TRI's Pollution Prevention (P2) Data

Did you know that the Toxics Release Inventory (TRI) can help you answer questions about P2?

- *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?*
- *Which P2 practices have led to the largest reductions in releases of toxic chemicals to the environment, and which companies have implemented these practices?*

TRI includes information that can help you find these answers. The Pollution Prevention Act (PPA) of 1990 requires facilities to provide details about each toxic chemical they report to TRI, such as:

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

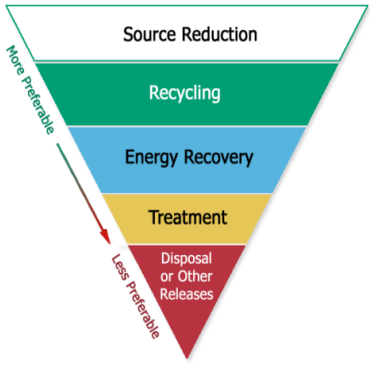
These data elements can be used to track environmental progress at industrial facilities and highlight effective environmental practices.

TRI and the Waste Management Hierarchy

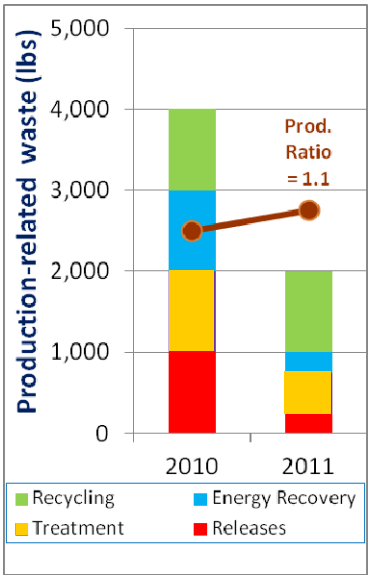
The waste management hierarchy established by the PPA guides waste generators toward the best options for managing wastes. At the top of the hierarchy is the most preferred option: the prevention of toxic waste generation through source reduction activities.

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 the waste. TRI collects information on the total quantities of toxic chemicals managed using each of these methods and helps track industry progress in reducing waste generation and moving toward safer waste management alternatives.

The Waste Management Hierarchy



P2 in TRI Data



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

For More Information:

E-mail: tri.help@epa.gov
Websites: www.epa.gov/tri/p2
www.epa.gov/p2

Source Reduction and Other Environmentally-Friendly Practices

Under the PPA, facilities implementing source reduction activities report the activity implemented and the method by which this P2 opportunity was identified using designated codes (see first column below). Many facilities also choose to describe these activities or other measures taken to reduce toxic chemical releases, using a free-text data entry 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.
W51: Instituted recirculation within a process	A waste stream from the second ion exchange process that would typically be sent to the wastewater treatment system has be redirected to the first ion exchange process so the chemicals are used rather than discarded.

Production Ratio or Activity Index

Under the PPA, TRI facilities report a production ratio or activity index 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 would reflect the year-to-year change in the number of kilowatt hours produced.

Using this ratio, year-to-year changes in waste management quantities can be viewed within the context of production. This can help data users gauge whether reductions in waste generation were the result of reported source reduction activities.

Accessing and Using TRI's P2 Data

EPA's new P2 search tool can be used to identify P2 practices associated with particular industries, chemicals, or businesses and to see which facilities reported the largest reductions in toxic chemical releases. This tool also provides access to graphical representations of the P2 data reported annually by each facility.

On-the-go access to these data is offered through myrtk, while more complex queries can be performed using TRI.net. For more on these tools and for updates, visit http://www.epa.gov/tri/p2/.

Barriers to Implementing P2

In 2012, EPA began encouraging 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 will provide a more complete picture of P2 activities at facilities and may facilitate exchanges between those seeking and those offering technical assistance.