

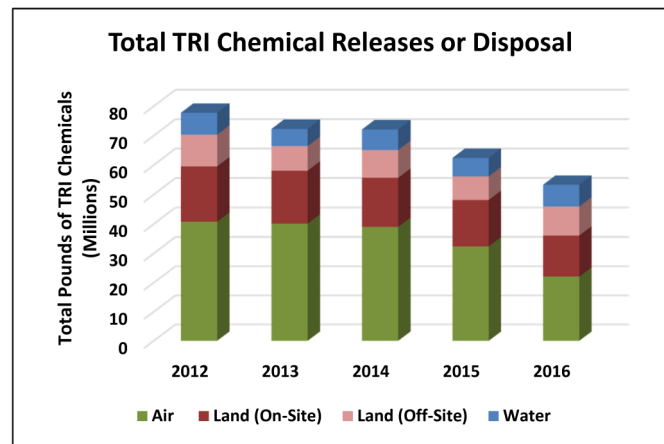
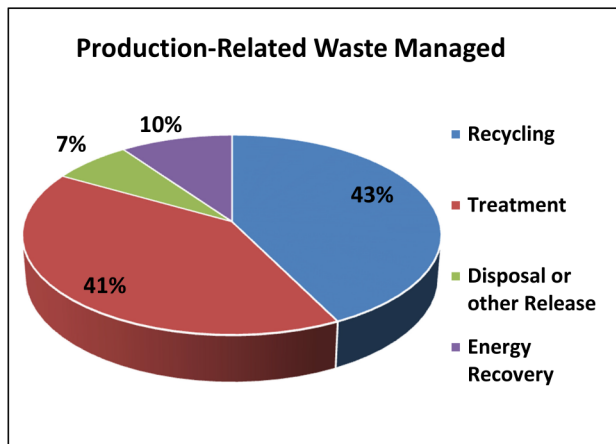
EPA TOXIC RELEASE INVENTORY (TRI)

Kentucky At-A-Glance—2016 Reporting Year

The U.S. Environmental Protection Agency (EPA) releases its annual [Toxic Release Inventory](#) analysis to help citizens stay informed of pollutants that may impact their communities and land, air and water resources. TRI includes data from approximately 20,000 facilities across the country and covers over 675 chemicals. TRI tracks information about on-site releases, transfers of chemical waste, chemical recycling, waste treatment, energy recovery and pollution prevention. This fact sheet provides highlights from Kentucky facilities. You can find more information about TRI, specific facilities and other reports at the [EPA TRI website](#).

How many total pounds of TRI-tracked chemicals were managed in 2016?

In 2016, Kentucky continued to see a downward trend in reported releases and disposal. The 421 TRI facilities managed 781.9 million pounds of production-related waste. Of that, 39,734,837 pounds were released to air or water at levels permitted to protect human health and the environment and 19,983,558 pounds were placed in on-site or off-site in managed land disposal units.

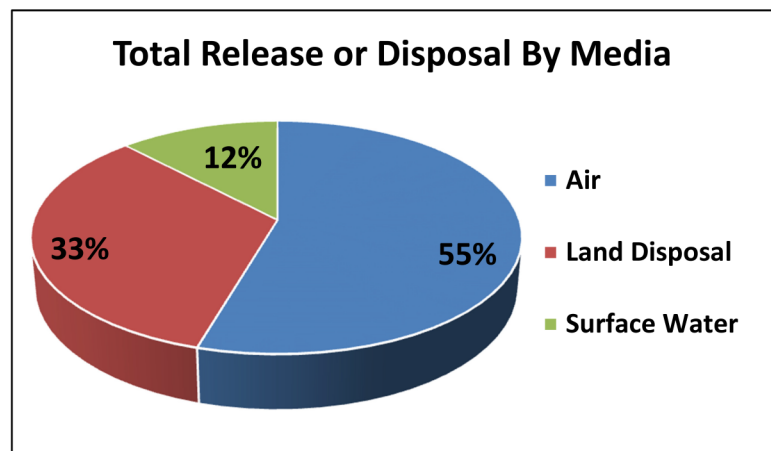


93% of the total chemicals managed by TRI facilities in 2016 ended up being recycled, treated or recovered for energy rather than being released to air, bodies of water or disposed on land.

The on-site designation means the chemical was treated, reused, disposed or released on the premises of the facility. Off-site means the chemical was treated, reused, disposed, or released outside of the facility.

What chemicals are most commonly released or disposed in Kentucky and where do they go?

