



# Toxics Release Inventory 2009 Hawaii Report

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

## Hawaii's Releases

In 2009, 40 facilities reported a total of 3 million pounds of toxic chemical releases. Hawaii's total reported on-site and off-site releases decreased 9% (299 thousand 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	2,266,925	446,948	143,011	2,670	156,048
2008	2,277,988	549,838	169,076	3,471	245,556
2009	2,228,566	222,963	147,530	4,477	343,925

## Releases to the Environment

**Air:** Total Air releases have decreased 2% (49 thousand pounds) since 2008.

**Water:** Total Water releases have decreased 59% (327 thousand pounds) since 2008.

**On-site Land:** Total On-site land releases have decreased 13% (22 thousand pounds) since 2008.

**Underground Injection:** Total Underground injection releases have increased 29% (one thousand pounds) since 2008.

**Off-site Transfers:** Total Off-site transfers have increased 40% (98 thousand pounds) since 2008.

## Facilities with Largest Chemical Releases

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

	Facility Name	City	County	Total Releases
1	HAWAIIAN ELECTRIC CO. INC. KAHE GENERATING STATION	KAPOLEI	Honolulu	736,963
2	HAWAIIAN ELECTRIC CO. INC. WAI'AU GENERATING STATION	PEARL CITY	Honolulu	362,360
3	AES HAWAII INC.	KAPOLEI	Honolulu	317,706
4	US NAVY PEARL HARBOR NAVAL COMPLEX	PEARL HARBOR	Honolulu	269,943
5	MAUI ELECTRIC CO. LTD. KAHULUI GENERATING STATION	KAHULUI	Maui	220,123
6	CHEVRON PRODUCTS CO. HAWAII REFINERY	KAPOLEI	Honolulu	213,339
7	HAWAII ELECTRIC LIGHT CO. INC. HILL GENERATING STATION	HILO	Hawaii	210,120
8	HAWAII ELECTRIC LIGHT CO. INC. PUNA GENERATING STATION	KEAAU	Hawaii	110,008
9	MAUI ELECTRIC CO. LTD. MAALAE GENERATING STATION	KIHEI	Maui	94,413
10	TESORO HAWAII REFINERY	KAPOLEI	Honolulu	88,412

## Top 10 Released Chemicals

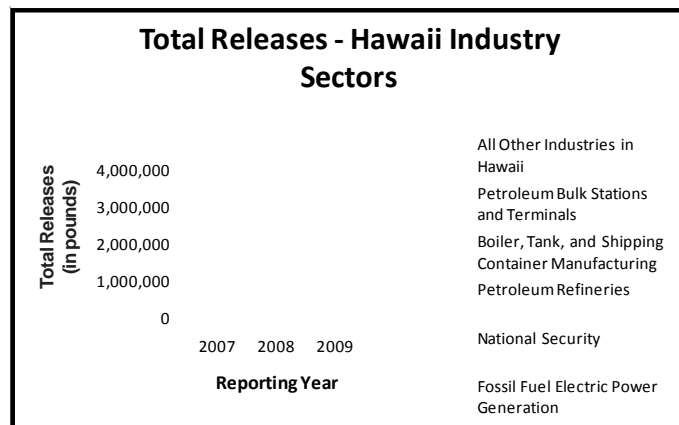
The top released chemicals based on total on-site and off-site releases in Hawaii are:

Chemical	Total Releases (pounds)	Percentage of Total Releases
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY)	1,448,379	49
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY)	301,000	10
NITRATE COMPOUNDS	226,307	8
BARIUM COMPOUNDS	134,791	5
LEAD & LEAD COMPOUNDS	107,927	4
ZINC COMPOUNDS	91,712	3
AMMONIA	80,636	3
PROPYLENE	78,800	3
NICKEL COMPOUNDS	74,489	3
COPPER	65,030	2

## Industry Breakdown

Fossil Fuel Electric Power Generation, National Security, and Petroleum Refineries account for 97% of total releases in 2009.

Industry	Total Releases	Percentage of Total Releases
Fossil Fuel Electric Power Generation	2,134,319	72%
National Security	444,284	15%
Petroleum Refineries	301,751	10%



## 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 Hawaii, 110 thousand pounds of total (on-site and off-site) releases of PBT chemicals were reported. This is an increase of 18 thousand pounds or 19%. 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 by 2009.

Chemical	Total On-Site and Off-Site Releases		Percent Change
	2008	2009	
LEAD & LEAD COMPOUNDS	91,106	107,927	18
POLYCYCLIC AROMATIC COMPOUNDS	1,288	2,276	77
MERCURY & MERCURY COMPOUNDS	293	192	-34
BENZO(G,H,I)PERYLENE	6	16	164
PENDIMETHALIN	0.20	0.30	50
DIOXIN AND DIOXIN-LIKE COMPOUNDS (grams)*	0.01012	0.0090	-11

## Facilities with Largest PBT Releases

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

	Facility Name	City	County	Total Releases
1	U.S. ARMY SCHOFIELD BARRACKS/ WHEELER ARMY AIRFIELD	SCHOFIELD BARRACKS	Honolulu, HI	30,217
2	US NAVY PEARL HARBOR NAVAL COMPLEX	PEARL HARBOR	Honolulu, HI	23,612
3	US ARMY POHAKULOA TRAINING AREA - RANGE FACILITY	HILO	Hawaii, HI	21,435
4	US MARINE CORPS BASE HAWAII PUULOA TRAINING FACILITY	EWA BEACH	Honolulu, HI	18,158
5	U.S. MARINE CORPS BASE HAWAII	MCBH KANEHOE BAY	Honolulu, HI	7,563
6	AES HAWAII INC.	KAPOLEI	Honolulu, HI	4,024
7	HAWAIIAN ELECTRIC CO. INC. KAHE GENERATING STATION	KAPOLEI	Honolulu, HI	2,142
8	MAUI ELECTRIC CO. LTD. MAALAE GENERATING STATION	KIHEI	Maui, HI	938
9	CHEVRON PRODUCTS CO. HAWAII REFINERY	KAPOLEI	Honolulu, HI	870
10	HAWAIIAN ELECTRIC CO. INC. WAIU GENERATING STATION	PEARL CITY	Honolulu, HI	591