



DMR Pollutant Loading Tool Version 1.0

TRI SEARCH USER GUIDE

1. OVERVIEW

You have a new tool for analyses of wastewater pollutant discharge data. This tool, the Discharge Monitoring Report Pollutant Loading Tool (abbreviated “Loading Tool”) provides you with pollutant loadings you can use to answer questions about the amount and toxicity of pollutant discharges to U.S. waters.

The tool calculates pollutant loadings from monitoring and permit data from EPA’s Permit Compliance System (PCS) and Integrated Compliance Information System for the National Pollutant Discharge Elimination System (ICIS-NPDES). The tool also includes wastewater pollutant discharge data from EPA’s Toxics Release Inventory (TRI). Data are available for the years 2007 through 2010. This tool helps you access wastewater pollutant discharge data, if you are a general user or if you are a more technical user:

- If you are a **general user**, you can use the *EZ Search* or *TRI Search* to quickly find discharge monitoring data or TRI data based on simple searches.
- If you are a **technical user** (e.g., NPDES permit writer, watershed modeler, or regulatory agency), you can use the *Advanced Search* to access more detailed discharge monitoring data that you can download in a comma-separated value (CSV) file for further analysis in your own software application.

You can navigate the Loading Tool home page using the eight tabs described in Table 1.

Table 1. Loading Tool Tabs and Descriptions

Tab	Description
Overview	Provides general information about the tool including: (1) How to Navigate the Tool; (2) Loading Tool Data Sources; (3) Data Scope and Limitations; and (4) 2010 Beta Release and Testing.
EZ Search	General users can perform simple searches using DMR data. Results are displayed on a Web page in “top ten” lists to help you determine which discharges are important, which facilities and industries are producing these discharges, and which watersheds are impacted.
TRI Search	Similar search interface and display results as EZ Search but the data source is TRI data
Facility Search	Provides direct access to facility-level information, one facility at a time.
Advanced Search	Designed for technical users and provides increased flexibility on search criteria and data to be downloaded as a CSV file for post processing by the user.
Data Explorer	General users can create a thematic map of the United States in which states are shaded in blue in proportion to the user’s search criteria. For example, the user can visually see the number of POTWs in each state with states shaded in dark blue having the most number of POTWs.
Everyday Searches	Provides access to trend charts and other ‘canned’ searches (by geographic location,

	industry sector, and/or pollutant) of DMR data that are often used by technical users. In particular, the “Facility Loading Calculations” on this tab details exactly how the tool calculates annual pollutant loads using DMR data
Users Guide/Technical Documents	Provides the instructions, guides, and metadata to assist users with the Loading Tool.

This document provides guidance for accessing TRI data in the Loading Tool. You can find guidance for using the EZ Search, Facility Search, and Advanced Search in the *User’s Guide for the EZ Search, Facility Search, and Advanced Search*; the Everyday Searches feature in the *Everyday Searches User’s Guide*; and the Data Explorer feature in the *Data Explorer User’s Guide*.

2. TRI DATA IN THE LOADING TOOL

The Loading Tool provides access to TRI data in two ways, shown in Figure 1:

- Direct access to TRI releases via the TRI search; and
- Ability to compare TRI releases to DMR loading results in the EZ Search and Facility Search.

The screenshot shows the 'Discharge Monitoring Report (DMR) Pollutant Loading Tool' interface. At the top, there is a navigation bar with tabs: Overview, EZ Search, TRI Search, Facility Search, Advanced Search, Data Explorer, Everyday Searches, and User's Guides/Tech Documents. The 'TRI Search' tab is circled in blue, with a blue box and arrow pointing to it labeled 'Direct access to TRI data'. Below the navigation bar is a 'Note' section. Underneath is the 'TRI Search' section, which has a red box and arrow pointing to it labeled 'Ability to compare DMR loading results to TRI data'. This section includes instructions and a search form with three main sections: 1. Location or Watershed (with fields for Zip Code, EPA Region, and State), 2. Pollutant (with a field for TRI Chemical Name and a 'Look up chemical name' link), and 3. Industry (with a field for Point Source Category). A 'Select Reporting Year' dropdown menu is set to 2009.

Figure 1. User Access to TRI Data in the Loading Tool

2.1 TRI Search Interface – Direct Access to TRI Data

Using the TRI Search tab you can directly access TRI releases by specifying a reporting year, location or watershed, pollutant, or industry. The TRI Search options are similar to the EZ Search options for DMR data. This allows you to perform parallel queries to compare TRI releases to DMR discharges.

