

Toxics Release Inventory (TRI)

Criteria, Thresholds, and Form Options
for Reporting

2017 Pollution Prevention Waste
Management Workshop

Topics

- Introduction
- Reporting Criteria
- Reporting Form Options
- Online Submission Procedures
- Resources



Introduction



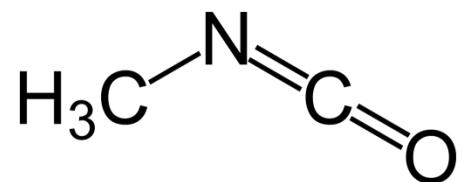
What is TRI?

- Established in 1986 under the Emergency Planning and Community Right-to-Know Act (EPCRA)
- Publicly accessible United States Environmental Protection Agency (EPA) database contains information on disposal and other releases of over 690 toxic chemicals from more than 20,000 U.S. industrial facilities
- Goals of TRI
 - Provide communities with information regarding toxic chemical releases and waste management activities
 - Support informed decisions by industry, government, nongovernmental organizations, and the public



Why was TRI established?

Simple, methyl isocyanate

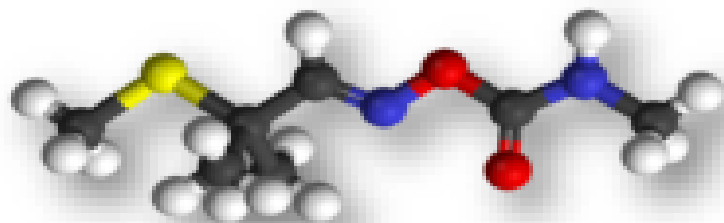


A Union Carbide chemical plant located in Bhopal, India was the site of one of the most significant chemical industry disasters in history. Beginning on the night of December 2, 1984 and continuing into the morning hours of December 3, 1984, a runaway hydrolysis reaction caused the uncontrolled release of thousands of pounds of methyl isocyanate and related by-products. The gas settled over the closely located town and caused thousands of fatalities and casualties were upwards of 500,000 people.



What followed the Bhopal accident?

Eight months later, the town of Institute, WV was also exposed to aldicarb oxime vapors (made using methyl isocyanate) from a leaking tank. The accident didn't cause any fatalities, but around 100 residents reported medical problems.



2-Methyl-2-(methylthio)propanal *O*-(*N*-methylcarbamoyl)oxime

At this point, the EPA was tasked by Congress via the EPCRA to create the Toxics Release Inventory program.



The Texas Commission on Environmental Quality (TCEQ) and the TRI Program

- The Texas Health and Safety Code, Chapter 370 establishes the state requirements for reporting TRI forms and imposes a fee for Form R reports.
- The TCEQ TRI Coordinator acts as a liaison to the EPA TRI program by supplying online and phone support for businesses and the general public.
- The TCEQ does not have the compliance and enforcement authority for the TRI.
- Chemicals reported to the TRI using Form R trigger reporting to the TCEQ Pollution Prevention Team via the Waste Reduction Policy Act.



Reporting Criteria



Facilities must meet all three reporting criteria

- 10 or more full-time employees or 20,000 man hours as defined by the EPA
- Industry sector must be covered by the North American Industrial Classification System (NAICS) code list found in Table I of the December 2016 EPA publication 740-B-16-001, *Toxic Chemical Release Inventory Reporting Forms and Instructions* and
- Manufacture, process, or otherwise use more than the threshold amount for that classification of a TRI chemical



TRI Chemicals

- Approximately 595 individual chemicals and 32 chemical categories are currently on the TRI list. Five of the chemical categories list 70 specific chemicals.
- Some chemical and chemical categories are classified as Persistent Bioaccumulative Toxic (PBT) chemicals and have different reporting requirements.
- Qualifiers are applied to some chemicals and chemical categories to account for physical forms, including dust, fumes, fibrous forms, friable materials, aerosols, and chemical allotropes, or manufacturer/manufacturing techniques, or geographical origins.



Some TRI-Covered Industries

Example: 212 Mining (coal, metal, and nonmetallic minerals) covers all NAICS codes inclusive from 212000 through 212999

- 221 Utilities (coal- and oil-fired electricity generation plants)
- 31-33 Manufacturing (including but not exclusively, food, beverage, tobacco, textile mills and products, leather, wood, paper, printing and publishing, petroleum products, chemicals, plastics, rubber products, nonmetallic mineral products, primary metals, fabricated metals, machinery, computer and electronic products, electrical equipment, transportation equipment, furniture, and other miscellaneous manufacturing)
- 424 Merchant Wholesalers, Non-durable Goods (chemical and petroleum products)
- 425 Wholesale Electronic Markets (chemicals and allied products)
- 511, 512, 519 Publishing (including but not exclusively, newspapers, periodicals, and books)
- 562 Hazardous Waste (solvent recovery and facilities covered under Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. 6921 *et seq.*)



Threshold Reporting Amounts

Facilities meet the criteria requirements for reporting if site-level usage totals for each non-PBT chemical are at least:

- 25,000 pounds, manufactured (produce, prepare, compound, or import a TRI chemical);
- 25,000 pounds, processed (preparation of a TRI chemical for distribution in commerce); or
- 10,000 pounds, otherwise used.



