



Introduction to the Toxics Release Inventory for Industrial Facilities

April 2019



What is TRI?

- TRI is an EPA information resource that provides data on releases and other waste management practices of toxic chemicals from certain facilities
- TRI can tell you about:



Releases



Waste transfers



Recycling



Pollution prevention



- The TRI Program collects data annually from more than **21,000 facilities** across the country and covers **595 individually listed chemicals** and **33 chemical categories**



Purpose of TRI Information

“To inform persons about releases of toxic chemicals to the environment; to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering; to aid in the development of appropriate regulations, guidelines, and standards; and for other similar purposes.” **42 USC 11023(h)**



Which facilities must report to TRI?

1. Facility must be in a TRI-covered industry sector or category, including:



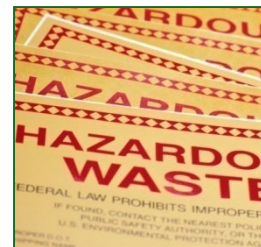
Manufacturing



**Coal/Oil
Electricity
Generation**



**Certain Mining
Facilities**



**Hazardous
Waste
Management**



Federal Facilities

2. Facility must have the equivalent of at least 10 full-time employees.
3. Facility must manufacture, process or use more than a certain amount of a TRI-listed chemical per year.



What information do facilities report to TRI?

- On-site releases of TRI chemicals to:
 - Air
 - Water
 - Land
- Transfer of chemical waste to off-site locations
- Other waste management:
 - Recycling
 - Treatment
 - Energy Recovery
- Pollution prevention activities





What is a “release”?

- On-Site Release to **Air**

- Includes both fugitive/non-point source emissions (e.g. leaks and evaporation) and stack/point-source emissions (e.g. releases from a duct or pipe)



- On-Site Release to **Water**

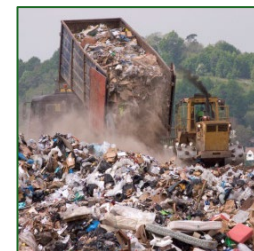
- Discharges to surface water bodies such as streams, rivers, lakes, and oceans; also includes releases of TRI chemicals to surface water due to runoff, including stormwater runoff



- On-Site Release to **Land**

- Eight categories of land releases or disposal are reported to TRI. Examples include:

- Placement of waste rock containing TRI chemicals into engineered piles or structures at metal mines
- Disposal of chemical waste in landfills
- Injection of liquid containing TRI chemicals into underground injection wells
- Placement of waste materials into surface impoundments to volatilize or settle
- Application of certain waste products to farmlands as fertilizer



