



Pollution Prevention and Reduction

Toxics Release Inventory

The Environmental Protection Agency requires industries, manufacturing facilities, and utilities to report on the release of any of 650 chemicals it defines as potentially hazardous to human health. This collection of data is called the Toxics Release Inventory (TRI).

TVA files annual reports on the amounts of TRI chemicals released by its fossil-fuel plants (those that burn coal or oil). Only 26 substances on the list are emitted by TVA plants in quantities large enough to require reporting. The TRI doesn't include sulfur dioxide and nitrogen oxides, which all fossil plants emit and monitor routinely.

As a federal agency TVA must also report TRI releases from all of its operations, not just its fossil plants. Although the amounts are small, the emissions numbers TVA submits are comprehensive and include substances that might be used for cleaning or maintenance activities at any TVA facilities, including nuclear or hydro plants. Only federal facilities must include all of their operations other than just coal- or oil-burning plants. Private utilities are not covered under this requirement.

[Inhalation health-risk assessments](#) performed at all TVA fossil plants show no significant health risks to employees or members of the public from the release of any of the chemicals in the TRI.

For more information about the Toxics Release Inventory, including reporting requirements and a list of the chemicals reported on by TVA, see [Frequently Asked Questions](#).

In 2007, TVA's 11 fossil plants generated a record 100.1 billion kilowatt-hours of electricity. TVA continues to reduce emissions at all its fossil-fuel generating facilities, and it is in compliance with federal and state regulations governing air, land, and water releases.

TVA's total fossil-system TRI releases for 2007 were 60,218,650 pounds, a 14.4 percent decrease from 2006. The 2007 decrease was due to:

Emissions Data

For data on emissions at each of TVA's fossil plants, choose from the menu below.

Fossil Plants

General Information

For general information on individual emissions choose from the menu below.

Emissions

- Less coal being burned at Allen, Colbert, and Johnsonville fossil plants
- A considerable decrease in sulfuric acid emissions at Cumberland fossil plant due to the installation of a sulfur trioxide mitigation system
- A significant decrease in emissions at Paradise due to operation of a scrubber on unit 3.

2007 data for all coal-burning plants

All amounts are in pounds

Chemical	Air	Water	Land	Offsite Disposal	Total
Hydrochloric Acid (aerosol)	17,599,722	0	0	0	17,599,722
Hydrogen Fluoride	3,206,579	0	0	0	3,206,579
Sulfuric Acid (aerosol)	15,398,186	0	0	0	15,398,186
Ammonia	135,739	5,349	0	0	141,088
Antimony Compounds	138	825	23,682	2	24,647
Arsenic Compounds	3,307	12,113	300,763	44,832	361,016
Barium Compounds	37,723	150,891	10,565,568	4,794,642	15,548,824
Beryllium Compounds	189	7	32,149	5	32,351
Cadmium Compounds	0	0	0	0	0
Chromium Compounds	5,425	5,677	545,025	123,910	680,037
Cobalt Compounds	761	351	134,917	60	136,089
Copper Compounds	4,068	51,927	636,881	190,544	883,421
Lead Compounds	4,951	304	429,507	115,057	549,818
Manganese Compounds	8,795	56,462	1,112,051	280,495	1,457,803
Mercury Compounds	3,108	20	1,542	385	5,055
Nickel Compounds	4,977	8,377	469,643	85,571	568,567
Selenium Compounds	13,835	4,187	27,286	3	45,311
Silver Compounds	0	0	0	0	0
Thallium Compounds	112	967	110,230	18	111,326
Vanadium Compounds	6,469	35,316	1,149,727	272,004	1,463,516
Zinc Compounds	21,034	16,981	1,283,672	328,813	1,650,500
Benzo(g,h,i) perylene	2	0	2	0	4
Napthalene	667	0	0	0	667.437
Nitrate Compounds	0	353,645	0	0	353,645
Dioxin (grams)	21	0	0	0	21
Dioxin (lbs)	0	0	0	0	0
Polycyclic Aromatic Compounds	320	0	141	17	479
TOTALS	36,456,104	703,400	16,822,787	6,236,358	60,218,650

Gross MWh generated:	107,380,844
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Pounds released per MWh:	0.56
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To view TRI data for each TVA fossil plant, choose a plant from the [Emissions Data menu](#) at top right.