INTRODUCTION:

TRIGGERED BY THE DISASTER IN BHOPAL, INDIA, WHERE MORE THAN 2,000 PEOPLE WERE KILLED OR CRITICALLY INJURED AS A RESULT OF AN ACCIDENTAL RELEASE OF METHYL ISOCYANATE, CONGRESS PASSED THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA). EPCRA FOCUSES ON THE SAFETY HAZARDS ASSOCIATED WITH STORING AND HANDLING TOXIC CHEMICALS AND REDUCING THE LIKELIHOOD OF A DISASTER.

SARA 312 (TIER II): BACKGROUND

Under SARA 312 (Tier II), facilities must annually report an inventory of any hazardous chemicals used or stored in the facility in excess of the product threshold to their State Emergency Response Commission (SERC), Local Emergency Planning Committee (LEPC), and local fire department by March 1st for the prior calendar year. For Tier II, hazardous chemicals are defined as any substances for which a facility must maintain a Material Safety Data Sheet (MSDS) under the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

This standard identifies the criteria used to classify a hazardous chemical. MSDSs provide detailed information on the health and physical hazards of chemicals, along with protective measures. Facilities with hazardous chemicals (or products with hazardous chemical components) in quantities that equal or exceed the following thresholds must report:

• For Extremely Hazardous Substances (EHS): Either 500 pounds or the Threshold Planning Quantity (TPQ), whichever is lower

• For gasoline (all grades combined) at a retail gas station: 75,000 gallons (or approximately 283,900 liters) if the tank(s) was stored entirely underground and was in compliance at all times during the preceding calendar year with all applicable Underground Storage Tank (UST) requirements at 40 CFR part 280 or requirements of the State UST program approved by the Agency under 40 CFR part 281
**INTRODUCTION:**

**EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW ACT**

- For diesel fuel (all grades combined) at a retail gas station: 100,000 gallons (or approximately 378,500 liters) if the tank(s) was stored entirely underground and the tank(s) was in compliance at all times during the preceding calendar year with all applicable UST requirements at 40 CFR part 280 or requirements of the State UST program approved by the Agency under 40 CFR part 281
- For all other hazardous chemicals: 10,000 pounds

**SARA 313 (TRI): BACKGROUND**

Under SARA 313 (Toxic Release Inventory – TRI), facilities must annually submit a TRI form for each of the listed chemicals that are processed, manufactured, or otherwise used above the applicable regulatory threshold quantities by July 1st of the prior calendar year. The forms may be submitted online using TRI-MEweb.

The list incorporates over 600 TRI chemicals, including chemical categories, such as glycol ethers, nitrates, and chromium compounds. TRI is designed to inventory information on the use, disposal, and release of the listed TRI toxic chemicals for thousands of facilities across the U.S., and document how facilities control those chemicals through methods such as energy recovery, recycling, and treatment.

Facilities with chemicals in quantities that equal or exceed the following thresholds must report for listed chemicals that exceed the following thresholds:

- 25,000 pounds if the chemical is processed
- 25,000 pounds if the chemical is manufactured
- 10,000 pounds if the chemical is otherwise used

**Sage helps clients determine:**

1. If they need to report for Tier II;
2. Which chemicals need to be included in the report based on our experience with the rules and regulations; and
3. State-specific requirements that must be met.

Sage also prepares submission packages. While certain determinations may be straightforward, such as the amount of oil stored onsite, there are others that require a thorough working knowledge of the rules and regulations and their application. For instance, lead-acid batteries contain both lead (10,000 lbs threshold) and sulfuric acid (500 lbs EHS threshold). Therefore, a facility that runs two or three electric forklifts may have enough sulfuric acid onsite to trigger the reporting threshold and must submit Tier IIs for sulfuric acid.
OUR SERVICES AND APPROACH:

MEETING REPORTING REQUIREMENTS

**SARA 312 REPORTS**

SARA 312 reports have an annual deadline of March 1st, and must be submitted to the LEPC, SERC, and local fire department. Tier II reporting requirements are federal regulations that incorporate state-specific requirements. Some states require specific site plans, MSDSs, and a fee in addition to the reports. Most states accept Tier IIs electronically; however, some require paper submissions to the SERC and fire department.

**SARA 313 REPORTS**

SARA 313 reports have an annual deadline of July 1st, and must be submitted to EPA and the state agency electronically via EPA’s TRI-MEweb program. Facilities are required to report for TRI if they fall within the applicable NAICS/SIC code, have greater than or equal to ten full-time employees, and exceed the reporting thresholds. Sage helps facilities determine if they meet the applicability requirements; prepares the calculations, reports, and forms; and assists with form submittal.

