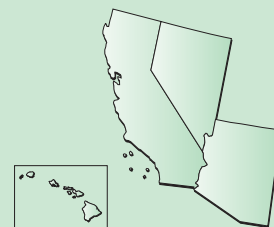




# Toxics Release Inventory 2007 Hawaii Report



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

## Hawaii's Releases

In Hawaii, 41 facilities reported a total of 3 million pounds of toxic chemical releases. Hawaii's total reported on-site and off-site releases increased 0.3% (10,315 pounds), when compared to 2006 data. Water releases and off-site transfers decreased in 2007.

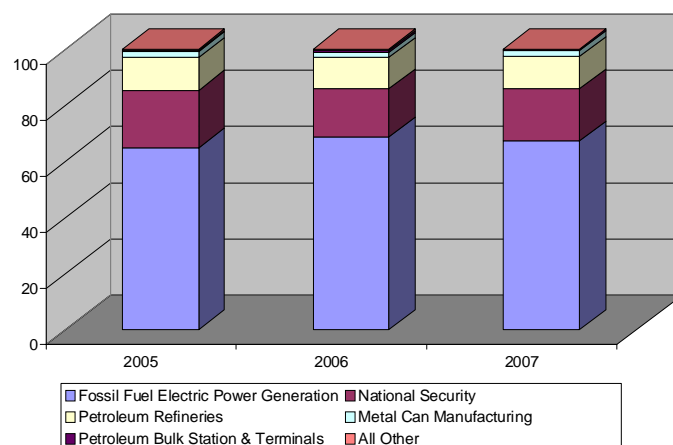
**Total Releases for Reporting Years 2005 – 2007**

Year	Air	Water	On-Site Land	Underground Injection	Off-Site
2005	2,311,635	522,217	89,734	2,736	176,408
2006	2,254,013	358,266	174,678	4,743	209,594
2007	2,267,711	446,948	141,716	2,670	152,563

## Industry Breakdown

Electric power generation facilities account for 67% of Hawaii's Toxic Release Inventory (TRI) chemical releases, including 83% of the air releases.

**Total Releases: Hawaii Industry Sectors**

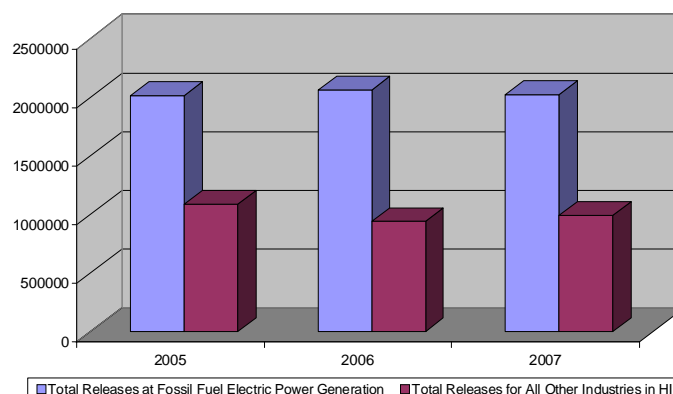


## Facilities with Largest Chemical Releases

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

	Facility Name	City	Total Releases
1	HAWAIIAN ELECTRIC CO INC KAHE GENERATING STATION	KAPOLEI	820,976
2	US NAVY PEARL HARBOR NAVAL COMPLEX	PEARL HARBOR	373,735
3	HAWAIIAN ELECTRIC CO INC WAIKUA GENERATING STATION	PEARL CITY	342,801
4	CHEVRON PRODUCTS CO – HAWAII REFINERY	KAPOLEI	277,526
5	HAWAII ELECTRIC LIGHT CO INC HILL GENERATING STATION	HILO	210,169
6	MAUI ELECTRIC CO LTD KAHULUI GENERATING STATION	KAHULUI	210,123
7	AES HAWAII INC	KAPOLEI	155,988
8	HAWAII ELECTRIC LIGHT CO INC PUNA GENERATING STATION	KEAAU	92,006
9	MAUI ELECTRIC CO LTD MAALAEA GENERATING STATION	KIHEI	88,368
10	US ARMY SCHOFIELD BARRACKS/ WHEELER ARMY AIRFIELD	SCHOFIELD BARRACKS	79,115

**Total Releases: Fossil Fuel Electric Power Generation Compared with All Other Industries**



## Releases to the Environment

**Land:** On-Site land releases decreased by 33 thousand pounds (19%), led by U.S. Army Pohakuloa Training Area – Range Facility which decreased by 28 thousand pounds.

**Air:** Air releases increased by 1% (14 thousand pounds). Hawaiian Electric Co Inc. Kahe Generating Station led the air releases with 817 thousand pounds,

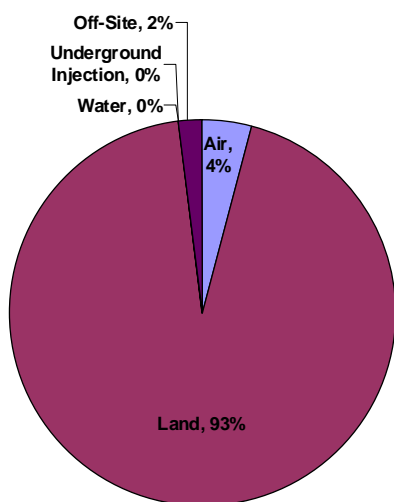
an increase of 3% (26 thousand pounds) over releases reported in 2006.

