THE TOXIC RELEASE INVENTORY (TRI)
PACE® SPOTLIGHT ON PFAS ISSUES AND REGULATIONS

ABOUT THIS PAPER
The Pace® Spotlight series is designed to shed light on important topics of concern to our clients. Wherever possible, we try to educate as well as provide actionable information.

ACRONYMS
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
EPCRA – Emergency Planning and Community Right to Know Act
NDAA – National Defense Authorization Act
SNUR – Significant New Use Rule
TRI – Toxic Release Inventory

WHAT IS THE TOXIC RELEASE INVENTORY?
Created in 1986 under the Emergency Planning and Community Right-to-Know Act (EPCRA), the Toxic Release Inventory (TRI) tracks toxic chemical releases from industrial facilities into the environment. This information is made available to the public in the U.S. EPA’s online TRI search tool.

Although TRI has been around for more than three decades, it wasn’t until 2019 that the first PFAS were added to the TRI industry reporting requirements. The number of PFAS chemicals included in TRI now stands at 180.

WHAT YOU NEED TO KNOW
• TRI is a reporting requirement; not a regulatory control on the amount of chemicals released into the environment.
• The number of PFAS included in TRI continues to grow, so businesses that use any PFAS should watch for new reporting requirements.
• PFAS are not always clearly labeled or spelled out on material safety data sheets (SDS).
• Fluorinated plastics can also contain PFAS, which can leach into the container’s contents.
• In December of 2022, the EPA published a proposed rule designating PFAS as Chemicals of Concern under TRI. Once finalized, the change will remove the de minimus reporting exemption.
• PFAS do not have to be released directly into the environment to trigger a reporting requirement. For example, release to a waste disposal facility is still considered a release into the environment under TRI.
• Businesses should consult the U.S. EPA’s list of covered industry sectors to see if they are included or exempted from reporting.

INDUSTRIES COVERED BY TRI
Not all industry sectors are required to report, but the list is expansive. Refer to the EPA’s TRI-Covered Industry Sectors page for details of those businesses included as well as exemptions from the program. A small sample of the types of businesses covered are listed below. Many of the businesses required to report may not use the covered PFAS in their operations, but as the list of PFAS included in TRI grows, all businesses should carefully examine the chemicals used in their operations.

• Chemicals Manufacturing
• Electronics Manufacturing
• Farming
• Food & Beverage Manufacturing
• Incinerators
• Landfills
• Logging
• Oil & Gas
• Primary & Fabricated Metals
• Publishing
• Pulp & Paper
• Textile & Apparel Manufacturing
**FAQ: WHAT IS CONSIDERED A “RELEASE” OF CHEMICALS UNDER TRI?**

For the purposes of TRI reporting, both accidental and planned releases into the air or water must be reported. Accidental releases are, of course, unplanned incidents that release the covered compounds into the environment. This can include more than just chemical spills. For example, the unintended release of PFAS compounds in stack emissions or through incomplete combustion disposal methods may be included in this category.

Planned releases include the purposeful disposal of covered compounds. It’s important to note that the release does not have to be directly into the environment. For example, if a facility transfers hazardous waste to a processor for disposal, this is considered to be a release into the environment under TRI.

**FAQ: DO I NEED TO REPORT AFFF STORAGE OR RELEASE?**

The legacy aqueous film-forming foam (AFFF) used to fight Class B chemical fires frequently contains PFAS. This foam has a long shelf-life, and a facility covered under TRI may have these compounds in storage. Always consult a compliance expert for the latest reporting requirements, but it’s our understanding that stored AFFF does not need to be reported. However, if the foam is used to fight a fire, there is an accidental discharge, or a leakage is discovered, these releases must be reported.

**FAQ: HOW IS THE TRI DATA USED?**

TRI was initiated under the auspices of the 1986 Emergency Planning and Community Right-to-Know Act (EPCRA) to support informed decision-making by companies, government agencies, non-governmental organizations, and the public. While TRI in itself does not set limits on the quantity of compounds that can be released into the environment, nor on the methods of disposal, the EPA leverages the data from TRI as they set enforceable limits and impose regulatory processes under other programs.

