Advances in TRI Data Reporting and Collection Wednesday, 10:45-11:45 a.m. Atrium Ballroom

Understanding the Basics of TRI Data Collection and Presentation before the Interpretation

Morton Wakeland, Jr., Presenter

The Toxics Release Inventory, more commonly referred to by its acronym, TRI, is the premier EPA database that houses chemical releases information on over 650 different chemicals and chemical categories. With the Pollution Prevention Act of 1990, release information was augmented with waste management information (Section 8. Source Reduction & Recycling Activities, now Waste Management) on those same chemicals and chemical categories beginning with 1991 reports.

These data are retrieved from the TRI though various publicly available EPA web tools, e.g., Envirofacts, & TRI Explorer, and standalone software like TRI.NET, to mention only a few. Because of the database's longevity (reporting year 1987 to present), users should understand that over the years the database has not remained constant. That is, information has not always been categorized in the same manner and the list of potentially reportable TRI chemicals themselves have changed, with numerous chemicals being both added and also delisted (removed from the list of potentially reportable TRI chemicals). Therefore, interpretation of the data presents some unique set of challenges to the ardent users of TRI data. This presentation will give TRI data users the necessary background information so that they better understand how TRI data has been collected and presented over the years and thus make more plausible and accurate interpretations of information retrieve from the TRI database.

TRI-MEweb 2.0 - Eyes to the Future

Juan Parra, Presenter

Presentation on the newest version of TRIMEweb that will be launched in January 2017. Will showcase the new User Interface and functionality of the reporting application that collect 80,000 forms from 23,000 facilities for TRI. The new version of TRI-MEweb is significantly different from legacy version, so industry will benefit from seeing a preview of the new TRI-MEweb software.

Updating the Regulatory Compliance Assistance Program Tool to Improve TRI Reporting for the Polyurethane Industry

Shen Tian, Presenter

The Center for the Polyurethanes Industry (CPI) of the American Chemistry Council launched a spreadsheet-based tool called "Regulatory Compliance Assistance Program (RCAP)" to help users with TRI reporting for diisocyanate users in 2013. This tool builds on and improves previously available resources to assist users in estimating data

required for TRI reporting. The RCAP tool addresses the specific needs of polyurethane industry since the chemical properties and applications of Methylene Diphenyl Diisocyanate (MDI) and Toluene Diisocyanate (TDI) are different than common VOCs. In addition, during the production stage, MDI and TDI react with other ingredients in the formula and therefore are not available for emission. A comprehensive update has been done in the RCAP tool to address these needs by integrating the most recent emission guidance documents from the U.S. Environmental Protection Agency (USEPA). In the updated RCAP tool, polyurethane applications were categorized based on their emission mechanisms and matched with emission algorithms from USEPA's Emission Inventory Improvement Program and General Risk Management Guidance. For applications where USEPA's emission guidance was absent or not applicable, engineering calculations were employed.

In order to increase transparency, documentation was added to explain all the equations used, assumptions made and the rationale of emission algorithm selection, plus detailed user guidance, were also included. Finally, the tool was validated with field measurement data and showed closer agreements than the previous version of the RCAP tool. Sensitivity analysis was conducted to discuss the relative impact of key input parameters to the final emission estimate results. In conclusion, by providing a consistent and more accurate TRI reporting tool to diisocyanate users, the RCAP tool can benefit the industry, government agencies, community and other stakeholders along the value chain in the decision-making processes which involve using TRI data reported by the polyurethane industry.