Top 10 Chemicals Released	
Chemical	Pounds
SULFURIC ACID	8,057,221
NITRATE COMPOUNDS	7,497,236
BARIUM COMPOUNDS	4,407,923
ZINC COMPOUNDS	3,882,537
CHROMIUM COMPOUNDS	3,227,964
MANGANESE COMPOUNDS	2,971,044
METHANOL	2,405,597
NICKEL COMPOUNDS	2,182,171
HYDROCHLORIC ACID	1,847,463
VANADIUM COMPOUNDS	1,508,605



TRI chemicals can be released or managed on- or off-site of the facility. They can go to landfills, wastewater treatment facilities or be released into the air. This chart depicts the media where on- and off-site chemicals are released or disposed.

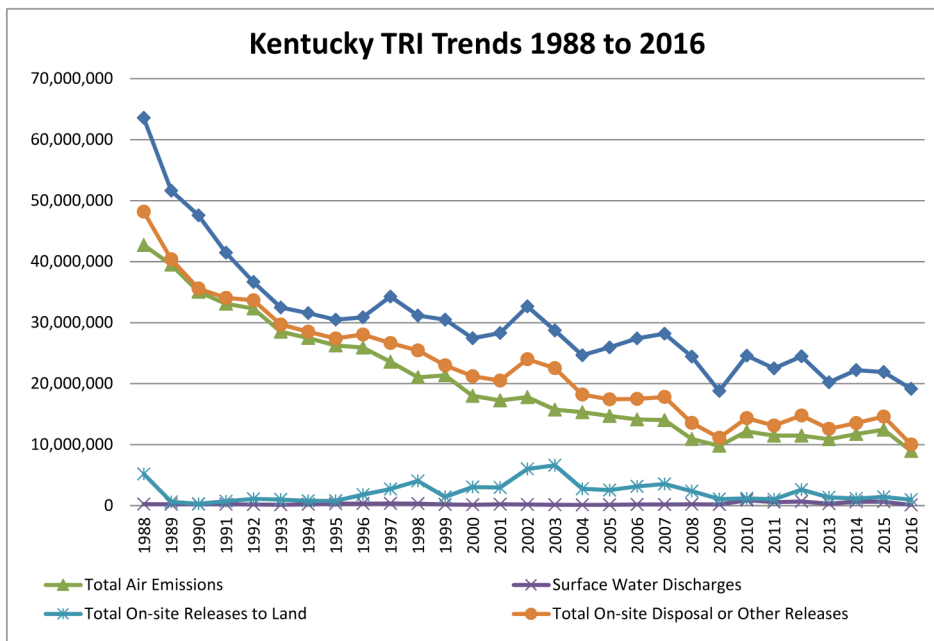
Which facilities released the most TRI chemicals in 2016?

Facility	Total Releases in Pounds
NORTH AMERICAN STAINLESS (CARROLL)	9,118,564
US TVA PARADISE FOSSIL PLANT (MUHLENBERG)	4,207,492
KENTUCKY UTILITIES CO GHENT STATION (CARROLL)	3,625,968
BIG RIVERS ELECTRIC CORP REID/GREEN/HMP&L STATION II (HENDERSON)	2,835,331
US TVA SHAWNEE FOSSIL PLANT (MCCRACKEN)	2,600,113
SPURLOCK POWER STATION (MASON)	2,529,764
PERDUE CROMWELL PROCESSING PLANT (OHIO)	1,936,337
DUKE ENERGY KENTUCKY INC - EAST BEND GENERATING STATION (BOONE)	1,554,025
LOUISVILLE GAS & ELECTRIC CO - MILL CREEK STATION (JEFFERSON)	1,386,395
OWENSBORO MUNICIPAL UTILITIES ELMER SMITH STATION (DAVIESS)	1,209,714

What counties release the most TRI-tracked chemicals?

County	Releases in Pounds
Carroll	12,899,726
Jefferson	4,696,359
Muhlenberg	4,384,696
Henderson	3,532,824
Marshall	3,158,887
McCracken	2,783,205
Mason	2,623,260
Ohio	2,573,932
Daviess	2,169,062
Boone	1,813,976

What is the trend for TRI chemicals in Kentucky?



Through production efficiencies, regulatory changes and pollution prevention activities, the amount of toxic chemicals produced in Kentucky has continued on a downward trend. The above chart is an index of chemicals that have been tracked since the beginning to EPA's Toxic Release Inventory in 1988. While more chemicals and facility sectors have been added to the tracking list, the pattern is indicative of the efforts of facilities and regulators to protect the environment.

Counties that are home to electrical utilities tend to have higher levels of TRI chemicals present within their borders because of the nature of their processes. Despite being substantial TRI contributors, total air emissions from power plants have decreased since 2012. This is due to a combination of changes in business practices and improvements in pollution control measures.

Air Emissions– Electrical Utilities	
Year	Total Emissions (Pounds)
2012	24,588,648
2013	24,608,297
2014	22,908,915
2015	15,651,540
2016	9,416,210