2.1.1 *Year Search Option*

By default, the Loading Tool presents TRI releases for 2010. You can access data for other reporting years (2007-2009), by selecting the year of interest from the selection menu shown in Figure 2.



Figure 2. Year Search Option

2.1.2 *Location Search Option*

By default, the TRI Search reports results for nationwide loadings. A nationwide search includes all 50 U.S. states and U.S. territories and tribes. You can narrow the search to the specified geographic boundaries by specifying an EPA Region, state, county, city, or zip code, as shown in Figure 3.

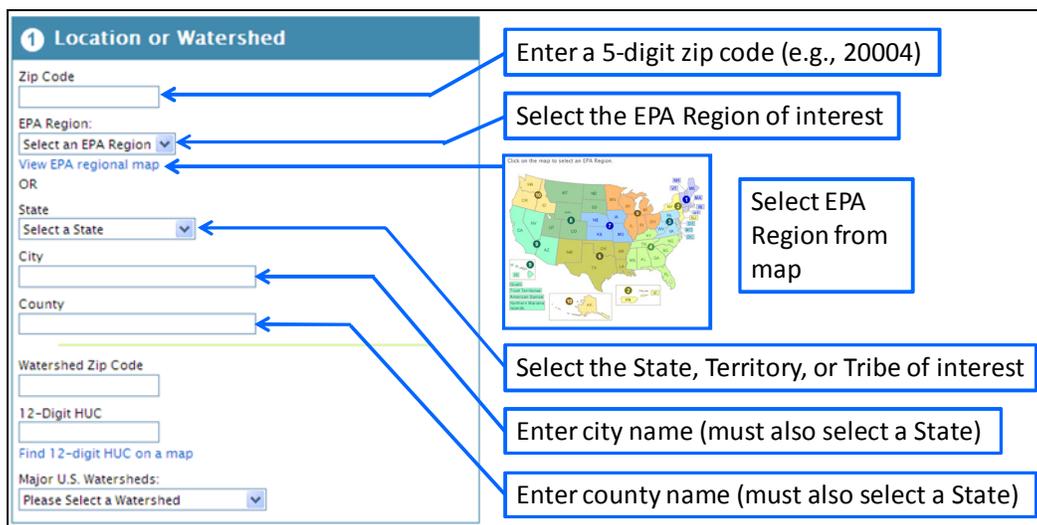


Figure 3. Location Search Option

Tips for Searching by Location

- The TRI Search fields provide options for retrieving information for the location of interest. Entering information for all location fields is unnecessary.
- Begin with broad search criteria (e.g., state) and narrow the search based on the results of the broad search. City names and county names must match exactly with the city and county names in TRI. Therefore, if you enter a city or county name that is different than TRI, your search may return no results.
- Avoid entering redundant search criteria. For example, specifying an EPA region when a state has already been selected is unnecessary.

2.1.3 Watershed Search Option

As an alternative to searching by location, you can filter TRI data using the Watershed Search option. The Loading Tool defines watersheds using the 12-digit hydrologic unit code (HUC-12). You can specify a watershed of interest by entering a zip code, entering a HUC-12 code, or by selecting a major U.S. watershed from the drop down menu, as shown in Figure 4. For example, you can easily focus your search to only include dischargers in the Chesapeake Bay watershed. The “Users Guide/Technical Documents” tab provides maps showing the geographic extent of each “major U.S. watershed.”

