

Toxics Release Inventory (TRI) 2018 National Analysis

EXECUTIVE SUMMARY

THIS EXECUTIVE SUMMARY presents an overview of the most recent Toxics Release Inventory (TRI) data, and summarizes the detailed information found on EPA's [TRI National Analysis website](#).

What is TRI?

Congress established the Toxics Release Inventory (TRI) to ensure that every community is empowered with access to information on what chemicals are being handled and released at nearby facilities. TRI includes information on chemical wastes managed, including those that are released to the environment, and activities that reduce waste generation. These data are submitted to EPA annually by U.S. facilities in industry sectors such as mining, manufacturing, electric power generation, and hazardous waste management, as well as federal facilities.

TRI data are used by communities, researchers, and government

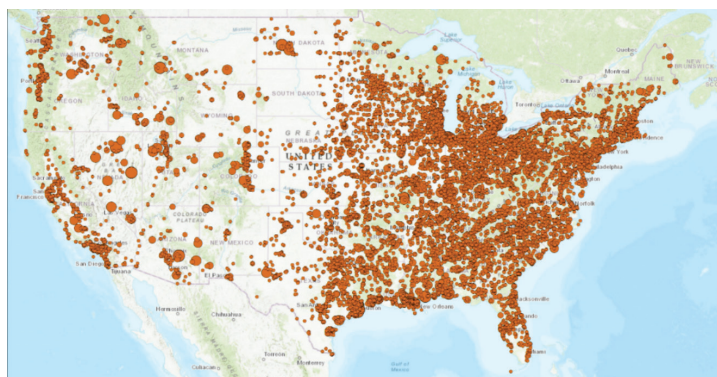
TRI data are publicly available and EPA's web-based tools allow anyone to retrieve the data and conduct their own analyses.

The TRI National Analysis is EPA's presentation of the most recent data

The National Analysis is part of EPA's commitment to transparency and enhances public understanding of the TRI data by:

- Summarizing reported data on releases and other waste management practices of chemicals, and providing trend analyses of these data; and
- Providing interactive tools that support access to and exploration of TRI data.

21,557 facilities throughout the United States reported to TRI for 2018



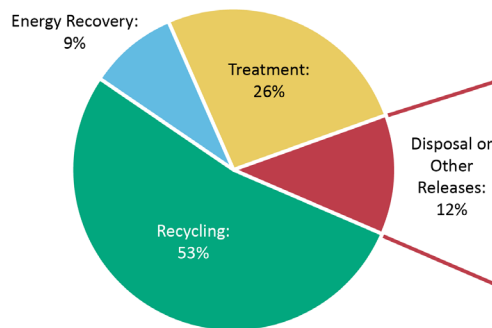
Facilities have until July 1 of each year to submit data from the previous year. These data then undergo quality reviews by EPA and the 2018 data are now ready to be explored. Use the interactive map-based [Where You Live](#) section of the TRI National Analyses to find TRI reporting information for a state, county, city, watershed, or facility.

Overview of the 2018 TRI Data

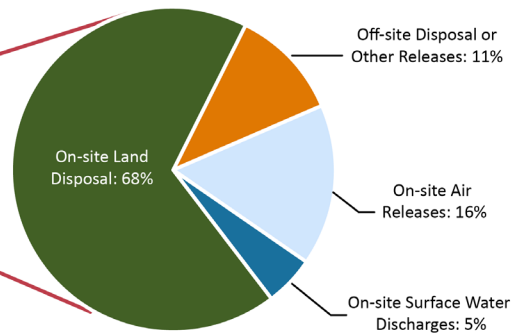
Facilities report to TRI the quantities of TRI-listed chemicals that they dispose of or otherwise release to the environment as a result of normal industrial operations. In addition, facilities report the quantities of “production-related waste” managed, meaning the chemical wastes that they manage through preferred methods including recycling, combusting for energy recovery, and treating for destruction.

The pie charts below summarize the most recent TRI data on: 1) how production-related chemical wastes were managed in 2018; and 2) how the portion of wastes that were disposed of or otherwise released to the environment were handled.

