Executive Summary

The Toxics Release Inventory (TRI) tracks the management of certain toxic chemicals that may pose a threat to human health and the environment. U.S. facilities in different industry sectors must report annually on how much of each chemical is released to the environment and/or managed through recycling, energy recovery and treatment. The information submitted by facilities is compiled in TRI, and can help support informed decision-making by industry, government, non-governmental organizations and the public.

The *TRI National Analysis* is EPA's annual interpretation of TRI data. It highlights how toxic chemical wastes were managed, where toxic chemicals were released, and how the 2012 TRI data compare to data from previous years.

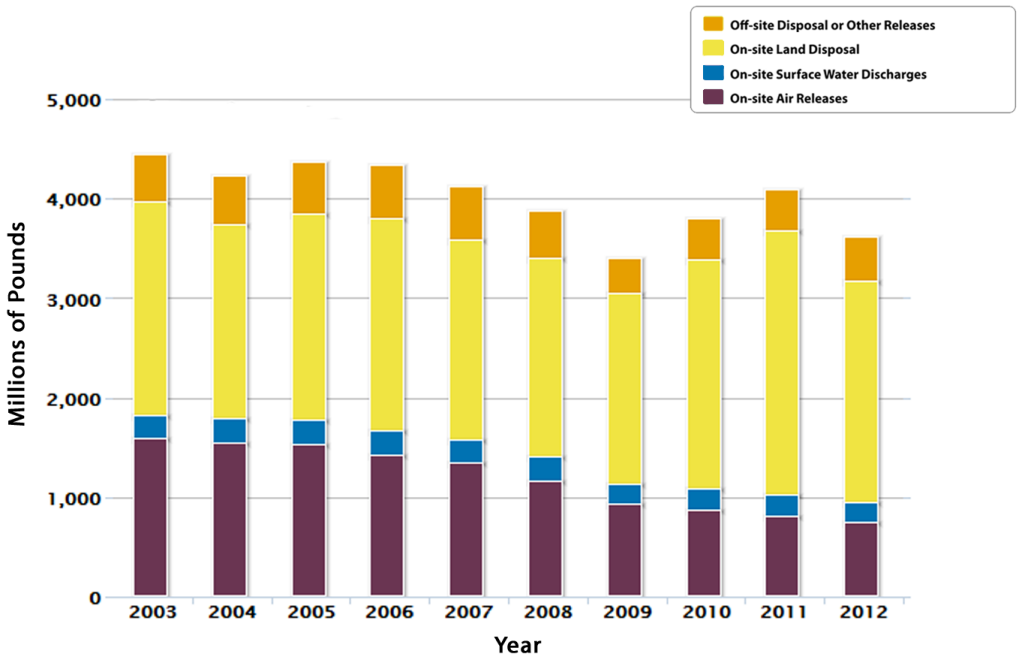
2012 Quick Facts

TRI facilities reported disposing of or releasing 3.63 billion pounds of TRI chemicals with:

- 21% to air on-site
- 6% to water on-site
- 61% to land on-site
- 12% as off-site disposal

In 2012, 21,024 facilities reported to TRI. Together they reported total on- and off-site disposal or other releases of 3.63 billion pounds of toxic chemicals. Most were disposed of or released at the facility to air, water, or land. Figure E1 shows that disposal or other releases of TRI chemicals have generally decreased in the long-term: down 19% from 2003 to 2012. From 2011 to 2012, there was a 12% decrease in disposal or other releases, mostly due to decreases in on-site land disposal by the metal mining sector. However, disposal or other releases of chemicals to the environment focus on chemicals' final deposition and represent only a piece of the management of toxic chemicals in waste. TRI also collects information on the quantities of toxic chemicals managed through recycling, energy recovery, and treatment. This production-related waste includes the total amounts of toxic chemicals in waste managed by facilities, giving a more complete picture of what happens to chemicals at facilities.

Figure E1. Total Disposal or Other Releases, 2003-2012



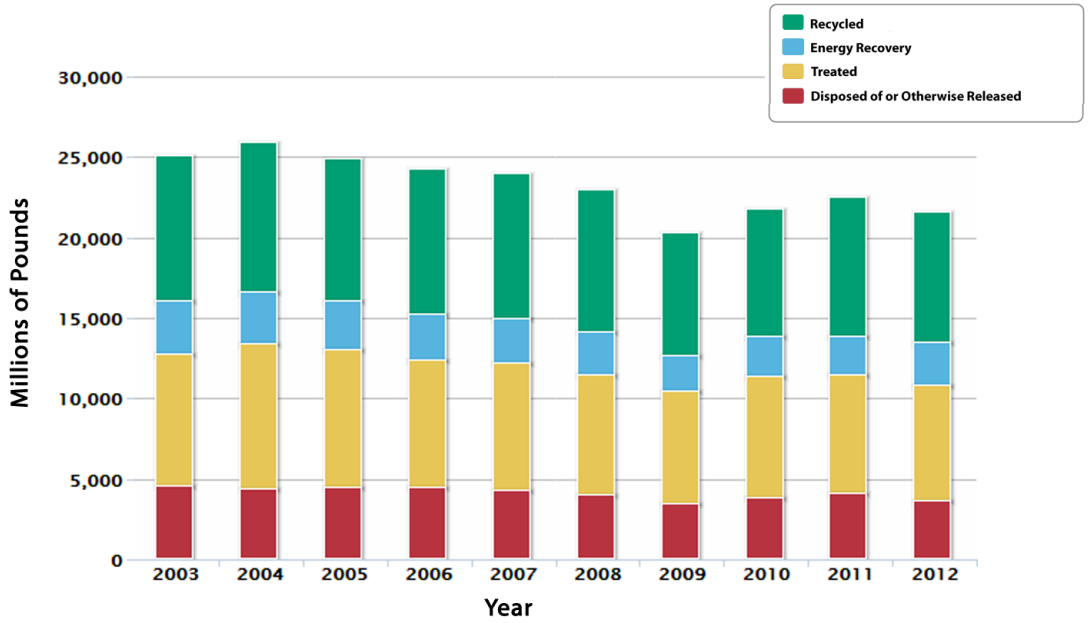
In 2012, 23.52 billion pounds of toxic chemicals were managed at TRI facilities in production-related waste. As shown in Figure E2, from 2003 to 2012, total production-related waste managed by TRI facilities declined 14% (more than 3.5 billion pounds). From 2011 to 2012, reductions occurred in the quantities of TRI chemicals in waste that were recycled, combusted for energy recovery, treated, or released.

