

Nevada's Releases

In 2010, 129 facilities reported a total of 477 million pounds of toxic chemical releases. Nevada's total reported on-site and off-site releases increased 161% (294 million pounds), when compared to 2009 data.

What is a Release?

A TRI "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; it is measured in pounds, unless stated otherwise.

Total Releases for Reporting Years 2008 – 2010

Year	Air	Water	On-Site Land	Under-ground Injection	Off-Site	Total Releases
2008	1,555,488	160	196,366,905	0	1,810,650	199,733,204
2009	1,666,516	118	179,544,500	0	1,602,689	182,813,823
2010	1,509,948	1,293,701	472,142,276	0	1,927,538	476,873,463

Releases to the Environment

Air: Air releases decreased 9% (157 thousand pounds) since 2009.

Water: Water releases increased 1,096,257% (1.29 million pounds) since 2009.

On-Site Land: On-site land releases increased 163% (293 million pounds) since 2009.

Underground Injection: Underground Injection releases did not change since 2009.

Off-Site Transfers: Total off-site transfers have increased 20% (325 thousand pounds) since 2009.

Facilities with Largest Chemical Releases

The top ten facilities in Nevada for total on-site and off-site releases of all chemicals were the following:

	Facility Name	City	County	Total Releases
1	NEWMONT MINING CORP. COPPER CANYON FACILITY	BATTLE MOUNTAIN	LANDER	208,127,221
2	NEWMONT MINING CORP. TWIN CREEKS MINE	GOLCONDA	HUMBOLDT	169,175,460
3	BARRICK GOLDSTRIKE MINES INC.	ELKO	ELKO	29,261,541
4	CORTEZ GOLD MINES	CRESCENT VALLEY	LANDER	24,308,733
5	NEWMONT MINING CORP - CARLIN SOUTH AREA	CARLIN	EUREKA	16,357,404
6	RUBY HILL MINE	EUREKA	EUREKA	10,291,679
7	JERRITT CANYON MINE	ELKO	ELKO	4,433,257
8	US ECOLOGY NEVADA INC.	BEATTY	NYE	3,433,319
9	SMOKY VALLEY COMMON OPERATION	ROUND MOUNTAIN	NYE	1,933,852
10	TRONOX LLC	HENDERSON	CLARK	1,628,068

Top 10 Released Chemicals

The top released chemicals based on total on-site and off-site releases in Nevada were the following:

Chemical	Total Releases (pounds)	Percentage of Total Releases
ARSENIC & ARSENIC COMPOUNDS	271,587,258	57.0%
LEAD & LEAD COMPOUNDS	84,387,335	17.7%
ZINC COMPOUNDS	36,706,693	7.7%
MANGANESE & MANGANESE COMPOUNDS	33,083,462	6.9%
COPPER & COPPER COMPOUNDS	17,026,709	3.6%
ANTIMONY & ANTIMONY COMPOUNDS	10,727,528	2.2%
NITRATE COMPOUNDS	5,595,183	1.2%
MERCURY & MERCURY COMPOUNDS	4,208,347	0.9%
NICKEL & NICKEL COMPOUNDS	2,308,537	0.5%
VANADIUM (EXCEPT WHEN CONTAINED IN ALLOY) & VANADIUM COMPOUNDS	2,017,263	0.4%

In determining release quantities for metal compounds, facilities only consider the primary metal portion of the compound. For instance, a facility reporting for lead compounds only reports the lead portion of the lead compounds released.

Industry Breakdown

Metal ore mining accounts for 98% of total releases in 2010; this category includes the following metals: iron, gold, silver, lead, zinc, copper, nickel, uranium, radium, and vanadium.

PBT Chemical Releases

Starting in 2000, EPA established more stringent reporting thresholds for persistent bioaccumulative toxic (PBT) chemicals originally on, or added to, the TRI chemical list. PBT chemicals are of particular concern not only because they are toxic, but also because they remain in the environment for long periods of time, are not readily destroyed, and build up or accumulate in body tissue. The TRI PBT chemicals include dioxin and dioxin-like compounds, lead and lead compounds, mercury and mercury compounds, polycyclic aromatic compounds (PACs), polychlorinated biphenyls (PCBs), and certain pesticides, among other chemicals.

In Nevada, 89 million pounds of total (on-site and off-site) releases of PBT chemicals were reported in 2010. This is an increase of 33 million pounds or 59% since 2009. Lead and lead compounds top the list again in 2010. The PBT chemicals in the table are ranked in descending order for 2010.

Chemical	Total On-Site and Off-Site Releases in pounds		Percent Change
	2009	2010	
LEAD & LEAD COMPOUNDS	50,690,696	84,387,335	66%
MERCURY & MERCURY COMPOUNDS	5,281,781	4,208,347	-20%
TRIFLURALIN	3,609	3,067	-15%
CHLORDANE	287	348	21%
POLYCHLORINATED BIPHENYLS (PCBs)	488	120	-75%
POLYCYCLIC AROMATIC COMPOUNDS	19	23	21%
BENZO(G,H,I)PERYLENE	0.28	0.16	-42%
DIOXIN AND DIOXIN-LIKE COMPOUNDS*	0.016 grams	0.014 grams	-14%

*Releases of most Persistent, Bioaccumulative and Toxic (PBT) chemicals are in pounds. Dioxin and dioxin-like compounds data are in grams.

Facilities with Largest PBT Releases

The top ten facilities in Nevada for total on-site and off-site releases of PBT chemicals are:

	Facility Name	City	County	Total Releases
1	NEWMONT MINING CORP. COPPER CANYON FACILITY	BATTLE MOUNTAIN	Lander	53,213,492
2	RUBY HILL MINE	EUREKA	Eureka	10,288,323
3	CORTEZ GOLD MINES	CRESCENT VALLEY	Lander	9,984,395
4	BARRICK GOLDSTRIKE MINES INC.	ELKO	Elko	5,737,703
5	NEWMONT MINING CORP. TWIN CREEKS MINE	GOLCONDA	Humboldt	2,051,302
6	NEWMONT MINING CORP. - CARLIN SOUTH AREA	CARLIN	Eureka	2,050,048
7	SMOKY VALLEY COMMON OPERATION	ROUND MOUNTAIN	Nye	1,466,253
8	HYCROFT MINE	WINNEMUCA	Humboldt	1,073,159
9	BALD MOUNTAIN MINE	ELKO	White Pine	804,456
10	MARIGOLD MINING CO.	VALMY	Humboldt	662,241

For More Information

See www.epa.gov/tri for national TRI information or www.epa.gov/region09/tri for Regional TRI information, or contact Lily Lee, Toxic Release Inventory Coordinator, US EPA Region 9, at lee.lily@epa.gov or 415-947-4187.

Release data alone are not sufficient to determine exposure or to calculate potential risks to human health and the environment. TRI data, in conjunction with other information, such as the toxicity of the chemical, the release medium (e.g., air), and site-specific conditions, can be used as a starting point in evaluating exposures that may result from releases of toxic chemicals.