**Water:** Water releases increased 89 thousand pounds, a 25% change. US Navy Pearl Harbor Naval Complex reported an increase of 70 thousand pounds over the previous year.

**Underground Injection:** Underground injection releases decreased 2,073 pounds over the previous year, a 44% change. This decrease was led by Tesoro Hawaii Refinery, which reduced its total underground injection releases by 2,062 pounds.

**Off-Site Releases (Transfers and Disposals):** Reported transfers decreased by 57 thousand pounds overall, a 27% change. AES Hawaii Inc., an electric power generating plant, reported a decrease of 60 thousand pounds.

**Total Releases: Reporting Year 2007**



## 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, 83 thousand pounds of total on-site and off-site releases of PBT chemicals were reported. This is a decrease of 10% (9 thousand pounds) from the previous reporting year. The decrease in lead and lead compounds releases drove the overall decrease of PBT releases in the state.

In determining release quantities for metal compounds, facilities only consider the primary metal portion of the compound. For instance, a facility reporting lead compounds only reports the lead portion of the lead compounds released. The PBT chemicals are ranked by 2007 total releases.

Chemical	Total On-Site and Off-Site Releases		Percent Change
	2006	2007	
LEAD & LEAD COMPOUNDS	90,131	81,219	-10%
POLYCYCLIC AROMATIC COMPOUNDS	1,467	1,269	-13%
MERCURY & MERCURY COMPOUNDS	127	203	60%
BENZO(G,H,I) PERYLENE	7	6	-14%
DIOXIN AND DIOXIN-LIKE COMPOUNDS	5	5	0%

## Lead and Lead Compounds Releases

Approximately 81 thousand pounds of total lead releases were reported. The military facilities released the largest amounts of reported lead, releasing 77 thousand pounds. Ninety-four percent of the lead reported was released to land (approximately 77 thousand pounds).

There was a 19% decrease in lead air releases, a reduction of 590 pounds. The U.S. Army Pohakuloa Training Area – Range Facility reported a 100% reduction of its 2006 lead air release of 292 pounds, the largest decrease.

## Mercury and Mercury Compounds

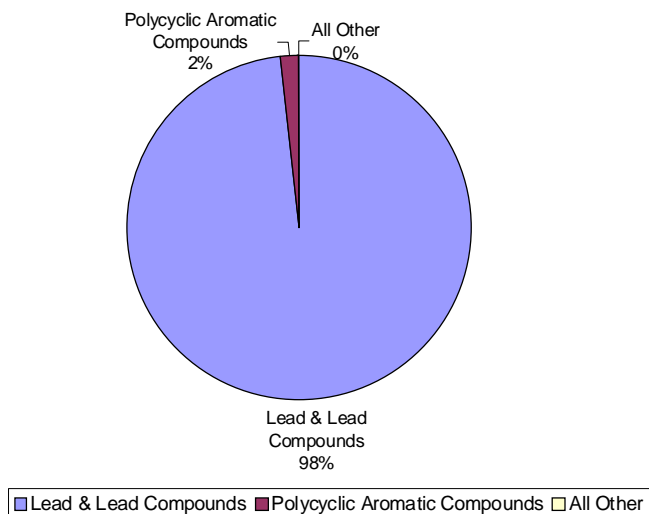
Total releases for mercury increased 60% from 2006. The 76-pound increase was driven by a 160% (49 pounds) increase in total releases at Chevron Products Co. – Hawaii Refinery and 933% increase (49 pounds) at Tesoro Hawaii Refinery. Off-Site land releases of mercury increased 166% (88 pounds). This was driven by a 52 pound increase (248%) at Chevron and a 48 pound increase (4800%) at Tesoro from 2006 data.

There was a reported 19% (13 pounds) decrease in mercury air releases. The largest decrease (10 pounds) occurred at Maui Electric Co. Ltd. Maalaea Generating Station, a 100% reduction from 2006 data. The majority of the mercury releases came from the fossil fuel electric power generation industry; they released 93% (51 pounds) of the 55 total pounds.

## Polychlorinated Biphenyls (PCBs) and Polycyclic Aromatic Compounds (PACs)

Polycyclic aromatic compounds releases decreased by 198 pounds, a 13% reduction from 2006. Maui Electric Co. Ltd. Maalaea Generating Station reported 50% of total PACs releases (640 pounds) and reported the greatest decrease of releases from 2006, a reduction of 190 pounds (23%).

**Total PBT Releases**



## 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	Total Releases
1	US ARMY SCHOFIELD BARRACKS/WHEELER ARMY AIRFIELD	SCHOFIELD BARRACKS	42,269
2	US MARINE CORPS BASE HAWAII PUULOA TRAINING FACILITY	EWA BEACH	13,471
3	US MARINE CORPS BASE HAWAII	KANEOHE BAY	10,539
4	US ARMY POHAKULOA TRAINING AREA	HILO	10,479
5	AES HAWAII INC	KAPOLEI	1,441
6	HAWAIIAN ELECTRIC CO INC KAHE GENERATING STATION	KAPOLEI	1,275
7	MAUI ELECTRIC CO LTD MAALAEA GENERATING STATION	KIHEI	908
8	CHEVRON PRODUCTS CO – HAWAII REFINERY	KAPOLEI	601
9	HAWAIIAN ELECTRIC CO INC WAIU GENERATING STATION	PEARL CITY	599
10	KALAELOA COGENERATION PLANT	KAPOLEI	290