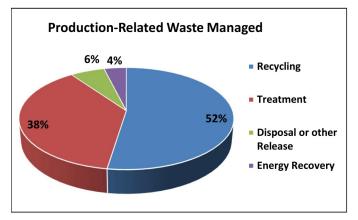
EPA TOXIC RELEASE INVENTORY (TRI)

Kentucky At-A-Glance—2021 Reporting Year

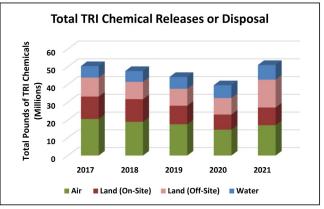
The U.S. Environmental Protection Agency (EPA) releases its annual <u>Toxic Release Inventory</u> analysis to help citizens stay informed of pollutants that may impact their communities and land, air and water resources. TRI includes data from over 20,000 facilities across the country and covers over 700 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 <u>EPA TRI website</u>.

How many total pounds of TRI-tracked chemicals were managed in 2021?

In 2021, onsite releases, onsite disposal, and offsite disposal reported for facilities in Kentucky increased. Total releases and disposal were higher when compared to the 2020 reporting year. This is likely due in part to a rebound from decreased economic activity during 2020. The 405 TRI facilities managed 768.8 million pounds of production-related waste. Of that, 25,368,216 pounds were released to air or water under existing environmental permits issued to protect human health and the environment and 19,617,010 pounds were placed in on-site or off-site in managed land disposal units.



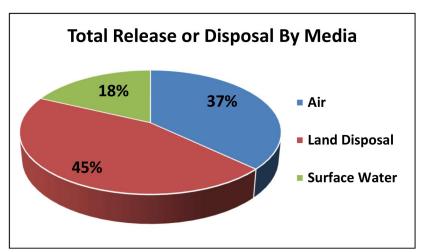
of the total chemicals managed by TRI facilities in 2021 ended up being recycled, treated or recovered for energy rather than being released to air, bodies of water or disposed on land.



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
NITRATE COMPOUNDS	8,951,624
LEAD COMPOUNDS	6,238,874
SULFURIC ACID	4,654,568
BARIUM COMPOUNDS	3,424,473
METHANOL	3,337,534
ZINC COMPOUNDS	2,566,672
CHROMIUM COMPOUNDS	2,331,241
MANGANESE COMPOUNDS	1,968,606
NICKEL COMPOUNDS	1,498,725
COPPER COMPOUNDS	1,352,326

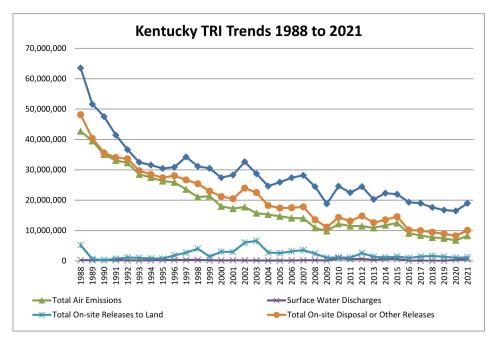


TRI chemicals can be released or managed on- or off-site of the facility. They can go to landfills, wastewater treatment facilities or be released into the air. This chart depicts the media where on- and off-site chemicals are released or disposed.

Which facilities released the most TRI chemicals in 2021?

Facility	Total Releases in Pounds
NORTH AMERICAN STAINLESS	8,394,338
ENERSYS DELAWARE INC	5,647,980
KENTUCKY UTILITIES CO GHENT STATION	2,717,198
U.S. TVA SHAWNEE FOSSIL PLANT	2,443,213
BIG RIVERS ELECTRIC CORP. WILSON STATION	2,304,339
SPURLOCK POWER STATION	2,073,333
PHOENIX PAPER WICKLIFFE LLC	1,734,122
PERDUE CROMWELL PROCESSING PLANT	1,612,391
AGC FLAT GLASS N AMERICA INC	1,460,713
LOUISVILLE GAS & ELECTRIC CO - TRIMBLE COUNTY STATION	1,233,456

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.

What counties release the most TRI-tracked chemicals?

County	Releases in Pounds
Carroll	11,593,601
Madison	7,373,322
Jefferson	5,215,315
Ohio	3,928,552
McCracken	2,511,176
Marshall	2,162,345
Mason	2,076,562
Hancock	2,036,455
Ballard	1,745,134
Henderson	1,615,034

Counties that are home to electrical utilities tend to have had 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 with a slight increase in 2021 over 2020. These reductions are due to a combination of changes in business practices and improvements in pollution control measures.

Emissions – Electrical Utilities		
Year	Total Air Emissions	
	(Pounds)	
2017	8,294,422	
2018	7,603,274	
2019	6,594,128	
2020	4,931,156	
2021	5,544,275	