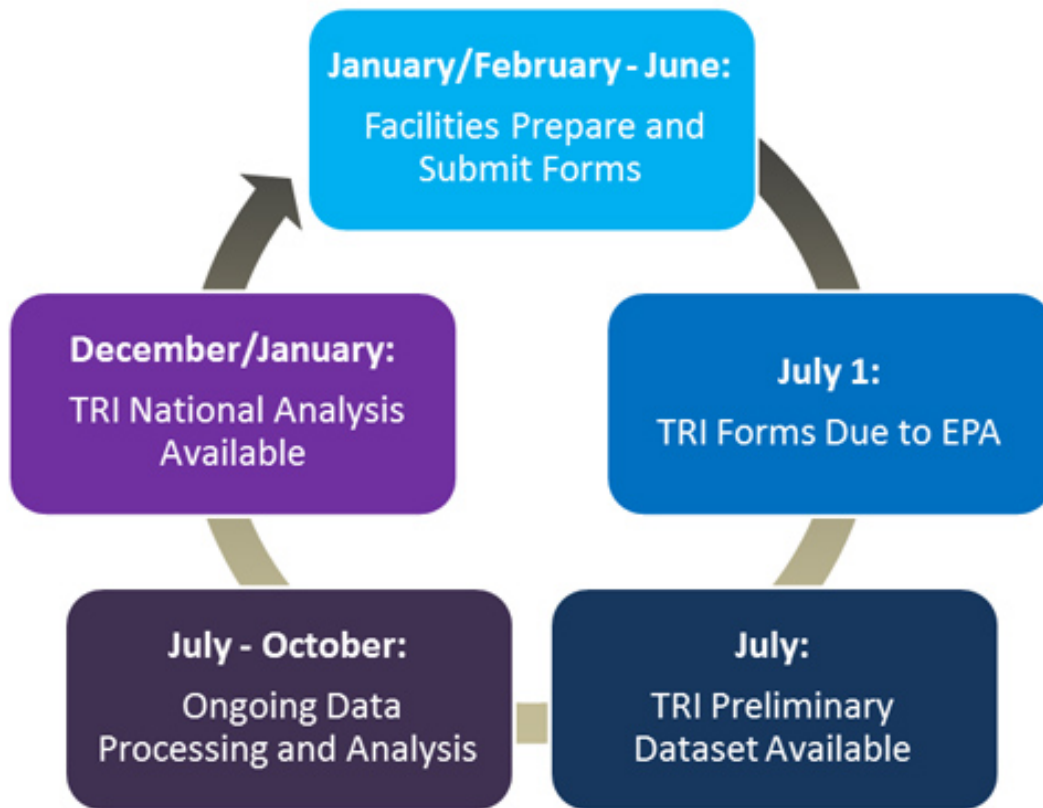


TRI's Statutory Authority

- **Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) § 313**
 - Facilities in certain industrial sectors must report toxic chemical releases to air, water, and land and other waste management to EPA and appropriate state each year.
 - EPA must maintain the data and make it available to the public.
- **Pollution Prevention Act of 1990 (PPA)**
 - TRI facilities must report progress in reducing waste generation and moving towards safer waste management alternatives.
 - Section 8 of the TRI Reporting Form R



Annual TRI Data Cycle



- **Due by July 1:** Facilities submit their TRI reporting forms to EPA.
- **July-October:** EPA conducts data quality checks and compliance assistance activities.
- **January:** EPA publishes the TRI National Analysis, the official annual TRI report.



