

California's Releases

In 2010, 1278 facilities reported a total of 35 million pounds of toxic chemical releases. California's total reported on-site and off-site releases decreased 5% (1.8 million pounds), when compared to 2009 reported releases.

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 2008 – 2010

Year	Air	Water	On-Site Land	Under-ground Injection	Off-Site	Total Releases
2008	12,677,914	2,227,201	23,830,642	104,807	3,773,066	42,613,631
2009	9,516,521	1,703,551	21,275,954	384,610	4,128,309	37,008,945
2010	9,078,482	2,617,138	19,648,704	127,064	3,691,810	35,163,198

Releases to the Environment

Air: Air releases decreased 5% (438,040 pounds) since 2009.

Water: Water releases increased 54% (913,588 pounds) since 2009.

On-Site Land: On-site land releases decreased 8% (1.6 million pounds) since 2009.

Underground Injection: Underground Injection releases decreased 67% (257,546 pounds) since 2009.

Off-Site Transfers: Total off-site transfers have decreased 11% (426,499 pounds) since 2009.

Facilities with Largest Chemical Releases

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

	Facility Name	City	County	Total Releases
1	CLEAN HARBORS BUTTOWILLOW LLC.	BUTTOWILLOW	Kern	9,009,522
2	CHEMICAL WASTE MANAGEMENT INC.	KETTLEMAN CITY	Kings	6,760,718
3	MESQUITE MINE	BRAWLEY	Imperial	2,405,198
4	VALERO REFINING CO.- CALIFORNIA BENICIA REFINERY	BENICIA	Solano	1,269,827
5	CONOCOPHILLIPS SAN FRANCISCO REFINERY	RODEO	Contra Costa	1,193,708
6	CHEVRON PRODUCTS CO. DIV. OF CHEVRON USA INC.	EL SEGUNDO	Los Angeles	1,048,520
7	SHELL OIL PRODUCTS US - MARTINEZ REFINERY	MARTINEZ	Contra Costa	682,536
8	BP WEST COAST PRODUCTS LLC CARSON.BP CARSON ONE	CARSON	Los Angeles	640,990
9	US DOD MARINE CORPS	CAMP PENDLETON	San Diego	575,736
10	CHEVRON PRODUCTS CO. RICHMOND REFINERY	RICHMOND	Contra Costa	575,669

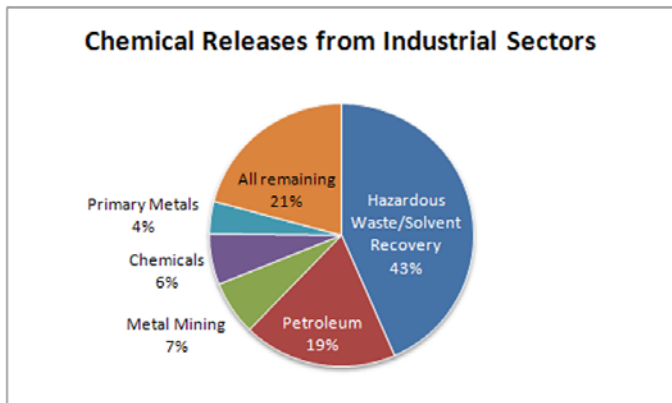
Top 10 Released Chemicals

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

Chemical	Total Releases (pounds)	Percentage of Total Releases
LEAD AND LEAD COMPOUNDS	4,458,900	13%
AMMONIA	3,961,644	11%
ASBESTOS (FRIABLE)	3,907,539	11%
NITRATE COMPOUNDS	3,417,694	9%
COPPER AND COPPER COMPOUNDS	2,006,723	5%
ALUMINUM (FUME OR DUST) AND ALUMINUM OXIDE (FIBROUS FORMS)	1,576,022	4%
METHYL TERT- BUTYL ETHER	1,212,607	3%
STYRENE	1,113,412	3%
NICKEL AND NICKEL COMPOUNDS	1,095,860	3%
METHANOL	982,976	2%

Industry Breakdown

Hazardous waste, petroleum refineries and metal ore mining account for 69% of total releases in 2010. The metal ore mining category includes the following metals: iron, gold, silver, lead, zinc, copper, nickel, uranium, radium, and vanadium. "Other" includes 19 industries (e.g. food/beverages/tobacco or metal fabrication) that each make up 3% or less of the total state releases.



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 California, 4.6 million pounds of total (on-site and off-site) releases of PBT chemicals were reported in 2010. This is a decrease of 2.5 million pounds or 36% since 2009. Lead and lead compounds top the list in 2010, as they did in 2009, making up 98% of total PBT releases both years. 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 in Pounds		Percent Change
	2009	2010	
LEAD AND LEAD COMPOUNDS	6,897,472	4,458,900	-35%
MERCURY & MERCURY COMPOUNDS	42,035	43,480	3%
POLYCYCLIC AROMATIC COMPOUNDS	49,894	23,482	-53%
POLYCHLORINATED BIPHENYLS (PCB's)	37,382	20,756	-44%
BENZO(G,H,I)PERYLENE	5,908	2,391	-60%
TETRABROMOBIPHENOL A	1,571	1,995	27%
DIOXIN AND DIOXIN-LIKE COMPOUNDS*	0.21 grams	0.39 grams	85%

*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 California for total on-site and off-site releases of PBT chemicals are the following:

	Facility Name	City	County	Total Releases
1	MESQUITE MINE	BRAWLEY	Imperial	2,402,428
2	CHEMICAL WASTE MANAGEMENT INC.	KETTLEMAN CITY	Kings	752,092
3	CLEAN HARBORS BUTTONWILLOW LLC.	BUTTON-WILLOW	Kern	521,229
4	QUEMETCO INC.	CITY OF INDUSTRY	Los Angeles	273,093
5	EXIDE TECHNOLOGIES	LOS ANGELES	Los Angeles	262,924
6	US DOD MARINE CORPS BASE CAMP PENDLETON	CAMP PENDLETON	San Diego	195,073
7	US MARINE CORPS TWENTYNINE PALMS	TWENTYNINE PALMS	San Bernardino	88,723
8	US MARINE CORPS CHOCOLATE MOUNTAINS AERIAL GUNNERY RANGE	NILAND	Imperial	40,919
9	US DOD MARINE CORPS AIR STATION MIRAMAR	SAN DIEGO	San Diego	26,293
10	US ARMY GARRISON FORT HUNTER LIGGETT	JOLON	Monterey	23,790

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.