Production-Related Waste Managed, 2018
32.1 billion pounds



Disposal or Other Releases
3.8 billion pounds



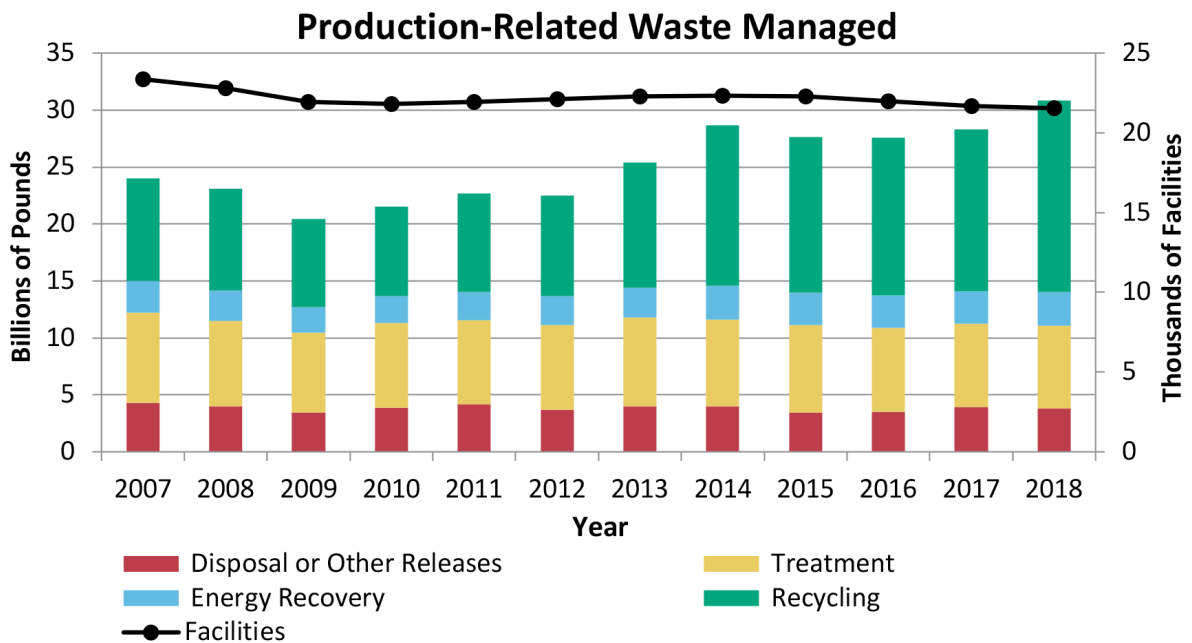
To avoid double counting, the Disposal or Other Releases pie chart on the right excludes quantities of TRI chemicals that are transferred off site from a TRI-reporting facility and subsequently released on site by a receiving facility that also reports to TRI.

- Facilities reported managing 32.1 billion pounds of TRI-listed chemicals as production-related waste. This is the quantity of TRI chemicals in waste that is recycled, combusted for energy recovery, treated and disposed of or otherwise released into the environment. In other words, it encompasses the TRI chemicals in waste generated from the routine production processes and operations at the facilities.
 - Of this total, 88% was recycled, combusted for energy recovery, or treated, and 12% was disposed of or otherwise released into the environment.
- For chemical wastes that were disposed of or otherwise released, facilities also reported where the wastes were released—into the air, water, or land (on site or off site). As shown in the pie chart on the right, most waste was disposed of to land, which includes landfills and underground injection wells, and other land disposal.

As with any dataset, there are several factors to consider when using the TRI data, which are summarized in the [Introduction to the 2018 National Analysis](#). For more information see [Factors to Consider When Using Toxics Release Inventory Data](#).

Trends in production-related waste managed: recycling has continued to increase

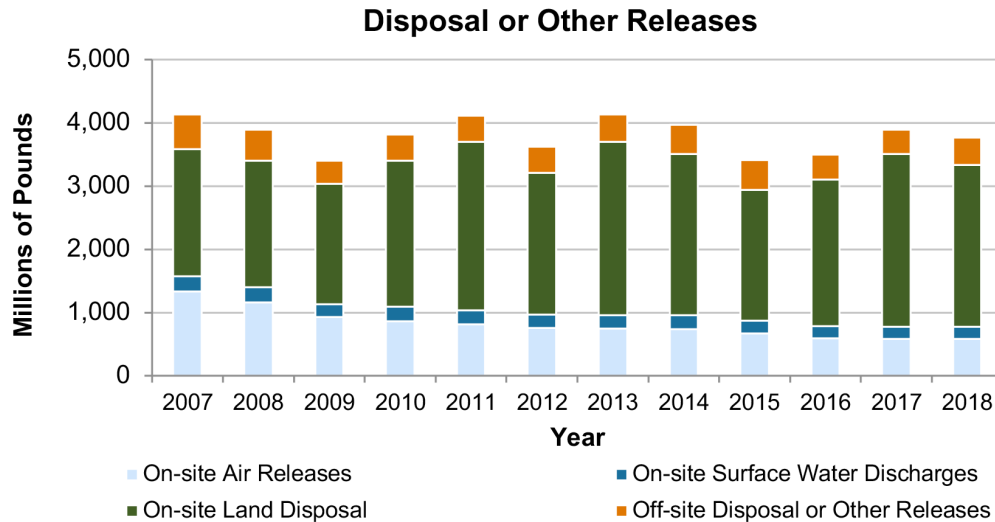
Looking at production-related waste managed over time helps track progress made by industrial facilities in adopting waste management practices that are preferable to disposing of or otherwise releasing waste into the environment, as illustrated in the waste management hierarchy established in the Pollution Prevention Act.