2012 Quick Facts

23.52 billion pounds of TRI chemicals were reported as managed as waste:

- 35% was recycled
- 12% was used for energy recovery
- 38% was treated
- 15% was disposed of or released

Figure E2. Production-Related Waste Managed, 2003-2012

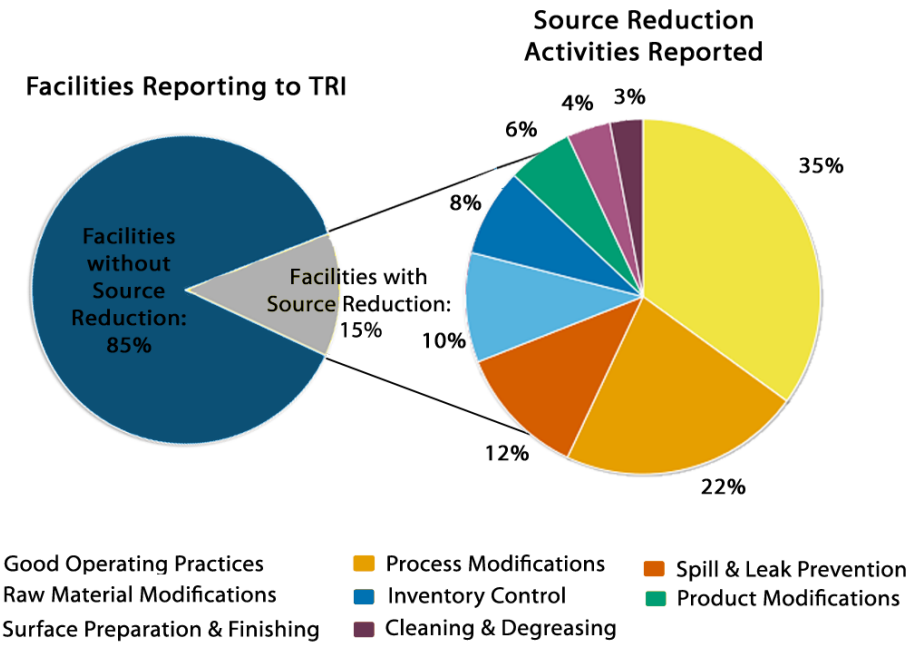


Facilities that report to TRI also provide information on their parent companies, if they have one. The National Analysis uses this information to highlight parent companies that reported the largest total quantity of chemicals in production-related waste managed. For 2012, the top three parent companies based on the quantities of chemicals in waste managed were: Teck American Inc (a metal mining company); Koch Industries (with facilities in paper, petroleum refining, and chemical sectors); and The Dow Chemical Company (a chemical manufacturer).

The National Analysis also highlights waste management trends within industry sectors. In 2012, 92% of total disposal or other releases of TRI chemicals originated from just seven of the 26 TRI industry sectors. More than two-thirds originated from three industry sectors: metal mining (40%), chemicals (15%), and electric utilities (14%). Most of the metal mining releases are to on-site land disposal; this sector reported nearly two-thirds (65%) of the on-site land disposal for all industries. Electric utilities reported the largest on-site air emissions, which represented over 25% of air emissions from all industries.

In addition to submitting information on releases and waste management quantities to TRI, TRI facilities also report on newly implemented source reduction activities during the year. The term "source reduction" generally refers to any practice that reduces the total quantity of chemical waste generated at the source. In 2012, a total of 3,152 facilities (15% of all TRI facilities) reported initiating 10,250 source reduction activities. Good operating practices, process modifications, and spill and leak prevention were the types of activities reported most frequently, as shown in Figure E3.

Figure E3. Newly Implemented Source Reduction Practices, 2012



TRI data can be used in combination with other data sources to provide a more complete picture of what is going on with chemical use, management and releases. The National Analysis highlights two examples of this: the Chemical Data Reporting rule, which collects information about the manufacture and use of chemicals in commerce, and EPA's Greenhouse Gas Reporting Program, which requires large emitters of greenhouse gases and suppliers of certain products to submit annual reports on their emissions.

TRI can also help you find information specific to your concerns and community. In addition to this Overview document, the TRI National Analysis includes TRI information summarized by state, by urban community, by aquatic ecosystem, and by Indian Country and Native Alaska Villages. To access these analyses, go to the **2012 TRI National Analysis homepage** at www2.epa.gov/toxics-release-inventory-tri-program/2012-tri-national-analysis. For more information about the Toxics Release Inventory Program, and to access the most recent TRI data, go to **EPA's TRI website** at www2.epa.gov/toxics-release-inventory-tri-program.