---

**PFAS INCLUDED IN TRI**

The U.S. EPA adds chemicals to the TRI reporting requirements based on three criteria. These chemicals are expected or known to cause:

- Cancer or other chronic human health effects
- Significant adverse acute human health effects
- Significant adverse effects on the environment

As of reporting year 2022, there are now 180 PFAS covered by TRI. The 2020 National Defense Authorization Act (NDAA) provides a framework for automatically adding new PFAS every year. For example, when a Significant New Use Rule (SNUR) is determined to cover a PFAS compound or if the EPA finalizes toxicity values for a PFAS compound, that PFAS compound will automatically be added to TRI reporting requirements. The list of PFAS for reporting year 2022 can be found [here](#).

**RELATED RULES & PROGRAMS**

PFAS regulations and rules, whether initiated at the federal, state, or local level, often overlap. This list is not all-inclusive, but here are a few related rules. Note that SNUR is the only one listed that is directly related to TRI, but both CERCLA and NPDES cover the reporting of PFAS releases.

- **CERCLA**: Once PFOA and PFOS are designated hazardous substances under CERCLA (expected Summer 2023), any person in charge of a facility or vessel must immediately notify the National Response Center, state, or Tribal emergency response commissions, and the local or Tribal emergency planning committees when there is a release of PFOA or PFOS greater than one pound over a 24-hour period.

- **SNUR**: Chemicals that are part of a SNUR are automatically added to TRI for the next reporting period.

- **NPDES**: The National Pollutant Discharge Elimination System covers permitting for the discharge of toxic chemicals into the waters of the U.S.
WHY ACT NOW?

In its 2021-2024 PFAS Strategic Roadmap, the EPA made it clear that it intends to be more aggressive at regulating PFAS in industry over the next couple of years. The agency intends to use existing tools, such as TRI, to accelerate progress. Organizations covered under TRI should ensure reporting compliance, including examining possible sources of release that they haven't considered before, e.g., stack emissions. It is also expected that the list of PFAS compounds covered by TRI will continue to grow, so assessing total PFAS emissions now may help organizations be better prepared for future reporting requirements and regulatory action. Finally, the EPA intends to classify PFAS as "chemicals of special concern" by the end of 2022, removing the de minimus reporting rule. This action will remove the reporting exemptions for extremely low levels of release, thus expanding reporting requirements for many businesses covered under TRI.

HOW PACE® CAN HELP

Some industrial uses of PFAS are easy to identify, but many organizations may not know whether the chemicals used in their operations are covered under TRI. Here are some ways Pace® helps customers maintain compliance.

- Labels and material safety data sheets are not always clear. Our PFAS experts are happy to review your documents to help you spot potential TRI-listed compounds.
- At a minimum, TRI-covered entities should perform wastewater effluent testing to ensure compliance with reporting requirements. Pace® offers several wastewater test methods and can help you choose the right method for your scenario and compliance requirements.
- We can analyze commercial waste prior to disposal or transfer to a waste disposal facility to help ensure compliance with all release reporting requirements.
- For landfill operators (commercial or industrial), we can analyze leachate for PFAS.
- For wastewater treatment facilities, we offer influent and effluent testing for PFAS and PFAS precursors. We can also test biosolids for the presence of PFAS.
- We can help you uncover unexpected sources of PFAS. For example, when pesticides that did not include PFAS as an ingredient were found to contain PFAS, it was suspected the compounds had leached from their fluorinated plastic containers to the product. Pace® provides several tests that can be used to analyze storage containers and commercial and industrial products for PFAS content.

CONTACT US

For more information, visit our website:

LEARN MORE ABOUT PACE®

Pace® makes the world a safer, healthier place. We partner with clients to provide the service, science, and laboratory data needed to make critical decisions that benefit us all. Through a nationwide laboratory network, Pace® advances the science of businesses, industries, consulting firms, government agencies, and others. More at PACELABS.com.