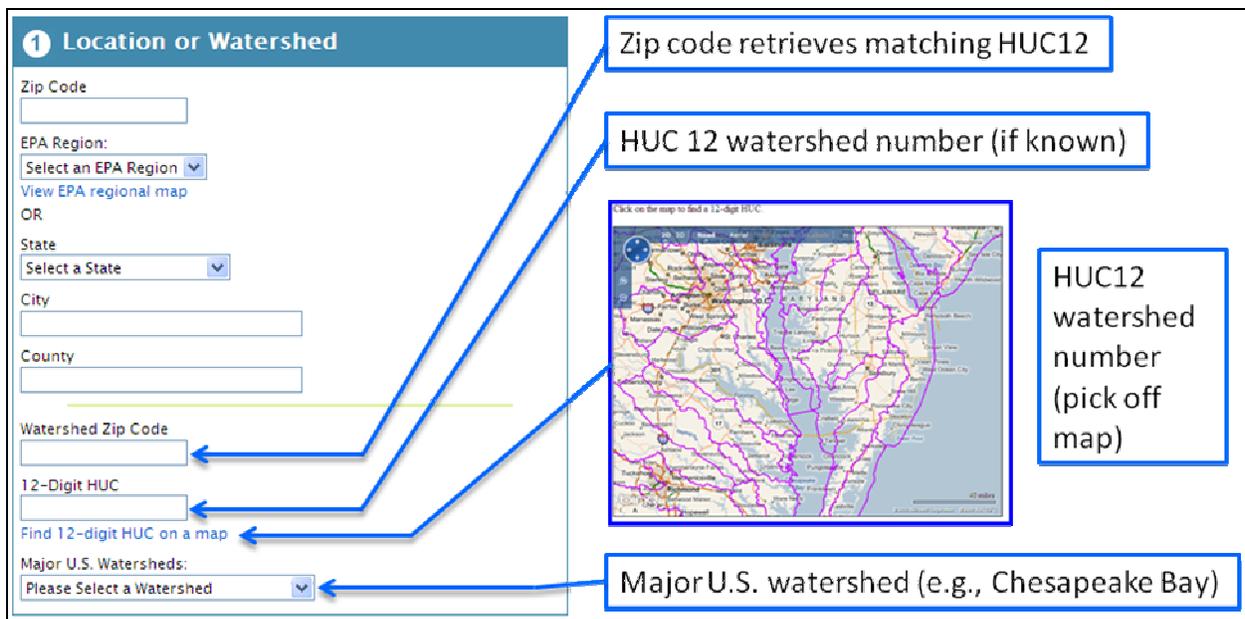


Figure 4. Watershed Search Option

Tips for Searching by Watershed

- The search fields provide three methods for specifying a watershed of interest. Do not enter information in more than one field.
- Begin with broad searches (e.g., zip code or major U.S. watershed) and narrow the search based on the results of the broad search. Approximately 34 percent of TRI Facility IDs do not have a matching HUC-12 in the Loading Tool database. Therefore, searching on a specific HUC-12 code may produce no results, even if a facility discharges to that watershed.

2.1.4 Pollutant Search Option

By default, the TRI Search reports results for all TRI chemicals. These include more than 300 toxic chemicals and chemical categories. Specifying a single chemical or chemical category of interest, as shown in Figure 5, will narrow the search.

