



# Toxics Release Inventory 2009 Nevada Report

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

## Nevada's Releases

In 2009, 135 facilities reported a total of 184 million pounds of toxic chemical releases. Nevada's total reported on-site and off-site releases decreased 8% (16 million pounds), when compared to 2008 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.

### Total Releases for Reporting Years 2007 – 2009

Year	Air	Water	On-Site Land	Underground Injection	Off-Site
2007	1,763,699	144	197,184,051	0	2,946,720
2008	1,550,110	160	196,366,905	0	1,874,256
2009	1,632,904	118	179,536,919	0	2,374,338

## Releases to the Environment

**Air:** Air releases increased 5% (83 thousand pounds) since 2008.

**Water:** Water releases decreased 27% (43 pounds) since 2008.

**On-Site Land:** On-site land releases decreased 9% (17 million pounds) since 2008.

**Underground Injection:** Underground Injection releases did not change since 2008 (0 reported).

**Off-Site Transfers:** Total off-site transfers increased 27% (500 thousand pounds) since 2008.

## Facilities with Largest Chemical Releases

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

	Facility Name	City	County	Total Releases
1	NEWMONT MINING CORP. TWIN CREEKS MINE	GOLCONDA	Humboldt, NV	47,984,557
2	BARRICK GOLDSTRIKE MINES INC.	ELKO	Elko, NV	41,478,744
3	NEWMONT MINING CORP. - CARLIN SOUTH AREA	CARLIN	Eureka, NV	28,273,751
4	NEWMONT MINING CORP. COPPER CANYON FACILITY	BATTLE MOUNTAIN	Lander, NV	20,422,374
5	CORTEZ GOLD MINES	CRESCENT VALLEY	Lander, NV	19,561,629
6	ROBINSON NEVADA MINING CO.	RUTH	White Pine, NV	11,127,558
7	US ECOLOGY NEVADA INC.	BEATTY	Nye, NV	2,569,162
8	TRONOX LLC	HENDERSON	Clark, NV	1,944,163
9	SMOKY VALLEY COMMON OPERATION	ROUND MOUNTAIN	Nye, NV	1,593,595
10	JERRITT CANYON MINE	ELKO	Elko, NV	1,038,716

## Top 10 Released Chemicals

The top released chemicals based on total on-site and off-site releases in Nevada are:

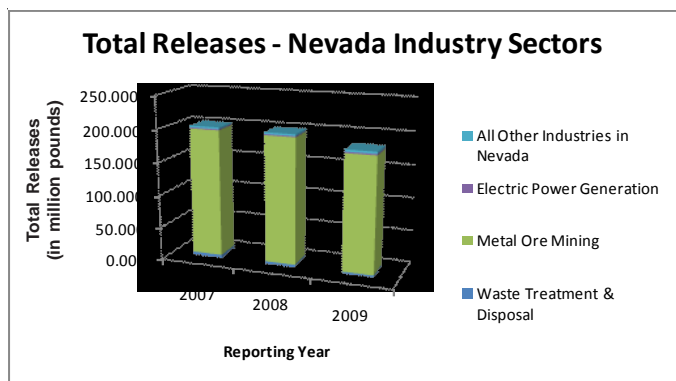
Chemical	Total Releases (pounds)	Percentage of Total Releases
ARSENIC & ARSENIC COMPOUNDS	76,939,652	42
LEAD & LEAD COMPOUNDS	50,690,696	28
ZINC COMPOUNDS	10,368,433	6
MANGANESE & MANGANESE COMPOUNDS	10,233,398	6
ANTIMONY & ANTIMONY COMPOUNDS	7,667,183	4
MERCURY & MERCURY COMPOUNDS	5,281,781	3
NITRATE COMPOUNDS	5,022,730	3
CHROMIUM & CHROMIUM COMPOUNDS (EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)	2,620,908	1
COPPER & COPPER COMPOUNDS	2,541,595	1
NICKEL & NICKEL COMPOUNDS	2,075,338	1

## Industry Breakdown

Metal ore mining accounts for 97% of total releases in 2009.

Industry	Total Releases	Percentage of Total Releases
Metal Ore Mining <sup>1</sup>	175,443,434	97%
Waste Treatment and Disposal	2,567,423	1%
Electric Power Generation, Transmission and Distribution	1,996,150	1%

<sup>1</sup> The metal ore mining category includes the following metals: iron, gold, silver, lead, zinc, copper, nickel, uranium, radium and vanadium.



## PBT Chemical Releases

Releases of Persistent, Bioaccumulative and Toxic (PBT) chemicals are in pounds. Dioxin and dioxin-like compounds data are in grams, not in Toxicity Equivalence (TEQ).

In Nevada, 56 million pounds of total (on-site and off-site) releases of PBT chemicals were reported. This is a decrease of 38 million pounds or 40% since 2008. Lead and lead compounds top the list in 2009. 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. The PBT chemicals in the table are ranked in descending order for 2009.

Chemical	Total On-Site and Off-Site Releases		Percent Change
	2008	2009	
LEAD & LEAD COMPOUNDS	88,035,911	50,690,696	-42%
MERCURY & MERCURY COMPOUNDS	5,449,928	5,281,781	-3%
TRIFLURALIN	3,810	3,609	-5%
POLYCHLORINATED BIPHENYLS CHLORDANE	350	488	40%
CHLORDANE	2	287	14,250%
POLYCYCLIC AROMATIC COMPOUNDS	65	19	-71%
BENZO(G,H,I)PERYLENE	0.45	0.28	-38%
HEXACHLOROBENZENE	2.12	0.10	-95%
DIOXIN AND DIOXIN-LIKE COMPOUNDS (grams)	0.017	0.016	-6%

## 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, NV	19,025,527
2	ROBINSON NEVADA MINING CO.	RUTH	White Pine, NV	10,832,043
3	CORTEZ GOLD MINES	CRESCENT VALLEY	Lander, NV	8,293,012
4	BARRICK GOLDSTRIKES MINES INC.	ELKO	Elko, NV	6,894,224
5	NEWMONT MINING CORP - CARLIN SOUTH AREA	CARLIN	Eureka, NV	4,110,731
6	NEWMONT MINING CORP. TWIN CREEKS MINE	GOLCONDA	Humboldt, NV	2,280,906
7	SMOKY VALLEY COMMON OPERATION	ROUND MOUNTAIN	Nye, NV	1,137,517
8	MARIGOLD MINING CO.	VALMY	Humboldt, NV	976,599
9	BALD MOUNTAIN MINE	ELKO	White Pine, NV	819,069
10	RUBY HILL MINE	EUREKA	Eureka, NV	351,792