

# EPCRA SECTION 313: TRI REPORTING

**MELISSA HART**, C: 636-221-8941, MELISSA.HART@SAGEENVIRONMENTAL.COM

**KARI KEEGAN**, C: 312-965-8038, KARI.KEEGAN@SAGEENVIRONMENTAL.COM

**BRUCE DUMDEI**, C: 708-269-7520, BRUCE.DUMDEI@SAGEENVIRONMENTAL.COM

© NOVEMBER 2013. ALL RIGHTS RESERVED. REVISED NOV. 12, 2013

## BACKGROUND:

REGULATORY/  
TECHNICAL  
BACKGROUND

**TRIGGERED BY THE BHOPAL, INDIA DISASTER, IN WHICH AN ACCIDENTAL RELEASE OF METHYL ISOCYANATE KILLED OR CRITICALLY INJURED MORE THAN 2,000 PEOPLE, 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 ON REDUCING THE LIKELIHOOD OF A DISASTER.**

**UNDER EPCRA SECTION 313, APPLICABLE FACILITIES MUST ANNUALLY SUBMIT A TOXIC RELEASE INVENTORY (TRI) FORM FOR EACH LISTED CHEMICAL THAT IS PROCESSED, MANUFACTURED, OR OTHERWISE USED ABOVE THE APPLICABLE REGULATORY THRESHOLD QUANTITIES BY JULY 1ST FOR THE PRIOR CALENDAR YEAR. 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 APPLICABLE FACILITIES ACROSS THE U.S. IN ADDITION TO HOW APPLICABLE FACILITIES CONTROL THOSE CHEMICALS THROUGH METHODS SUCH AS ENERGY RECOVERY, RECYCLING, AND TREATMENT. THE REQUIRED FORMS MAY BE SUBMITTED ONLINE USING TRI-MEweb.**

## OUR SERVICES AND APPROACH:

### APPLICABILITY

A facility is required to report under Section 313 when it fulfills all three of the following criteria:

- The facility is covered under a listed Standard Industrial Classification/North American Industry Classification System (SIC/NAICS) Code);
- The facility has 10 or more full-time employee equivalents (i.e., a total of 20,000 hours or greater); and
- The facility manufactures (including import), processes, or otherwise uses any EPCRA Section 313 chemical in quantities greater than the established threshold over the course of a calendar year. Facilities must report for listed chemicals which exceed the following thresholds:
  - 25,000 lbs if the chemical is processed;
  - 25,000 lbs if the chemical is manufactured; or
  - 10,000 lbs if the chemical is otherwise used.

*Note: Lower thresholds exist for certain very toxic chemicals (10 lbs - mercury, 100 lbs - lead, 0.1 gm dioxins). Please check the chemical list or call Sage for assistance. See EPA weblink for the TRI program at <http://www.epa.gov/toxics-release-inventory-tri-program>*

### THRESHOLD DETERMINATIONS AND REPORTING

TRI evaluations should:

- **Assess ALL non-exempt chemicals used on site** – raw materials, feedstock, intermediates, and process-related maintenance chemicals – for possible TRI chemical content;
- **Properly assess applicable exemptions**, which may apply to the TRI chemicals and mixtures used on site. Potential exemptions include the following:

*De minimis:* Materials that contain non-carcinogenic TRI chemicals in percent by weight concentrations less than 1.0%, or less than 0.1% for carcinogens, are deemed de minimis. If TRI chemicals are present below these concentrations, they are not subject to threshold determinations or release calculations;

*Article:* TRI chemicals are article exempt if they are formed into a specific shape or design during manufacture, have end-use functions dependent in whole or in part on their shape or design, and do not release a Section 313 chemical under normal processing or use conditions at a facility. Generally, the article exemption does not apply to the actual manufacturing of articles and does not include machining, grinding, and finishing operations associated with metal work;

*Laboratory activities;*

*NAICS code-specific exemptions*, such as coal mining extraction activities or metal mining overburden; and

*“Otherwise Use” exemptions*, including motor vehicle maintenance (does not include fuel combustion from motor vehicles), routine janitorial or facility (does not include those activities that are integral to the production process), grounds maintenance, structural components, personal use, and intake water and air.

- **Prepare threshold determination calculations** for each TRI chemical/category to determine if thresholds are exceeded.

If a facility exceeds any of the thresholds after the evaluation, the facility must calculate and report all releases and waste management activities including, but not limited to, air emissions, waste shipments, wastewater, and spills. Facilities that complete TRI evaluations should retain all records (minimum 3 years) pertaining to the evaluation even if reporting is not required.

## OUR SERVICES AND APPROACH:

---

### COMMON MISTAKES

Below are examples of common errors and mistakes Sage has observed in TRI documentation:

- Inaccurate and limited threshold determination calculations – “starting in the middle” with air emission calculations;
- Overlooking the fact that many raw materials may contain TRI chemicals as impurities, which may be reportable even though they make up such a small percentage of the material (i.e., mercury/mercury compounds and lead/lead compounds in natural gas, fuel oil, coal, asphalt, ore, minerals);
- Failure to calculate threshold determinations for materials that “straddle” the de minimis threshold of a TRI chemical or chemical category (common for metal alloys);
- Failure to evaluate natural gas in threshold determinations as “coincidental manufacture” of TRI chemicals resulting from combustion of the fuel or “otherwise use” of impurities contained in the gas prior to combustion; and
- Failure to calculate byproducts “manufactured” during treatment (i.e., nitrates from the neutralization of nitric acid in water streams or nitrates generated from the biological treatment of wastewater).

### REQUIREMENTS:

#### HOW SAGE HELPS MEET THEM/OUR SERVICES

Sage helps clients navigate difficult TRI regulations to ensure that reports are accurate, facilities are in compliance, and no fines are incurred.

- Sage prepares TRI threshold calculations, release and waste management calculations, and files Form R reports;
- Sage conducts independent Senior Quality Assurance/Quality Control (QAQC) for TRI threshold and release calculations if the facility/client has already prepared the appropriate documents and reports; and
- Sage helps clients draft voluntary self-disclosures to the Environmental Protection Agency (EPA) and assists with retroactive reporting for mistakes or errors within the 5-year statute of limitation.

TRI reporting can be very calculation intensive and involves a thorough understanding of facility operations and the applicable rules. EPA may assess fines of up to \$37,500 per chemical, per reporting year for up to 5 years if not completed correctly.