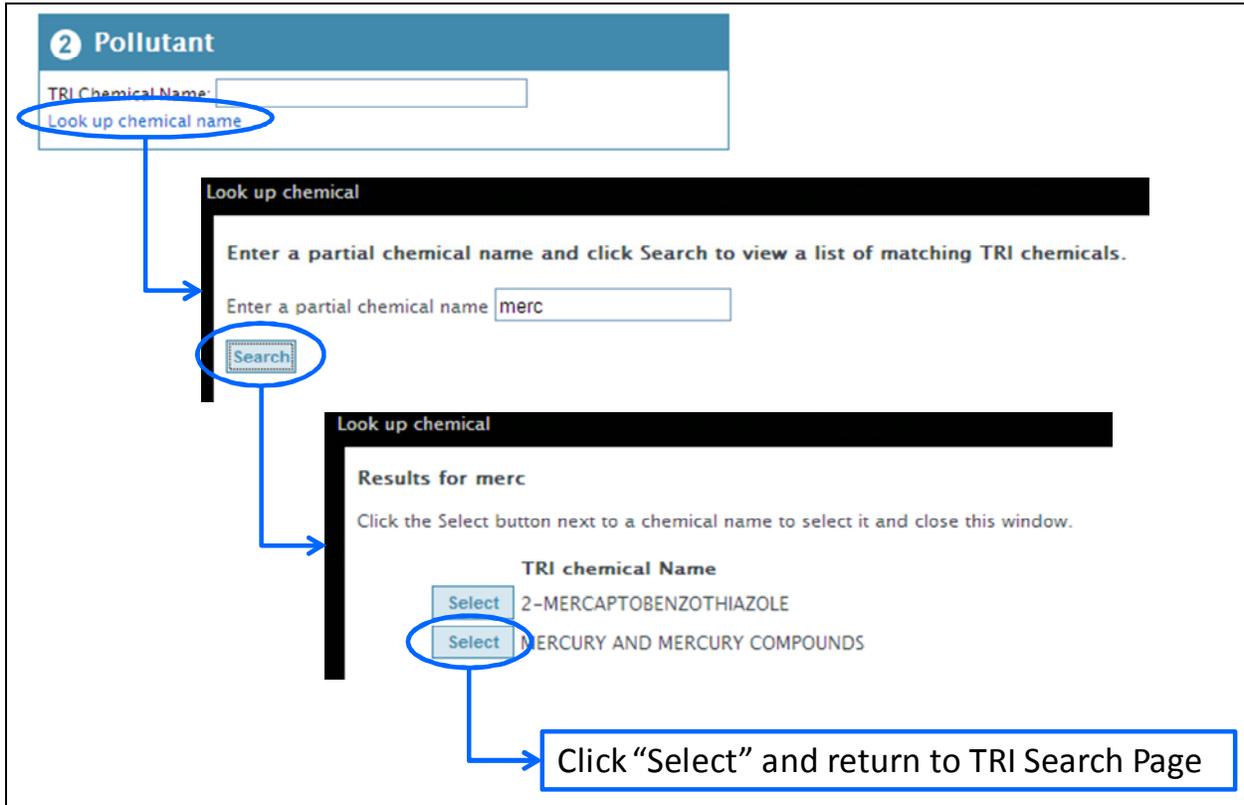


Figure 5. Pollutant Search Option

Tips for Searching by Pollutant

- Use the “Look up chemical name” link to identify the proper TRI chemical name. In the look up search, you can enter a full or partial chemical name, and the Loading Tool will present a list of matching TRI chemical names, from which you can select the chemical or chemical category of interest.

2.1.5 Industry Search Option

By default, the TRI Search reports results for all industries. The results include discharge data from approximately 5,500 industrial facilities with operations covering more than 370 North American Industrial Classification System (NAICS) Codes. As shown in Figure 6, you can limit the results to only include results for a specific Point Source Category, 2-digit SIC code, 4-digit SIC code, 6-digit NAICS Code, or 2-digit NAICS code.

The screenshot shows a web form titled '3 Industry'. It contains several input fields and dropdown menus. Blue callout boxes with arrows point to the following elements:

- Select a Point Source Category:** Points to the dropdown menu for 'Point Source Category'.
- Select a 2-digit SIC Code:** Points to the dropdown menu for 'Industrial Sector ID (2-Digit SIC Code)'.
- Enter a 4-digit SIC Code:** Points to the text input field for 'Enter a Industrial Sector ID (4-digit SIC Code)'.
- Enter a 6-digit NAICS Code:** Points to the text input field for 'Enter a 6-digit NAICS Code'.
- Select a 2-digit NAICS Code:** Points to the dropdown menu for '2-digit NAICS code'.

Figure 6. Industry Search Option

Tips for Searching by Industry

- The menus and search fields provide options for selecting an industry of interest. Do not specify search criteria in multiple fields. For example, selecting a 6-digit NAICS code is unnecessary if a 2-digit NAICS code has been entered. In addition, Point Source Category classifications and NAICS code classifications are not a one-to-one match. Therefore specifying both a Point Source Category and a NAICS code for a search may return no results.
- Begin with a broad search and then further refine the search to the 6-digit NAICS code or Point Source Category of interest, based on the results.
- TRI relies on 6-digit NAICS codes to identify a facility’s industrial classification. The primary NAICS code determines if TRI reporting is required. Most facilities in NAICS codes 11, 21, 22, 31 through 33, 42, 48 through 49, 51, 54, 56 and 81, and federal facilities are potentially subject to TRI reporting. The primary NAICS code is associated with the facility’s revenues, and may not relate to their pollutant discharges
- Although SIC code information is available, it is not required by TRI. Therefore, results from searches based on SIC codes will be limited to the completeness of the SIC code information in the TRI database.

3. EXAMPLE SEARCHES

You can use the Year, Location, Pollutant, and Industry Search options alone or in combination to answer questions, such as the following:

- Which industries in EPA Region 6 reported the largest discharges of dioxin and dioxin like compounds to TRI for 2008?
- What are the largest chemical releases reported to TRI for petroleum refineries in the San Francisco Bay watershed for 2009?

Example TRI Search #1: Which industries in EPA Region 6 reported the largest discharges of dioxin and dioxin like compounds to TRI for 2008?

Enter search criteria as shown in Figure 7 below. Click “Search”. The TRI Search Results page displays a table of the Top NAICS Discharges, shown in Figure 7. The table presents NAICS codes in order of descending direct TWPE.