- Since 2007, quantities of production-related waste recycled and combusted for energy recovery increased while quantities disposed of and otherwise released decreased; there was little change in quantities treated.
 - Recycling increased by 7.8 billion pounds (86%), a trend largely driven by several facilities that each reported over a billion pounds per year of chemical waste recycled.
- From 2017–2018, production-related waste managed increased by 9%.
 - This increase was driven by increased recycling of dichloromethane at a chemical manufacturing facility.

Trends in releases: air emission reductions are the largest part of the declining trend in release quantities

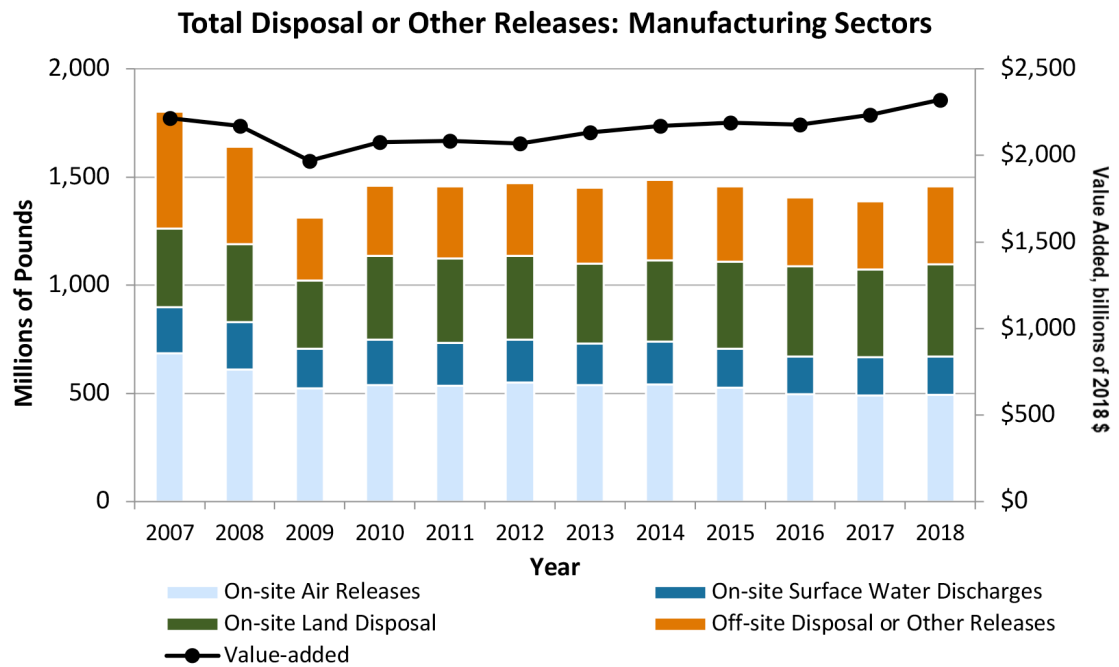
Many factors can affect trends in releases at facilities, including production rates, management practices, the composition of raw materials used, and the installation of control technologies.



- Disposal and other releases were 9% less for 2018 than those reported for 2007.
 - This reduction was driven by a 755 million pound reduction in air emissions.
 - Almost every industry sector reporting to TRI reduced its releases to air, with the largest reduction coming from the electric utilities sector. The decreased air emissions from electric utilities has been driven by: a shift from coal to other fuel sources; the installation of control technologies at coal-fired power plants; and the implementation of environmental regulations.
- From 2017–2018, disposal or other releases decreased by 3%.
 - There was little change in on-site air releases or on-site surface water discharges, while off-site disposal and on-site land disposal decreased. The reduction in on-site land disposal was the main driver for the decrease in total releases and was primarily due to reductions in land disposal reported by the metal mining sector.

Each year, the TRI National Analysis examines key industry sectors

This year’s TRI National Analysis highlights the following sectors: manufacturing, chemical manufacturing, aerospace manufacturing, metal mining, electric utilities, hazardous waste management, and federal facilities. Of these sectors, manufacturing is the broadest. It includes goods-producing businesses that transform materials into products such as food, paper, pharmaceuticals, electronics, and vehicles.



In the manufacturing sector:

- Since 2007, releases by manufacturing facilities decreased by 19%.
- Since 2010, releases have remained steady or slightly decreased even as production (represented by “value added”) increased following the economic recession.

In 2018, facilities implemented more than 3,000 new projects to reduce pollution at its source

Facilities report any newly implemented projects that eliminate or reduce the generation of chemical waste. These projects are referred to as “source reduction activities.” Source reduction success stories presented in the National Analysis highlight effective practices that other facilities can replicate. EPA’s [TRI Pollution Prevention Search Tool](#) promotes these opportunities for knowledge transfer by allowing users to search for source reduction activities that might be relevant to their operations.

Check out what’s new in this year’s TRI National Analysis

- Profiles of TRI reporting for each of the ten EPA regions
- Summary of TRI reporting by the hazardous waste management and aerospace sectors
- New interactive diagram of metal mining operations