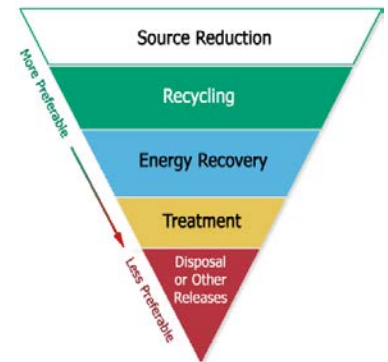


TRI and the Waste Management Hierarchy

The waste management hierarchy established by the Pollution Prevention Act (PPA) of 1990 guides waste generators toward the best options for managing wastes. At the top of the hierarchy is the most preferred option: the prevention of toxic waste generation through source reduction activities.

For waste that is generated, the preferred management methods are recycling, followed by burning for energy recovery, treatment and, as a last resort, disposing of or releasing the waste to the environment.



TRI's Pollution Prevention (P2) Data

The PPA requires facilities to provide details about each toxic chemical they report to the Toxics Release Inventory (TRI), such as:

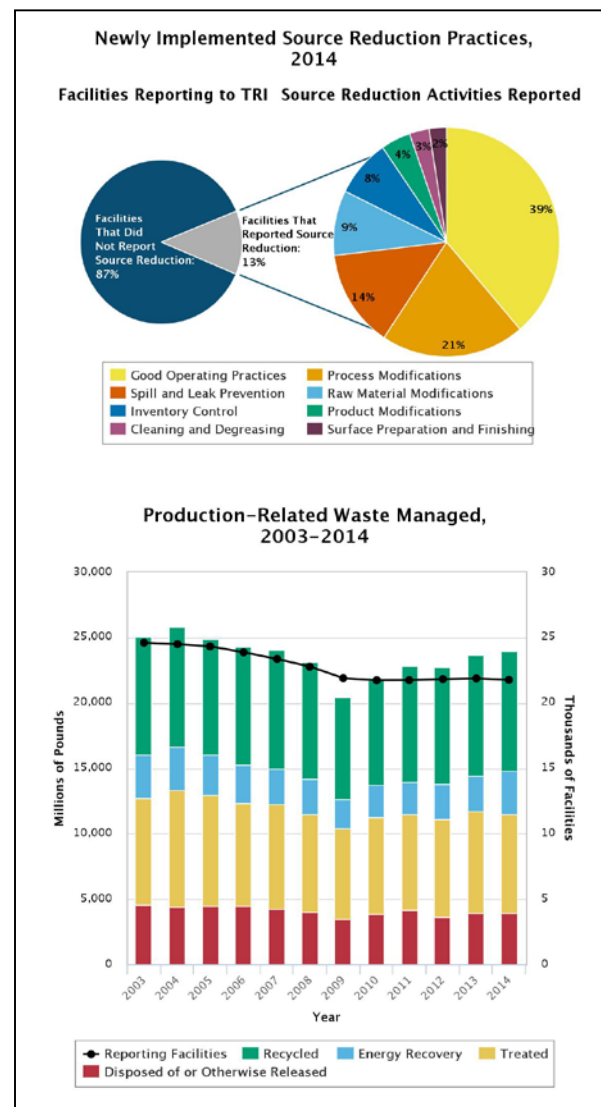
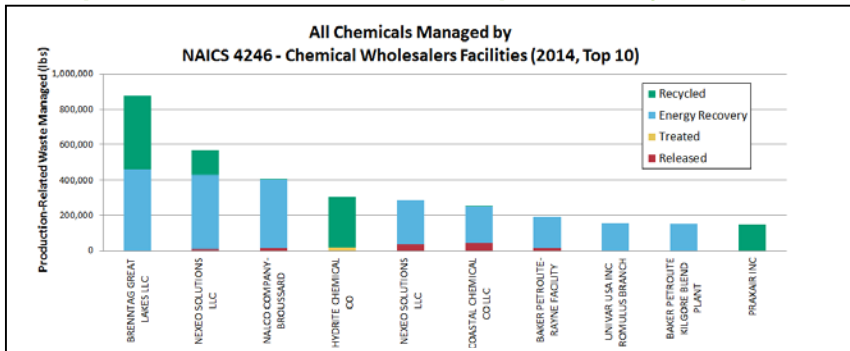
- Information about source reduction and other activities that have reduced environmental releases of the chemical
- Quantities of production-related chemical waste managed
- A production or activity ratio to provide context for reported toxic chemical quantities

TRI collects and distributes this information, helping to track industry progress in reducing waste generation and moving toward preferred waste management alternatives. By comparing facilities across a sector or between parent companies, you can identify and possibly adopt effective P2 activities initiated at other facilities.

