



# Toxics Release Inventory 2009 California Report

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

## California's Releases

In 2009, 1,286 facilities reported a total of 38 million pounds of toxic chemical releases. California's total reported on-site and off-site releases decreased 14% (6 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	15,324,699	4,058,515	27,739,951	69,922	9,064,986
2008	12,670,998	2,227,195	23,830,642	104,807	5,428,953
2009	9,470,079	1,703,704	21,033,190	384,610	5,649,204

## Releases to the Environment

**Air:** Air releases decreased 25% (3.2 million pounds) since 2008.

**Water:** Water releases decreased 24% (523,491 pounds) since 2008.

**On-Site Land:** On-site land releases decreased 12% (2.8 million pounds) since 2008.

**Underground Injection:** Underground Injection releases increased 267% (279,802 pounds) since 2008.

**Off-Site Transfers:** Total off-site transfers have increased 4% (220,251 pounds) since 2008.

## Facilities with Largest Chemical Releases

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

	Facility Name	City	County	Total Releases
1	CHEMICAL WASTE MANAGEMENT INC.	KETTLEMAN CITY	Kings, CA	14,693,132
2	WESTERN MESQUITE MINES INC..	BRAWLEY	Imperial, CA	2,732,125
3	CLEAN HARBORS BUTTOWILLOW LLC	BUTTON-WILLOW	Kern, CA	1,919,745
4	QUEMETCO INC.	CITY OF INDUSTRY	Los Angeles, CA	1,323,053
5	VALERO REFINING CO - CALIFORNIA BENICIA REFINERY	BENICIA	Solano, CA	1,228,782
6	CONOCOPHILLIPS SAN FRANCISCO REFINERY	RODEO	Contra Costa, CA	864,949
7	CHEVRON PRODUCTS CO. DIV. OF CHEVRON USA INC.	EL SEGUNDO	Los Angeles, CA	716,290
8	BP WEST COAST PRODUCTS LLC CARSON	CARSON	Los Angeles, CA	669,861
9	CHEVRON PRODUCTS CO. RICHMOND REFINERY	RICHMOND	Contra Costa, CA	604,483
10	U.S. MARINE CORPS MCB CAMP PENDELTON	CAMP PENDELTON	San Diego, CA	538,596

## Top 10 Released Chemicals

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

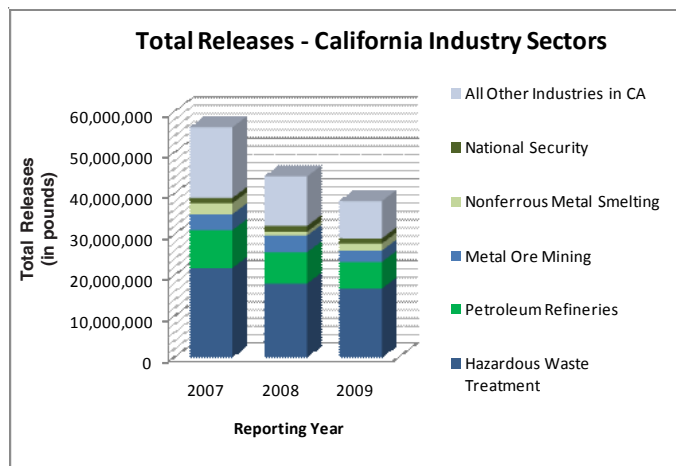
Chemical	Total Releases (pounds)	Percentage of Total Releases
LEAD AND LEAD COMPOUNDS	6,897,472	18
ZINC (FUME OR DUST) AND ZINC COMPOUNDS	4,274,046	11
AMMONIA	3,841,455	10
ASBESTOS (FRIABLE)	3,745,216	10
NITRATE COMPOUNDS	2,688,250	-7
COPPER AND COPPER COMPOUNDS	2,316,215	6
NICKEL AND NICKEL COMPOUNDS	1,886,098	5
ALUMINUM (FUME OR DUST) AND ALUMINUM OXIDE (FIBROUS FORMS)	1,791,222	5
BARIUM AND BARIUM COMPOUNDS	902,093	2
CERTAIN GLYCOL ETHERS	825,245	2

## Industry Breakdown

Hazardous waste, petroleum refineries and metal ore mining account for 68% of total releases in 2009.

Industry	Total Releases	Percentage of Total Releases
Hazardous Waste Treatment and Disposal	16,873,768	44%
Petroleum Refineries	6,496,491	17%
Metal Ore Mining <sup>1</sup>	2,772,874	7%
National Security	1,708,401	4%
Nonferrous Metal Smelting	1,277,395	3%

<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 California, 7 million pounds of total (on-site and off-site) releases of PBT chemicals were reported. This is a decrease of 1.3 million or 16% since 2008. Lead and lead compounds tops 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.

Chemical	Total On-Site and Off-Site Releases		Percent Change
	2008	2009	
LEAD & LEAD COMPOUNDS	8,237,437	6,897,472	-17
POLYCYCLIC AROMATIC COMPOUNDS	46,346	49,894	7
MERCURY AND MERCURY COMPOUNDS	28,632	42,035	47
POLYCHLORINATED BIPHENYLS	9,941	37,382	276
BENZO(G,H,I)PERYLENE	4,840	5,908	22
TETRABROMOBIPHENOLA	2,006	1,571	-22
TRIFLURALIN	NA	1,771	NA
CHLORDANE	318	309	-3
HEPTACHLOR	28	26	-10
HEXACHLOROBENZENE	8	26	212
DIOXIN AND DIOXIN-LIKE COMPOUNDS (grams)*	0.19	0.21	6

## Facilities with Largest PBT Releases

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

	Facility Name	City	County	Total Releases
1	WESTERN MESQUITE MINES INC.	BRAWLEY	Imperial, CA	2,725,586
2	CHEMICAL WASTE MANAGEMENT INC.	KETTLEMAN CITY	Kings, CA	1,967,802
3	QUEMETCO INC.	CITY OF INDUSTRY	Los Angeles, CA	984,540
4	EXIDE TECHNOLOGIES	LOS ANGELES	Los Angeles, CA	371,073
5	CLEAN HARBORS BUTTONWILLOW LLC	BUTTON-WILLOW	Kern, CA	356,876
6	U.S. MARINE CORPS MCB CAMP PENDLETON	CAMP PENDLETON	San Diego, CA	178,470
7	U.S. MARINE CORPS TWENTYNINE PALMS RANGE	TWENTYNINE PALMS	San Bernardino, CA	81,327
8	U.S. ARMY FORT IRWIN NATIONAL TRAINING CENTER	FORT IRWIN	San Bernardino, CA	47,274
9	U.S. MARINE CORPS CHOCOLATE MOUNTAINS AERIAL GUNNERY RANGE	NILAND	Imperial, CA	36,277
10	U.S. MARINE CORPS AIR STATION MIRAMAR	SAN DIEGO	San Diego, CA	26,430