Sample Uses of TRI Data

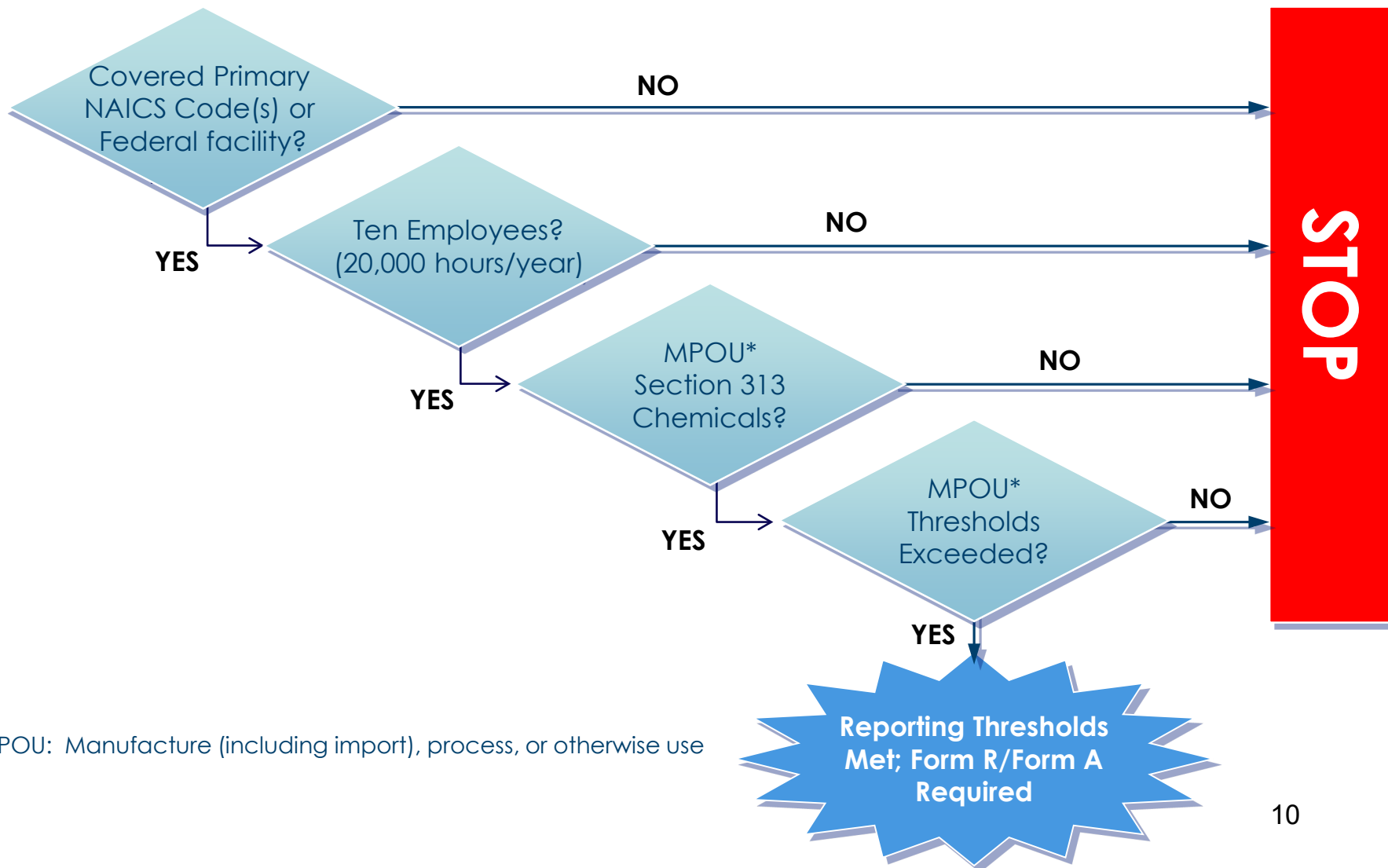
- Identify **how many TRI facilities** operate in the community **and where they are located**.
- Identify **which chemicals are being released** by TRI facilities.
- **Track increases or reductions** of chemical releases from facilities over time.
- **Compare the chemical releases and pollution prevention efforts of facilities** in one location with similar facilities across the country.
- **Prioritize efforts to reduce pollution** from facilities located in the area.
- **Support regulatory activities** involving TRI-listed chemicals.

More on TRI uses at:

www.epa.gov/tri/datainaction



TRI Reporting Requirements





Two-Part TRI Reporting Process

Applicability & Threshold Determinations

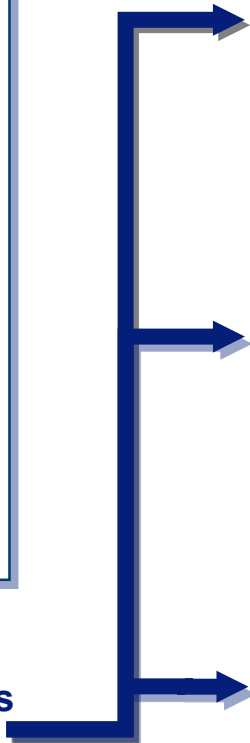
Identify Section 313 chemicals manufactured, processed, or otherwise used at the site



Determine quantities of Section 313 chemicals and whether they are **manufactured, processed, or otherwise used** on-site for the reporting year

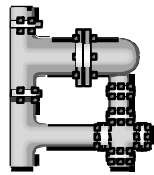


If a Threshold is Exceeded...




