

Toxic Release Inventory: The Community Right-to-Know Side of EPCRA



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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, including printing and related industries, 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.

There are two steps associated with TRI:

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 coincidental 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, blanket wash for example, it is considered otherwise used.

"Complete a TRI report through the USEPA's Central Data Exchange (CDX) by July 1".

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 more than 770 chemicals and chemical categories covered by TRI. USEPA's List of Lists (found at <https://tinyurl.com/2s3kykz7>) can help you find reportable chemicals. Chemicals that are reportable under TRI are identified in the *Section 313* column. Some common reportable chemicals used in the printing industry are toluene, xylene, and 1,2,4-trimethyl benzene, often found in ink and press wash formulations.

Chemicals that are considered persistent bioaccumulative toxins (PBT) can be found both in the List of Lists, and on a dedicated web page at <https://tinyurl.com/mr3yc7vb>. Chemicals in this category that may be emitted by printers 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 (at <https://tinyurl.com/49ktr3ns>) for many of these categories. Some cleaning solvents and other chemicals commonly used by printers – glycol ethers and water dissociable nitrates, for example – fall into chemical categories; both are common in fountain solution.

In 2020, USEPA added some per- and polyfluoroalkyl substances (PFAS) to the list of reportable chemicals. There are 180 PFAS that are reportable for the 2022 report year due July 1, 2023, and several more being added for the 2023 reporting year.

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: 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 storm water; 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 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, found at <https://cdx.epa.gov/>) by July 1. Some states and tribes have additional reporting requirements. Illinois, Indiana, and Wisconsin state authorities are able to access your report through CDX; so, there is no need to send a copy to each state.

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

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The EPA's Central Data Exchange is located at <https://cdx.epa.gov/>.