Transcript for Introduction to the TRI and DMR Comparison Dashboard Tutorial with Accessible Instructions

The tutorial narration is spoken over a video recording capturing movement on the screen. Specific actions are described within brackets.

Introduction

[Begin on the TRI and DMR Comparison Dashboard https://echo.epa.gov/trends/loading-tool/comparison-dashboard/ in an Internet browser.]

In this tutorial, we will provide an overview of the DMR Pollutant Loading Tool's TRI and DMR Comparison Dashboard. We will also provide some background information about TRI and DMR data and explain why we compare the data from these two systems. This tutorial may be useful to you if you are new to TRI and DMR data or are using the comparison dashboard for the first time.

TRI and DMR Comparison Dashboard Introduction

The TRI and DMR Comparison Dashboard is a visual presentation of the Toxics Release Inventory (or TRI) and Discharge Monitoring Report (or DMR) data, organized into 5 sections: Summary Table, Facility Universe Comparisons, Chemical Universe Comparisons, Top Industries, Top Chemicals.

The page initially displays nationwide comparisons of TRI and DMR data for the most recent available year. [*Use the Tab key to navigate to Additional Search Criteria and hit Enter to expand the section.*] You can use the search criteria at the top of the page to refine your scope based on location or watershed. Now, let's review some background information on TRI and DMR data.

TRI and DMR Background

The EPA collects TRI data under the Emergency Planning and Community Right-to-Know Act (EPCRA). EPCRA was created to help communities plan for emergencies involving hazardous substances and to provide public access to information on chemicals at facilities, their uses, and releases to the environment. To support this effort, EPA's TRI collects toxic chemical use and release data from facilities and provides this information to the public. Some facilities that report to TRI may discharge directly to receiving waters or may discharge indirectly (facilities that transfer wastewater to municipal wastewater treatment plants). Municipal wastewater treatment plants (or POTWs) are not required to report to TRI.

In addition, facilities that meet the following three criteria must report to TRI: The facility must be in a TRI-covered industrial sector (as identified by NAICS codes), employ 10 or more full-time employees, and must manufacture, process, or otherwise use a TRI-listed chemical in quantities above the applicable threshold level for the given chemical in a given year.

EPA and states collect DMR data under the National Pollutant Discharge Elimination System (or NPDES) program. The Clean Water Act prohibits anybody from discharging "pollutants"

through a "point source" into a "water of the United States" unless they have an NPDES permit. The NPDES permit will contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or human health. In essence, the permit translates general requirements of the Clean Water Act into specific provisions tailored to the operations of each facility discharging pollutants. Facilities with NPDES permits report compliance with permit limits through DMR submissions. Facilities that report DMRs include industrial direct dischargers and POTWs. DMR data do not capture the wastewater transfers from indirect facilities to POTWs.

Additionally, let's discuss why TRI releases and DMR loads may be different.

Each year, TRI facilities that meet the industry, employee threshold, and chemical activity requirements for TRI reporting must estimate their releases using the best readily available data, which could involve monitoring data, mass balances, or engineering estimates. The facility then submits its TRI report directly to EPA on an annual basis. EPA works continuously to ensure that TRI data are accurate and reliable. Steps taken to promote data quality include analyzing TRI data for potential errors and contacting TRI facilities concerning potentially inaccurate submissions. In 2013, EPA published a final rule requiring facilities to report all non-trade secret Toxics Release Inventory (TRI) data to EPA using the TRI-MEweb online reporting application. Widespread use of TRI-MEweb improves the quality and accuracy of TRI data and allows EPA to get the data to the public faster.

The DMR Pollutant Loading Tool extracts TRI data to present in reports and queries, such as the TRI and DMR Comparison Dashboard. In particular, the dashboard provides access to data regarding TRI chemical releases to surface waters and wastewater transfers to POTWs, which are reported on Sections 5.3 and 6.1 of TRI Form R, respectively.

For DMR data, facilities monitor their wastewater streams for pollutants as required by their NPDES permit. Pollutant quantities and concentrations reported on DMRs are based on chemical analysis and metered flow. Facilities submit these DMR data at a frequency required by their NPDES permit – typically monthly. EPA's 2015 NPDES Electronic Reporting Rule requires facilities to electronically submit their DMR data. EPA collects these DMR data from states and facilities and stores them in a data system, called ICIS-NPDES. EPA's DMR Pollutant Loading Tool then uses the ICIS-NPDES DMR data to calculate annual pollutant loadings.

For a given year, we can compare estimates of discharges that facilities report on their TRI forms and on their DMR forms. By overlaying the TRI and DMR data, the dashboard provides users a more comprehensive understanding of reported discharges. You can examine the differences to further investigate how facilities estimate their TRI releases, and to discover potential reporting issues related to either program. As we compare the TRI and DMR facility universes, keep in mind that while there is overlap, DMR and TRI are different data collections that serve different purposes. In situations where data from a given facility appear in one data set, but not the other, it does not automatically indicate the facility is noncompliant or has made a reporting error.

[Use the Tab key to navigate to the camera icon and hit the Enter key to access the tutorials page.] Click on the tutorial link for demonstrations on how to use the Facility Universe,

Chemical Universe, Top Industries, and Top Chemicals charts to analyze differences in discharge quantities derived from TRI and DMR data. [*Use the Tab key to navigate to the Help link.*] Please also refer to help content for more information.