Threshold Reporting Amounts, cont.

For a facility to meet criteria requirements for PBT chemicals, manufacturing, processing, and otherwise use site-level totals must be at least:

- 100 lbs. for aldrin, lead, lead compounds, methoxychlor, polycyclic aromatic compounds, pendimethalin, tetrabromobisphenol A, and trifluralin;
- 10 lbs. for benzo(g,h,i)perylene, chlordane, heptachlor, hexachlorobenzene, isodrin, mercury, mercury compounds, octachlorostyrene, pentachlorobenzene, polychlorinated biphenyls, and toxaphene; or
- 0.1 grams for dioxin and dioxin-like compounds.



Reporting Form Options



Form A vs. Form R Reporting

- Form A reports only include facility information and the chemical name.
- Form R reports include facility information, chemical name, release amounts, transfer information, and other waste management activities for air, water, underground injection, and land media both on-site and off-site.



Form A Reporting

- Criteria for use of Form A:
 - Do not exceed 500 pounds for the *total annual reportable amount** for only non-PBT chemicals, and
 - Chemical amounts manufactured or processed or otherwise used do not exceed one million pounds.

*The *total annual reportable amount* is equal to the combined total quantities released, treated, recovered, and combusted at the facility, plus the amounts transferred to off-site locations.

- Advantages from use of Form A:
 - Using only Form A reports does not trigger the Waste Reduction Policy Act.
 - Form A reports are not charged a TOX fee.



Online Submission Procedures



Reporting Process

- Submit TRI reports to the EPA Central Data Exchange (CDX) using the *TRI-MEweb* online reporting application by July 1st following the reporting year.
- Each chemical must be reported using either Form A or Form R.
- Facilities determine the correct reporting form by using the EPA guidance document, *Toxic Chemical Release Inventory Reporting Forms and Instructions*.
- For the State of Texas, when using the *TRI-MEweb* application, the submission is automatically submitted to the TCEQ.



Submitting TRI Data to the EPA

1. Create CDX user accounts for both the preparer of the forms and a certifying official. The certifying official will need to sign an Electronic Signature Agreement.
2. Login through the TRI-MEweb application and enter the access key that was received from CDX.
3. Enter facility and chemical information as applicable.
4. Validate the form and correct any errors if needed.
5. Select a certifying official and submit the form(s) for certification.
6. Certify, sign, and submit the form(s) to the EPA.

“The Central Data Exchange concept has been defined as a central point which supplements EPA reporting systems by performing new and existing functions for receiving legally acceptable data in various formats, including consolidated and integrated data.”

Central Data Exchange, <https://cdx.epa.gov>



TRI-MEweb Resources

- Registering with the CDX

<https://cdx.epa.gov/Registration/Terms>

- Tutorials

https://www.epa.gov/sites/production/files/2017-04/documents/tri_mini_tutorial_list.pdf

- Troubleshooting Guide

https://www.epa.gov/sites/production/files/2017-01/documents/ry_2016_cdx-tri-meweb_troubleshooting_guide.pdf



Resources



TRI Regulations

- Superfund Amendment and Reauthorization Act
Title III, Section 313
- EPCRA
- Title 40 Code of Federal Regulations, Part 372
- Texas Health and Safety Code, Chapter 370



EPA Online Training

Toxic Chemical Release Inventory Reporting Forms and Instructions

https://ofmpub.epa.gov/apex/guideme_ext/guideme_ext/guideme/file/ry_2016_rfi.pdf

TRI Basic Training Slides

https://www.epa.gov/sites/production/files/2017-01/documents/ry16_basic_concepts.pdf

TRI Advanced Training Slides

https://www.epa.gov/sites/production/files/2017-01/documents/ry16_advanced_concepts.pdf



TRI Information Sources

EPA TRI home page

<https://www.epa.gov/toxics-release-inventory-tri-program>

EPA TRI Explorer

<http://www.epa.gov/triexplorer/>

EPA Envirofacts

<http://www.epa.gov/enviro/tri-search>



TRI Reporting Guidance

TRI Threshold Screening Tool

<https://cdxnodengn.epa.gov/cdx-tri-threshold/action/Home>

General, Industry-specific, and Chemical-specific
Guidance Documents

<https://www.epa.gov/toxics-release-inventory-tri-program/guidance-documents-tri-reporting>



TRI Audit and Compliance Policies

EPA Audit Policy Home Page

<https://www.epa.gov/compliance/epas-audit-policy>

EPA Small Business Compliance Policy Home Page

(100 or fewer employees)

<https://www.epa.gov/compliance/small-business-compliance>



Contact Information

EPA Region 6 Enforcement Coordinator

Morton Wakeland, Jr. (214) 665 - 8116

TRI Information Center (operated by the EPA)

(800) 424 - 9346

Central Data Exchange

(888) 890 - 1995

TCEQ TRI Phone Number and Email Address

(512) 239 - 4TRI {4874}

toxic@tceq.texas.gov