The screenshot shows the TRI Search interface with the following search criteria:

- Reporting Year:** 2008
- EPA Region:** 06
- Pollutant:** DIOXIN AND DIOXIN-LIKE COMPOUND

The results table, titled "Top NAICS Discharges (2008)", is as follows:

NAICS Code	NAICS Description	Direct TRI Pounds (lbs/yr)	Indirect TRI Pounds (lbs/yr)	Direct TRI TWPE (lbs-eq/yr)	Indirect TRI TWPE (lbs-eq/yr)
325199	All Other Basic Organic Chemical Manufacturing	0.72	0	7,630,021	0
325211	Plastics Material and Resin Manufacturing	0.207	0	60,374	0
325181	Alkalies and Chlorine Manufacturing	0.053	0	564,841	0
321114	Wood Preservation	0.023	0.032	250,417	345,254
322110	Pulp Mills	0.022	0	233,598	0
322121	Paper (except Newsprint) Mills	0.012	0	128,245	0

Figure 7. Example TRI Search – Top NAICS Discharges of Dioxin and Dioxin-Like Compounds in EPA Region 6

Example TRI Search #2: What are the largest chemical releases reported to TRI for petroleum refineries in the San Francisco Bay watershed for 2009?

Enter search criteria as shown in Figure 8 below. Click “Search”. The first two tables presented in the TRI Search Results page list the top ten chemical releases in pounds and the top ten chemical releases as TWPE. The tables present the chemicals in order of descending direct pounds and descending direct TWPE.

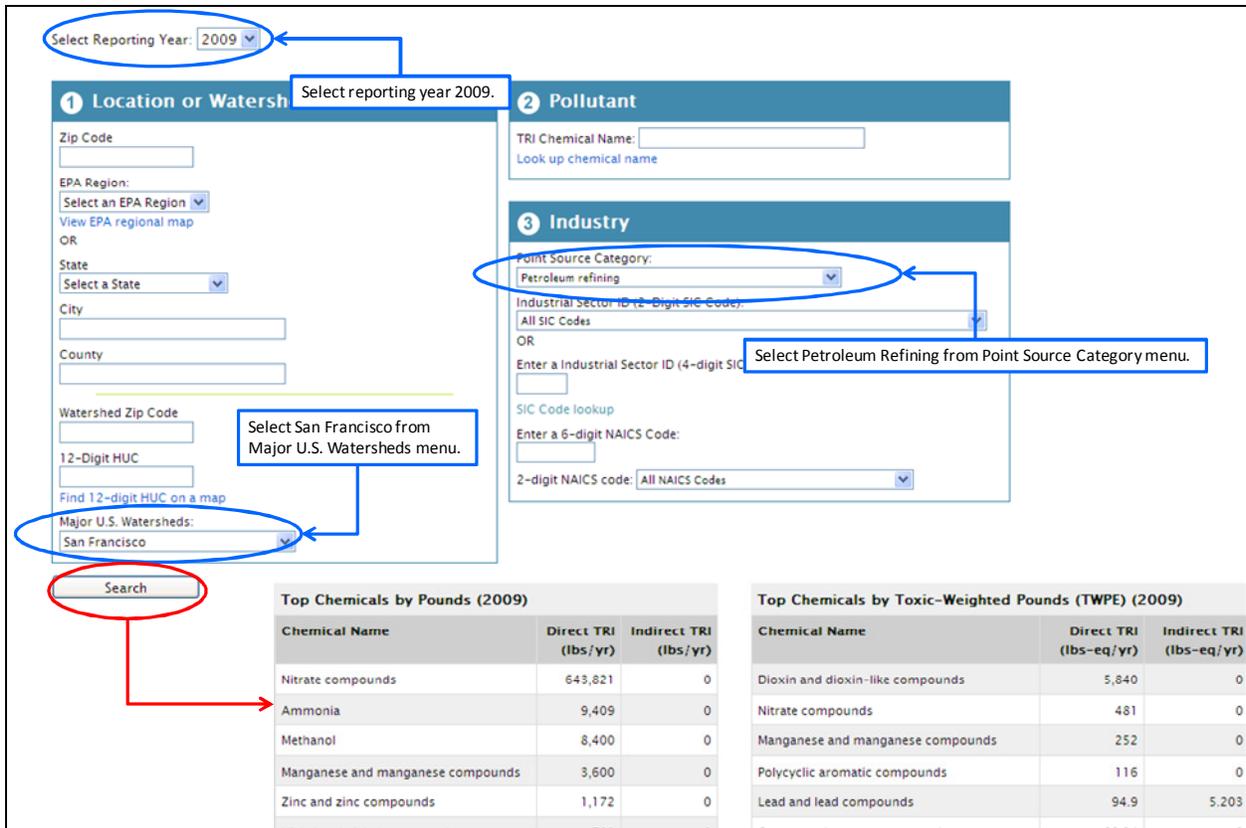


Figure 8. Example TRI Search – Top Discharges from Petroleum Refineries in San Francisco Bay Watershed