

TOXIC RELEASE INVENTORY: THE COMMUNITY RIGHT-TO-KNOW SIDE OF EPCRA

SCS ENGINEERS

The Emergency Planning and Community Right-to Know Act (EPCRA) is a rule under the U.S. Environmental Protection Agency (USEPA). There are two parts to EPCRA. The emergency planning includes annual notification of hazardous chemicals present at your site to your state and local emergency planning and response organizations, and with your fire department. That information is used to help them prepare for emergencies such as chemical releases or fires.

The other side of EPCRA is the right of people to know about the hazardous chemicals that are present and/or released in their communities. This information is disclosed through the toxic release inventory (TRI). TRI covers a variety of industries based on their NAICS code, that employ 10 full-time equivalent employees or more.

What's in a Name?

This report is often referred to by a variety of names, including Toxic Release Inventory, TRI, SARA 313 report, Form R, or Form A. Do not be fooled by the nomenclature; these all refer to the same reporting requirement.

Step 1: First, you'll need to determine if your facility is required to report by identifying the amount of the reportable chemicals or chemical categories that you manufactured, processed, or otherwise used in the previous calendar year. Use these definitions:

- **Manufacture** means to produce, prepare, compound, or import, including incidental manufacture such as a byproduct.
- **Process** means to prepare an already manufactured product for distribution in commerce. This includes repackaging.
- **Otherwise Use** is defined as other chemical use that is not considered manufacturing or processing. If the reportable chemical is not part of the final product, it is considered otherwise used.

Some activities are not subject to reporting; among the exemptions are chemicals in items that meet the definition of "articles," chemicals for personal use,

chemicals used for building and grounds maintenance (the exemption does not apply to cleaning of process equipment), or chemicals for maintenance of motor vehicles. There is also an exemption for "de minimis" concentrations, meaning that the chemical constitutes less than 1% of the formula, or if 0.1% of the chemical is a carcinogen.

There are currently 790 individual chemicals and several chemical categories covered by TRI. USEPA's List of Lists can help you find reportable chemicals. Chemicals that are reportable under TRI are identified in the Section 313 column. Some common reportable chemicals are toluene, xylene, and 1,2,4-trimethyl benzene, often found in paints and cleaning solvents.

Chemicals that are considered persistent bioaccumulative toxins (PBT) can be found both in the List of Lists, and on a dedicated web page <https://www.epa.gov/toxics-release-inventory-tri-program/persistent-bioaccumulative-toxic-pbt-chemicals-covered-tri>. Chemicals in this category that may be emitted include polycyclic aromatic compounds, mercury, mercury compounds, and lead. Be aware that the de minimis exemption does not apply to PBT chemicals.

Certain chemicals that are identified by category may not be listed in the List of Lists; the USEPA has published separate lists for many of these categories. Glycol ethers and water dissociable nitrates, for example – fall into chemical categories.

In 2020, USEPA added some per- and polyfluoroalkyl substances (PFAS) to the list of reportable chemicals. There are 189 PFAS that are reportable for the 2023 report year due July 1, 2024, and several more are being added for the 2024 reporting year. Another significant change for the 2024 reporting year is the removal of de minimis concentrations for PFAS calculations.

After you have identified the non-exempt chemicals and processes, you then need to determine how much of each was manufactured, processed, or otherwise used during the previous year. Each of these categories will be calculated separately for each chemical. The method for determining the totals differs from many other environmental regulatory calculations; USEPA does not require you to use the maximum concentration in all circumstances. For instance, if the Safety Data Sheet (SDS) expresses the concentration as

a range, you may use the midpoint. Many chemical manufacturers provide precise concentrations for TRI reporting in section 15 of the SDS.

Finally, check to see if you have exceeded any thresholds.

- **Manufacture:** 25,000 pounds
- **Process:** 25,000 pounds
- **Otherwise Use:** 10,000 pounds
- **Persistent Bioaccumulative Toxins:** Varies by Chemical

Complete the reporting in Step 2 for each chemical that exceeds a reporting threshold.

Important: *If you are in a covered NAICS code with at least 10 full-time equivalent employees, complete and document Step 1 every year, even if you do not have to file a report.*

Step 2: Forget (nearly) everything you did in Step 1. That step just helped you identify which chemicals are required to be included in the TRI.

For each chemical that exceeds a reporting threshold, the facility is required to calculate releases to the air, wastewater, and stormwater; and the amount of the chemical recycled or treated on-site, or sent off-site for treatment during the previous calendar year.

Choose your Form:

- **Form A:** Use this form if:
 - You are not reporting any PFAS or PBTs; and
 - The amount manufactured, processed, or otherwise used does not exceed 1,000,000 pounds; and
 - The total annual releases do not exceed 500 pounds.
- **Form R:** Use this form if you do not qualify to use Form A.

Complete a TRI report through the USEPA's Central Data Exchange (CDX) by July 1. Some states and tribes have additional reporting requirements.

The USEPA makes TRI submissions available to the public, and you can access them through the Environmental Compliance History Online (ECHO).◆