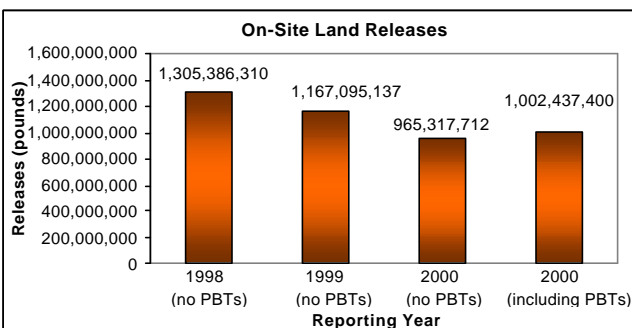
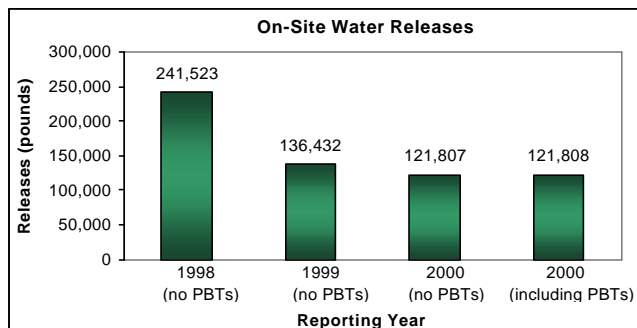
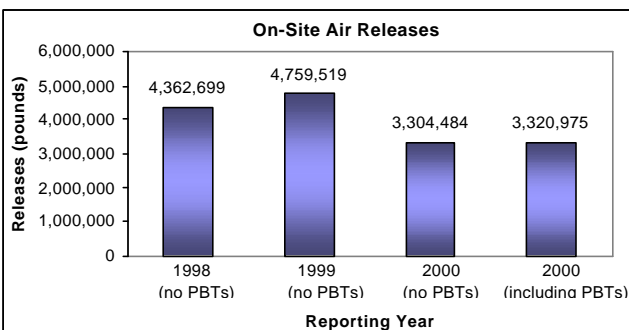
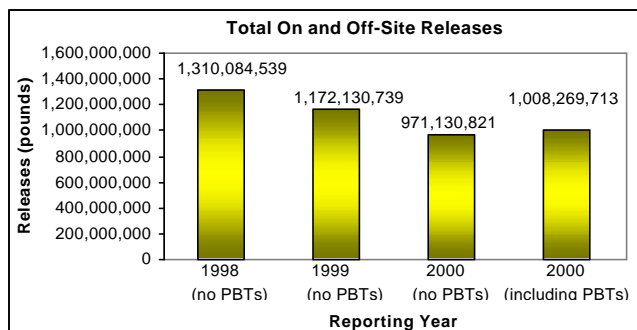




Nevada Report 2000: Toxics Release Inventory

U.S. EPA Region 9
Arizona, California,
Hawaii, Nevada,
and the Pacific
Islands

Toxic Chemical Releases: 1998-2000



Note: In order to allow a direct comparison of 1998, 1999 and 2000 releases, the data must be controlled for changes in the list of reportable chemicals—namely, lower thresholds for persistent, bioaccumulative, and toxic (PBT) chemicals. A table detailing the 2000 PBT releases is provided in a following section of this fact sheet.

The 2000 Public Data Release

EPA has just made public the 2000 data on toxic chemicals that were released to Nevada's air, water and land. This information comes from the Toxics Release Inventory (TRI), a federal community right-to-know program. In Nevada, 94 facilities reported a total of 1.01 billion pounds of toxic chemical releases*.

It is important to note that release should not be directly equated with risk. To evaluate risk, release data must be combined with information about chemical toxicity, site-specific conditions, and exposure. In addition, this data does not indicate whether a facility is violating environmental laws. Many of the substances reported through this program are subject to state and federal regulations designed to protect human health and the environment.

* Release is defined as the amount of a toxic chemical released on-site (to air, water, underground injection, landfills and other land disposal), and the amount transferred off-site for disposal. When comparing data from year to year, the data is normalized to account for changes in the list of reportable chemicals and other variables.

Industries

Manufacturing industries have been reporting their releases since 1987 and federal facilities started reporting in 1994. In 1998, seven new industry sectors began reporting their toxic chemical releases for the first time. These new sectors are metal and coal mining, electricity generation, commercial hazardous waste treatment, solvent recovery, petroleum bulk terminals, and wholesale chemical distributors.

Releases

As a whole, for all industries, total reported on- and off-site releases in Nevada fell by 14% from 1999. Most of this reduction can be attributed to a drop in on-site land releases from mining facilities. Several major facilities have significantly cut back operations, and one, BHP Copper Robinson Ops, has shut down.

