# Introduction to the Modernized Water Pollutant Loading Tool https://echo.epa.gov/trends/loading-tool/water-pollution-search/





**ECHO Training Tue, Nov 28, 2017 1:30 PM - 2:30 PM EST** 

# **Outline**

- Quick overview of how EPA and states collect and manage wastewater sampling data from sewage treatment plants and industrial facilities.
- Overview and demonstration of a new EPA web tool for better access to these data.
- Questions and answers and demo of tool.





Under the Federal Clean
Water Act (CWA), industrial
facilities and sewage
treatment plants are required
to get a permit in order to
discharge.

These CWA National Pollutant Discharge Elimination System (NPDES) permits require facilities to sample their wastewater, analyze the pollutants they are discharging, and report these results to states or EPA.



3



These wastewater pollution data are submitted on forms called "Discharge Monitoring Reports" or DMRs.

EPA policy requires states to enter these DMR data for some facilities into EPA's national data system.

EPA and states use DMR data to:

- Calculate permit effluent limits,
- Identify and target effluent limit violations, and
- Improve watershed modeling.





An important consideration in assessing the potential impact of pollutant discharges on human health and the environment is identifying the amount discharged (pounds per day), which can be reported or calculated from the DMR.





EPA also collects wastewater pollutant discharge data (annual amounts) from industrial facilities as part of the Toxics Release Inventory (TRI) program.

The current TRI toxic chemical list contains over 593 individually listed chemicals and 30 chemical categories.



#### New EPA Web Tool for Access to DMR Data



https://echo.epa.gov/trends/loading-tool/water-pollution-search/

EPA has a new web tool, DMR Pollutant Loading Tool, for easier access to DMR and TRI data (2007 to present).

EPA constructed this tool to answer questions in an easy to use interface:

- Who is the discharger of interest
- What is the pollutant of interest:
- When was the discharge:
- Where is the discharge of interest:
- How much point source pollution is discharged?





EPA designed the new tool for two main audiences:

- members of the general public (citizens, researchers) who would like quick and easy access to wastewater pollution data; and
- technical users (permit writers, watershed modelers, regulatory agencies).



#### **DMR Pollutant Loading Tool – What's New**

The Loading Tool was published on EPA's 40<sup>th</sup> birthday (2 December 2010) and has steadily grown into one of the Agency's most popular tools.

EPA has modernized the Loading Tool to increase user access to data, improve search speed and performance, and streamline site maintenance.

#### EPA has also simplified the navigation:

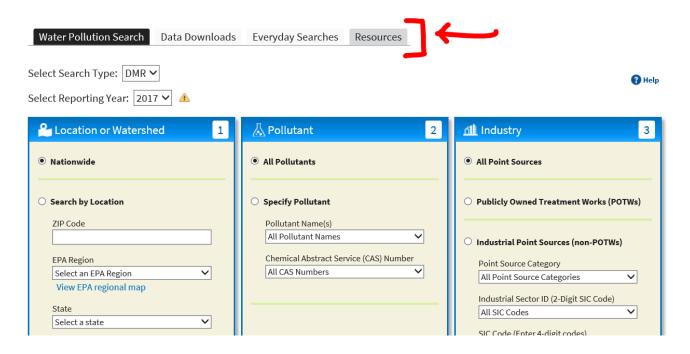
- "Water Pollution Search" combines EZ Search, TRI Search, and Facility Search
- "Get Data" lists tools that generate data files for download, including Custom Search (a.k.a. Advanced Search)
- "Everyday Search" lists specialized features, such as the TRI/DMR Comparison Dashboard



#### **DMR Pollutant Loading Tool – What's New**

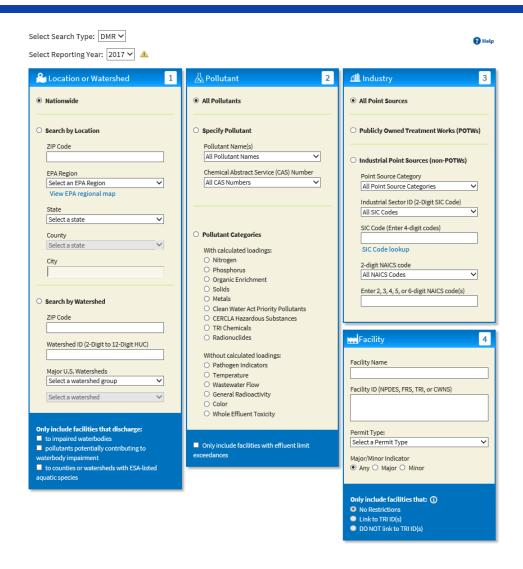
 EPA designed the Loading Tool with different tabs (search interfaces) and result formats (webpage, CSV downloads) to best match the needs of these two audiences.

#### Water Pollution Search (beta)





## **DMR Pollutant Loading Tool – What's New**





# **Webinar Demo of Loading Tool**



You have questions when you see a discharge....

#### Facility Information (DMR)

PAULSBORO REFINING CO LLC, PAULSBORO, NJ, 08066-Congressional District: New jersey's 1st District NPDES ID: NJ0005029 Latitude: 39.8401 FRS ID: 110022294569 Longitude: -75.2574 Other NPDES IDs associated with this FRS ID: None Facility Design Flow (MGD): TRI ID(s): 08066MBU CBU U Actual Average Facility Flow (MGD): Click a TRI ID to view that facility's detail page. 4-Digit SIC Code: 2911 - PETROLEUM REFINING Facility Type: NON-POTW NAICS Code: Permit Type: NPDES Individual Permit Likely Point Source Category: 419 - Petroleum refining Permit Effective Date: 07/01/2007 View Enforcement Compliance Report Permit Expiration Date: 06/30/2012 ☐ View Permit Limits Major/Minor Indicator: Major Wiew Multi-Year Loading Report Permit Issuance: STATE OF NEW JERSEY Approved Pretreatment Program: N/A Combined Sewer Overflow (CSO) Outfall: N/A

— Indicates value contains loads that are calculated using data that has been flagged as potential outliers or data errors.

- Indicates there was one or more exceedances of permit effluent limits for this pollutant sometime during the year. You can hover over the yellow flag to see the load over limit value.

View Facility Loading Calculations for this facility and reporting year. Examining these calculations will show you how the Loading Tool calculates annual pollutant discharges. These calculations can also help identify errors in the underlying discharge monitoring data.

Select Reporting Year: 2012 ▼

County: GLOUCESTER

Pollutant Name	Total Pounds (lbs/yr)	Max Allowable Load (lbs/yr)
Solids, total dissolved	18,057,551	48,810,036
Chemical oxygen demand (COD)	1,138,600	
Solids, total suspended	220,641	1,082,229
BOD, 5-day, 20 deg. C	59,021	
Oil and grease	23,809	240,49
Phosphorus	13,143	
Chlorine produced oxidants	7,409	
Ammonia as N	2,597	445,55
Sulfide	177	6,21
Total phenols	57.1	

(DMR, 2012)			
Pollutant Name	Total TWPE (lbs-eq/yr)	Max Allowable Load (lbs-eq/yr)	
Sulfide	495	17,390	
Chromium, Hexavalent	6.86	1,22	
Ammonia as N	2.88	499	
Chromium	0.32		

...the Loading Tool can provide answers!

Office of Enforcement and Compliance Assurance