Use TRI data to answer P2 questions:

- Have toxic chemical releases at a particular industrial facility gone up or down over time?
- Was this change in releases driven by changes in production? Or did P2 practices play a role?
- How are similar facilities managing the chemical? What P2 practices have been reported?
- Which P2 practices have led to the largest reductions in releases of toxic chemicals to the environment?

Example: Chemical Wholesalers Top 10 Facility Comparison



Source Reduction and Other Waste Management Practices

Facilities report the source reduction activities they implement using designated codes (W codes) on their TRI forms. Many facilities also choose to describe these activities or other measures taken to reduce toxic chemical releases, using a free-text data field on the TRI reporting form.

Source Reduction Activity	Pollution Prevention Free-Text Entry (Section 8.11)
W42: Substituted raw materials	We have reduced our air emissions by substituting #6 fuel oil with B50; a product that is 50% vegetable oil.
W60: Changed to mechanical stripping/cleaning devices (from solvents or other materials)	Grit blasting has been used in place of some of our acid stripping operations. Our customer satisfaction with this process will determine if it will be used as a permanent change. Otherwise our acid use will increase with expected increase in production requirements.
W21: Instituted procedures to ensure that materials do not stay in inventory beyond shelf-life	We found customers for paint at the end of its shelf life that did not require high performance standards of paint within its shelf life. This reduced the amount in the waste stream.

Barriers to Implementing P2

EPA encourages facilities that did not implement source reduction activities to use the optional P2 text-entry field to indicate what barriers may be preventing them from doing so. These may include:

- Need for additional technical information;
- Concerns about product quality; or
- Prohibitive cost.

This information provides a more complete picture of P2 activities at facilities and may facilitate exchanges between those seeking and those offering technical assistance.

Production Ratio or Activity Ratio

Under the PPA, TRI facilities report a production or activity ratio that typically compares production in the current year to the prior year. For a chemical used in the generation of electricity, for example, the production ratio for that chemical reflects annual change of kilowatt hours produced. Using this ratio, year-to-year changes in waste management quantities can be viewed within the context of production, which can help gauge whether reductions were the result of reported source reduction activities.

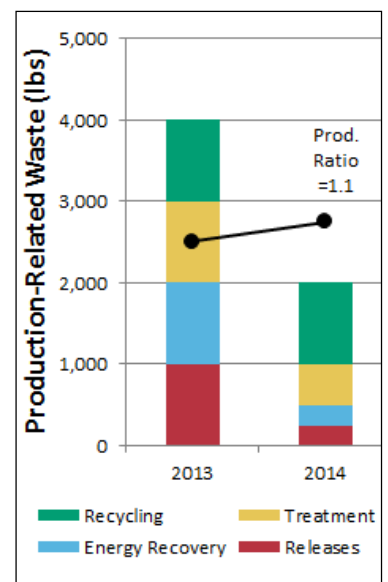
Accessing and Using TRI's P2 Data

EPA's [TRI P2 Search](#) tool can be used to identify P2 practices associated with particular industries, chemicals, or businesses and compare P2 performance at the facility and corporate level. This tool also includes visual representations of the P2 data reported annually by each facility or parent company. You can also find [P2 Spotlights](#) highlighting select chemicals and pollution prevention approaches. For more information on these tools and for updates, visit www.epa.gov/tri/p2.

Other TRI resources to access P2 data include:

- *myRTK* (www.epa.gov/tri/myrtk) for on-the-go access;
- *TRI Search* (www.epa.gov/enviro/tri-search) for facility view of the data; and
- *TRI National Analysis* (www.epa.gov/trinationalanalysis) for EPA's annual interpretation of the data.

Example: Facility P2 Data



Above: A facility reduces waste (even as production rises) and shifts to preferred waste management techniques