TRI takes a comprehensive look at all of the chemicals and chemical mixtures that are used and/or manufactured at a facility. This includes everything from process-related materials, to paints used on process-related equipment, to asphalt used to pave process-related roadways, to combustion of fuels. Needless to say, TRI reporting can be very calculation intensive and involves a thorough understanding of facility operations and the applicable rules. As an example, EPA has published guidance where the chromium in refractory brick must be evaluated (if applicable) for all three threshold categories: as an otherwise-used component of the oven, as chromium compounds manufactured when the oven is heated and chromium forms chromium oxide, and as chromium compounds processed as they stay as impurities in the final product. Sage ensures that every chemical and product is evaluated against the correct reporting threshold or meets exemptions allowed by the regulation.

It is critical that the correct values are compared against the correct thresholds to ensure reporting mistakes do not lead to penalties—as these can be very costly. EPA assesses fines of up to $37,500 per chemical, per reporting year for up to five years. For instance, if a glass manufacturing plant fails to evaluate their refractory brick for various metal compounds for five years, EPA could fine the facility $187,500 per unreported chemical. Sage navigates through the difficult TRI regulations to ensure that reports are accurate, the facility is in compliance, and no fines are incurred. Where applicable, Sage also drafts voluntary self-disclosures to EPA and assists with retroactive reporting for mistakes or errors within the five year statute of limitation.

**PREPARING NEW AND RETROACTIVE REPORTS**

Among other things, Tier II reports are provided to firefighters and first responders in the event of an emergency to ensure their safety. If there are several large tanks of
our services & approach:

meeting reporting requirements

flammable oil or formaldehyde (carcinogen) within the facility, first responders need to see those chemicals listed on the Tier II to ensure their safety. Sage always encourages a comprehensive and thorough chemical inventory review for all industrial facilities. We help facilities prepare Tier II reports to ensure that all products are correctly accounted for and the reports are submitted on time.

New Reports
Most facilities need help preparing TRI reports due to the complicated nature of the calculations and forms. One of TRI’s principal functions is to improve access to information about toxic chemical releases to the environment that may affect local communities. Sage works with facility personnel to understand their processes and how the regulations apply. In many cases, we conduct one-day audits. From there, we evaluate each chemical or product used by the facility for exemptions, use, and TRI hazardous components. After all of the products are evaluated, each TRI chemical is applied to its applicable threshold. For instance, Xylene may be otherwise used as a component of paint or it may be processed as a process-related solvent. Based on the exceeded threshold, Sage evaluates the facility’s releases and prepares the necessary forms.

Retroactive Reports
In certain states, retroactive reporting is required. In Arkansas, if an existing facility has just learned they are subject to Tier II and submits reports for the first time in 2011 but does not file retroactive reports for the prior reporting years, the facility is in violation. Sage helps create retroactive reports for prior reporting years and draft and submit self-disclosures to protect facilities from the potential for very large fines.

There are several approaches that can be taken for retroactive reporting, and Sage tailors each approach to the client’s needs and specific situation. We work with the facility to learn and understand the process, evaluate all of the chemicals/products used and stored at the facility for OSHA hazards, and evaluate the amount of chemicals/products used or stored onsite to determine if the thresholds have been exceeded. Based on this analysis, Sage prepares the reports to meet all federal, state, and local-specific requirements.

After the reports are submitted and prepared, Sage provides the facility with user-friendly and easy to use spreadsheets to keep onsite for documentation purposes. We also provide final copies of the forms submitted to EPA, along with instructions on maintaining documentation onsite for the three year recordkeeping window. We can also train facility staff to use the spreadsheets and provide annual oversight for future reporting years—serving as final QA/QC for the facility to ensure that all details are correctly represented.

Administrative Data
There are other parts to the Tier II application that may need to be completed for certain states, such as a site maps. Sage prepares maps and other items as required by the state, where we coordinate with the facility to obtain and incorporate relevant documentation within the spreadsheets. All numbers, conditions, and process or release related assumptions are clearly documented on the spreadsheets for both Tier II and TRI reporting and background documentation.
OUR SERVICES & APPROACH:

MEETING REPORTING REQUIREMENTS

TIMING/PROCESS

Tier IIs are due annually on March 1st, and TRI reports are due annually on July 1st for the prior calendar year. Sage usually suggests one month notice to begin work prior to the reporting deadlines. The time required to complete reports fluctuates based on the size of the facility, nature of operations, the availability of data, and other factors. Consequently, time required to create a completely new Tier II report varies depending on the details of the concerned facility.

SUMMARY:

SAGE’S SARA 312 & 313 OFFERINGS

According to Federal and State regulations, certain facilities must submit Tier II and TRI reports. Typically, if a facility reports for TRI, they will need to report Tier IIs, as well. Both Tier II and TRI reports require a complex, working knowledge of the SARA 312 and 313 regulations. Sage helps clients navigate through the rules, regulations, exemptions, and definitions to ensure that all calculations and forms are correct.