as hydrochloric acid aerosols, ammonia, metal compounds, nitrate compounds, and metal cyanides) with special TRI reporting considerations;
- General TRI program and process information; and
- How to use the TRI-MEweb online reporting application, and the CDX electronic submission process

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
- Ohio EPA's Fee Sheet can be downloaded at:
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/
 - 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 this 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 2011 TRI Data

- 20,927 Industry and Federal Facilities Reported.
- 650 Plus Chemicals and Chemical Categories.
- 4.09 Billion Pounds Managed Through Disposal or Releases or Recycling, Energy Recovery, or Treatment.
- 89.7% On-Site
- 10.3% Off-Site

2011 Ohio TRI Data

- 1,366 TRI Reporting facilities
- 300 TRI Chemicals Reported
- 4,796 Form Rs Submitted (805 for PBTs)
- 560 Form As Submitted
- 1/3 facilities reported 1 chemical
- Avg. # chemical reported: 4

Ohio's National Rank

Based on the Calendar Year 2011 TRI Data

- Air Releases: #2 (58,733,220 pounds)
 - Water Releases: #7 (10,652,646 pounds)
 - Land On-Site Releases: #12 (26,636,090 pounds)
 - Deep Well Injection: #5 (18,142,782 pounds)
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- Approximately 190 million pounds of TRI toxic chemicals were reported as released to the environment or transferred off-site for treatment or disposal in Ohio.

Ohio 2011 TRI Data

Total Releases and Transfers

Top 10 County's

- Cuyahoga (21,022,286 pounds)
- Hamilton (16,257,137 pounds)
- Allen (13,722,191 pounds)
- Ashtabula (11,915,212 pounds)
- Washington (11,339,985 pounds)
- Sandusky (9,992,598 pounds)
- Jefferson (9,246,166 pounds)
- Coshocton (8,380,066 pounds)
- Gallia (7,979,472 pounds)
- Clermont (6,490,704 pounds)

Ohio 2011 TRI Data

Top 10 Chemicals

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

Ohio 2011 TRI Data

Top 10 Facilities

Total Releases and Transfers

- Shepherd Chemical Company (Hamilton)
- Vickery Environmental Inc. (Sandusky)
- INEOS USA, LLC (Allen)
- Millennium Inorganic Chemicals, 2446 middle (Ashtabula)
- AEP-Muskingum River Plant (Washington)
- Research Organics Inc. (Cuyahoga)
- AEP- Cardinal Plant (Jefferson)
- AK Steel Corp Coshocton Works (Coshocton)
- Beckjord Generating Station (Clermont)
- Millennium Inorganic Chemicals, 2900 middle (Ashtabula)

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
- 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/
- Ohio EPA TRI Unit
Muhammad Elsalahat
(614) 644-3608
muhammad.elsalahat@epa.ohio.gov



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.

Questions?