Many mines extract, move, store, process, and dispose of large amounts of waste rock and ore--materials which often contain low concentrations of naturally occurring metals. The vast majority of this material is placed in surface impoundments or on the land, and the metals are reported as on-site releases to land. This previously buried material is exposed to potential leaching by rain, snow, and acid mine drainage, and must be carefully managed and monitored to prevent any surface water or ground-water contamination. There are also air releases from ore processing and metal refining operations.

Surface water discharges in Nevada decreased by nearly 15,000 pounds from 1999, due in large part to declining releases from Barrick Goldstrike Mines, Inc., Elko and Newmont Mining Corp Lone Tree Mine, Valmy. Underground injection releases decreased by 62% due to decreases at Jerritt Canyon Joint Venture, Elko. On-site land releases decreased by 17%, due mostly to decreases at Newmont Mining Corp Twin Creeks Mine, Golconda and the closure of BHP Copper Robinson Ops, Ruth. Off-site disposal releases increased by 2.4 million pounds. This increase is due in part to the increases at Kerr-McGee Chemical L.L.C., Henderson and Viking Metallurgical, Verdi. Total air releases decreased by 31%, a change attributable to reduced emissions from mines, and other industries.

New Data--Persistent, Bioaccumulative, and Toxic Chemicals

For the year 2000, TRI was expanded to include additional persistent, bioaccumulative and toxic (PBT) chemicals, and required reporting for these chemicals at lower thresholds. PBT pollutants are chemicals that are

toxic, persist in the environment and bioaccumulate in food chains, posing risks to human health and ecosystems.

Seven new chemicals and 2 chemical categories were added to the reporting list of over 650 chemicals. Additionally, reporting thresholds for 18 chemicals and chemical categories have been lowered; new thresholds range from 0.1 grams to 100 pounds.

In Nevada, 3.08 million pounds of on- and off-site releases of PBT chemicals were reported. Of this, 3.01 million pounds are releases of mercury or mercury compounds, and 10.916 grams are releases of dioxin or dioxin-like compounds. The following table gives the total amount of PBT releases reported in Nevada. The data are in pounds for all chemicals except dioxin, which is given in grams.

Table of PBT Releases in Nevada

<i>Chemical</i>	<i>Air</i>	<i>Water</i>	<i>Land</i>	<i>Off-Site Disposal</i>	<i>Total On- and Off-Site</i>
Mercury Compounds	12,675.5 2	1.00	2,999,500.9 6	73.01	3,012,250.79
Polychlorinated biphenyls (PCBs)	0.00	0.00	66,420.00	0.00	66,420.00
Polycyclic aromatic compounds (PACs)	6.45	0.00	300.00	2,600.70	2,907.15
Mercury	96.76	0.00	440.40	0.00	537.16
Benzo(g,h,i)perylene	0.20	0.00	2.00	0.00	2.20
Dioxin and dioxin-like compounds (in grams)	10.916	0.000	0.000	0.000	10.916

Releases of persistent, bioaccumulative and toxic (PBT) chemicals, in pounds. Dioxin and dioxin-like compounds data not in grams, not Toxicity Equivalents (TEQ).

Top Facilities for Releases

The top 10 facilities for on- and off-site releases in Nevada are:

- 1:** Barrick Goldstrike Mines Inc., Elko, Elko County, 346.5 million pounds
- 2:** Newmont Mining Corp. Twin Creeks Mine, Golconda, Humboldt County, 219.9 million pounds
- 3:** Newmont Mining Corp. Carlin South Area, Carlin, Eureka County, 154.2 million pounds
- 4:** Echo Bay Minerals Co. McCoy/Cove Mine, Battle Mountain, Lander County, 141.5 million pounds
- 5:** Equatorial Tonopah Inc. Tonopah, Nye County, 43.4 million pounds
- 6:** Newmont Mining Corp., Lone Tree Mine, Valmy, Humboldt County, 35.5 million pounds

7: Cortez Gold Mines, Pipeline Processing Plant Mill #2, Beowawe, Lander County, 28.6 million pounds

8: Bald Mountain Mine, Elko, White Pine County 12.0 million pounds

9: Getchell Gold Corp., Golconda, Humboldt County, 9.7 million pounds

10: Jerritt Canyon Joint Venture, Elko, Elko County, 3.0 million pounds

On-line Access

For national information on data release, see <http://www.epa.gov/tri>

The TRI data is available through the Envirofacts Warehouse, EPA's premier Internet site for distributing environmental information at <http://www.epa.gov/enviro>

or the TRI Explorer tool:
<http://www.epa.gov/triexplorer>

For general information on the Toxics Release Inventory, including reporting requirements for businesses, go to <http://www.epa.gov/region09/toxic/tri>

For more information on the EPA's PBT Chemicals Program:
<http://www.epa.gov/opptintr/pbt/>

Information and Assistance

We will be more than happy to answer your questions and assist you in learning more about the Toxics Release Inventory program in Region 9.

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