Release/Waste Mgmt. Reporting

Identify total releases and off-site transfers



Identify other waste management practices



Identify pollution prevention activities



Use TRI-MEweb to Complete Form R or Form A



Complete Final QA/QC

Certify Form

Submit to EPA & State or Tribe



Form A Eligibility

- In addition to the standard TRI Reporting Form R, EPA allows the use of the TRI Form A Certification Statement, a simplified two-page form
- Facilities are eligible to use Form A if all three criteria are met:
 1. The chemical being reported is NOT a PBT chemical
 2. The chemical has not been manufactured, processed, or otherwise used in excess of 1,000,000 pounds
 3. The total annual waste management (i.e., recycling, energy recovery, treatment, and disposal or other releases) of the chemical does not exceed 500 pounds
- If the three alternate threshold criteria are met:
 - Facilities have the option to file a Form A in lieu of a Form R
 - On Form A, no detailed release, other waste management, or source reduction reporting is required
 - Facilities should maintain records and calculations used to determine Form A eligibility



Overview of Covered Industry Sectors

Industrial Sector	Notes
Manufacturing	Facilities engaged in the mechanical or chemical transformation of materials or substances into new products
Metal mining	Not including metal mining services, and uranium, radium, and vanadium ores
Coal mining	Not including coal mining services
Electrical utilities	Limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce
Treatment, Storage, and Disposal facilities	Limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C, 42 U.S.C. Section 6921 et seq.
Solvent recovery services	Limited to facilities primarily engaged in solvent recovery services on a contract or fee basis
Chemical distributors	Facilities engaged in the wholesale distribution of chemicals and allied products
Petroleum bulk terminals	Facilities engaged in the wholesale distribution of crude petroleum and petroleum products from bulk liquid storage facilities



More Info on Reporting Criteria

- **A facility is defined as** “all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with, such person).”
(EPCRA § 329 (4))
- **The full-time employee criterion means** 10 or more full-time employee equivalents (i.e., 20,000 hours) (40 CFR § 372.3 and 372.22(a))
 - All persons employed by a facility regardless of function (Includes operational staff, administrative staff, contractors, etc.)



Processing Activities

- **Manufacturing** (EPCRA § 313(b)(1)(C)(i) and 40 CFR § 372.3) includes generating a listed chemical whether intentionally or coincidentally as an impurity or by-product as well as importing
- **Processing** (EPCRA § 313(b)(1)(C)(ii) and 40 CFR § 372.3) means preparation of a Section 313 chemical, after its manufacture, for distribution in commerce (includes, for example, use as a reactant to manufacture another substance or product, added as a formulation component, incorporated as an article component, repackaged for distribution, quantities sent off site for recycling, and incidental inclusion as an impurity)
- **Otherwise Use** (40 CFR § 372.3) includes most activities that are not manufacturing or processing



Reporting Form R Content

Part I	
Section 1:	Reporting Year
Section 2:	Trade Secret Information
Section 3:	Certification
Section 4:	Facility Identification
Section 5:	Parent Company Info
Part II	
Section 1:	Toxic Chemical ID
Section 2:	Mixture Component ID
Section 3:	Activities & Uses
Section 4:	Max Amt on site for CY
Section 5:	On-site Releases
Section 6:	Off-site Transfers
Section 7:	On-site Waste Treatment, Energy Recovery, Recycling Processes
Section 8:	Source Reduction and Waste Management Activities



TRI-MEweb and Submitting Via CDX

- EPA requires electronic filing of reporting forms via TRI-MEweb
 - No paper submissions are accepted (except for trade secrets)
 - Revisions and withdrawals must also be submitted using TRI-MEweb
 - TRI-MEweb tutorials and other resources are available at:
www.epa.gov/tri/trimeweb
- Use paper reporting forms only for trade secret reporting
 - More Information at: www.epa.gov/tri/rfi
- TRI-MEweb is accessed through EPA's Central Data Exchange (CDX): <https://cdx.epa.gov>



For more information on TRI, go to
www.epa.gov/tri

For more information on TRI reporting
requirements, go to
<https://epa.gov/tri/rfi>

Please note that reporting to TRI does not fulfill your reporting responsibilities under other environmental programs (e.g., Chemical Data Reporting, Risk Management Plan, etc.)



Some TRI Reporting Resources

Threshold Screening Tool

(Helps you determine if you must report to TRI)

TRI Program Contacts

(Useful resources to support TRI reporting,
including the phone number for the
TRI Information Center)