



Toxics Release Inventory 2008 Hawaii Report

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

Hawaii's Releases

In 2008, 39 facilities reported a total of 3.2 million pounds of toxic chemical releases. Hawaii's total reported on-site and off-site releases increased 5% (150 thousand pounds), when compared to 2007 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 2006 – 2008

| Year | Air | Water | On-Site Land | Underground Injection | Off-Site |
|------|-----------|---------|--------------|-----------------------|----------|
| 2006 | 2,254,027 | 358,266 | 174,678 | 4,743 | 230,678 |
| 2007 | 2,267,707 | 446,948 | 143,011 | 2,670 | 156,048 |
| 2008 | 2,281,298 | 549,838 | 86,391 | 3,471 | 245,556 |

Releases to the Environment

Air: Air releases increased 1% (14 thousand pounds) since 2007.

Water: Water releases increased 23% (103 thousand pounds) since 2007.

On-site Land: On-site land releases decreased 40% (57 thousand pounds) since 2007.

Underground Injection: Underground injection releases increased 30% (801 pounds) since 2007.

Off-Site Transfers: Total off-site transfers have increased 57% (90 thousand pounds) since 2007.

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, HI | 820,736 |
| 2 | US NAVY PEARL HARBOR NAVAL COMPLEX | PEARL HARBOR | Honolulu, HI | 552,279 |
| 3 | HAWAIIAN ELECTRIC CO INC WAI'AU GENERATING STATION | PEARL CITY | Honolulu, HI | 310,763 |
| 4 | AES HAWAII INC. | KAPOLEI | Honolulu, HI | 240,777 |
| 5 | CHEVRON PRODUCTS CO - HAWAII REFINERY | KAPOLEI | Honolulu, HI | 230,534 |
| 6 | HAWAII ELECTRIC LIGHT CO INC. HILL GENERATING STATION | HILO | Hawaii, HI | 210,131 |
| 7 | MAUI ELECTRIC CO LTD KAHULUI GENERATING STATION | KAHULUI | Maui, HI | 210,120 |
| 8 | HAWAII ELECTRIC LIGHT CO INC PUNAHU GENERATING STATION | KEAAU | Hawaii, HI | 103,005 |
| 9 | MAUI ELECTRIC CO LTD MAALAEA GENERATING STATION | KIHEI | Maui, HI | 98,349 |
| 10 | TESORO HAWAII REFINERY | KAPOLEI | Honolulu, HI | 89,030 |

Top 10 Released Chemicals

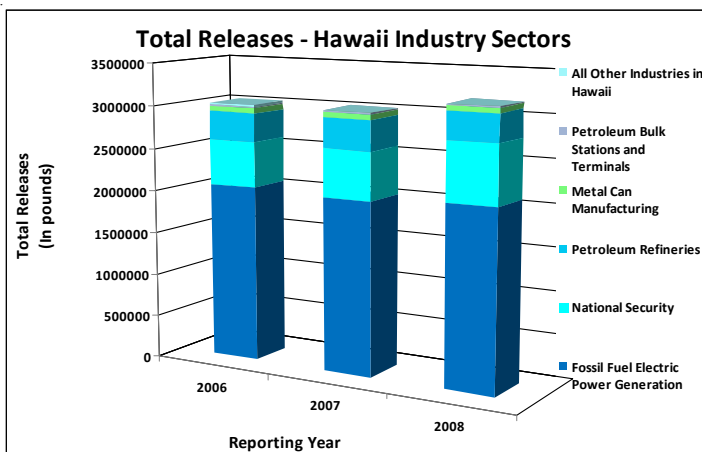
The top released chemicals based on total on-site and off-site releases in Hawaii are:

| Chemical | Total Releases (pounds) | Percentage of Total Releases |
|-------------------|-------------------------|------------------------------|
| SULFURIC ACID | 1,437,775 | 45 |
| NITRATE COMPOUNDS | 562,504 | 18 |
| HYDROCHLORIC ACID | 320,000 | 10 |
| BARIUM COMPOUNDS | 96,323 | 3 |
| PROPYLENE | 87,900 | 3 |
| AMMONIA | 73,610 | 2 |
| NICKEL COMPOUNDS | 69,603 | 2 |
| N-BUTYL ALCOHOL | 66,890 | 2 |
| ZINC COMPOUNDS | 65,506 | 2 |
| N-HEXANE | 58,279 | 2 |

Industry Breakdown

Fossil Fuel Electric Power Generation, National Security and Petroleum Refineries account for 97% of total releases in 2008.

| Industry | Total Releases | Percentage of Total Releases |
|---------------------------------------|----------------|------------------------------|
| Fossil Fuel Electric Power Generation | 2,090,113 | 66% |
| National Security | 678,864 | 21% |
| Petroleum Refineries | 319,564 | 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, 45 thousand pounds of total (on-site and off-site) releases of PBT chemicals were reported. This is a decrease of 40 thousand pounds or 47%. Lead and lead compounds tops the list in 2008. 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 2008 total on-site and off-site releases.

| Chemical | Total On-Site and Off-Site Releases | | Percent Change |
|--|-------------------------------------|--------|----------------|
| | 2007 | 2008 | |
| LEAD & LEAD COMPOUNDS | 84,110 | 43,674 | -48 |
| POLYCYCLIC AROMATIC COMPOUNDS | 1,271 | 1,288 | 1 |
| MERCURY & MERCURY COMPOUNDS | 203 | 293 | 44 |
| BENZO(G,H,I)PERYLENE | 6 | 6 | -2 |
| PENDIMETHALIN | 0 | 0 | 20 |
| DIOXIN AND DIOXIN-LIKE COMPOUNDS (grams) | 5.08 | 4.80 | -6 |

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 | US ARMY POHAKULOA TRAINING AREA - RANGE FACILITY | HILO | Hawaii, HI | 15,069 |
| 2 | US MARINE CORPS BASE HAWAII PUULOA TRAINING FACILITY | EWA BEACH | Honolulu, HI | 10,000 |
| 3 | US NAVY PEARL HARBOR NAVAL COMPLEX | PEARL HARBOR | Honolulu, HI | 9,972 |
| 4 | AES HAWAII INC | KAPOLEI | Honolulu, HI | 2,881 |
| 5 | U.S. MARINE CORPS BASE HAWAII | MCBH KANEHOE BAY | Honolulu, HI | 2,489 |
| 6 | HAWAIIAN ELECTRIC CO INC KAHE GENERATING STATION | KAPOLEI | Honolulu, HI | 1,335 |
| 7 | CHEVRON PRODUCTS CO - HAWAII REFINERY | KAPOLEI | Honolulu, HI | 949 |
| 8 | MAUI ELECTRIC CO LTD MAALAEA GENERATING STATION | KIHEI | Maui, HI | 899 |
| 9 | HAWAIIAN ELECTRIC CO INC WAI'AU GENERATING STATION | PEARL CITY | Honolulu, HI | 562 |
| 10 | KALAELOA COGENERATION PLANT | KAPOLEI | Honolulu, HI | 290 |