



Toxics Release Inventory Update Arizona Mexico Border Reporting Years 2004-2006

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

-- March 2008

On February 21, 2008 the EPA made public the 2006 data on toxic chemicals that were released to the air, water, and land of Arizona's Border Region.* This report provides data from the Toxics Release Inventory (TRI) for the facilities in Arizona that are located within 100 kilometers (using 70 zip code areas) of the U.S./Mexico Border.

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.

Releases and health effects

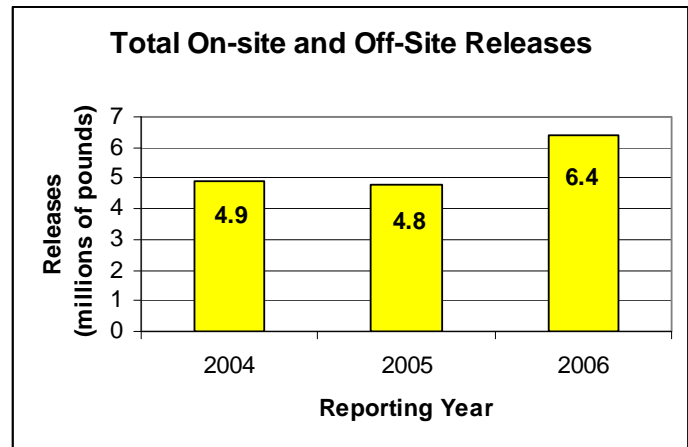
It is important to note that releases should not be directly equated with risk. To evaluate risk, release data must be combined with information about chemical toxicity, site-specific conditions, and exposure. In addition, this data does not indicate whether a facility is violating environmental laws. Many of the substances reported through this program are subject to state and federal regulations designed to protect human health and the environment.

Who is reporting?

A facility is subject to TRI reporting requirements if it has 10 or more full-time employee equivalents (20,000 work hours per year); is classified under a reportable North American Industrial Classification Code (NAICS); and manufactures, processes, or otherwise uses any of the listed toxic chemicals in amounts greater than the threshold quantities. For most chemicals the thresholds are 25,000 pounds for manufactured or processed, and 10,000 pounds for otherwise used.

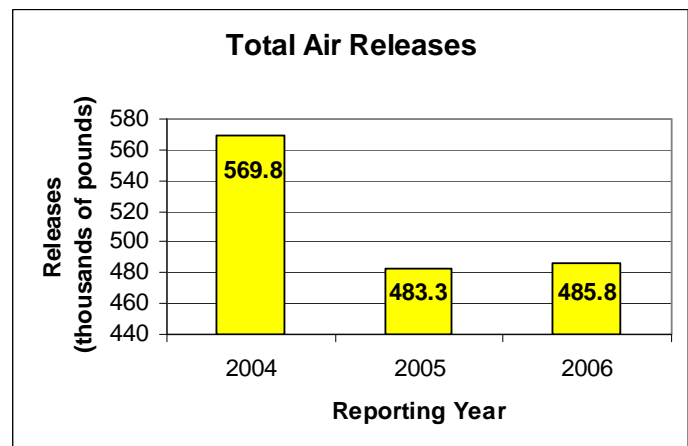
Chemical Releases

Total reported on-site and off-site releases in the Arizona Mexico Border Region during the past three years are as follows:**



In 2006, reported releases in the Border area of Arizona (6.4 million pounds) accounted for about 7% of the State's 98.7 million pounds of releases.

Total reported air releases in Border area of Arizona during the past three years are as follows:



* No adjustments were made to account for double counting that could occur as a result of off-site transfers of some TRI facilities also being reported as on-site releases at permitted hazardous waste landfills and other TRI facilities that receive the on-site transfers.

** Year to year data comparisons do not reflect changes in reporting requirements.

Trends in Releases

In 2006, 65 facilities in the Border area of Arizona reported releases of approximately 6.4 million pounds of toxic chemicals to the TRI Program. The following chart tracks releases to the environment for reporting years 2004 through 2006.

Total Releases for Reporting Years 2004 - 2006					
Year	Air	Water	On-Site Land	Under-ground Injection	Off-Site
2004	569,843	301	4,136,732	0	167,588
2005	483,291	5,683	4,056,209	0	220,554
2006	485,759	507	5,739,939	0	190,201

Largest Releases by Industry Type

In 2006, two industries -- Copper Mining and Fossil Fuel Electricity Generation -- account for 96% of the total 6.4 million pounds of reported releases in the Border area of Arizona.

Industry	Percentage of Total Releases
Copper Mining	81%
Electricity Generation	15%

Largest Releases by Chemical Type

The top five chemicals released in the Border area of Arizona in 2006, ranked by total on-site and off-site releases, are as follows:

Chemical	Release (pounds)	Percentage of Total Releases
Lead Compounds	3,662,998	57%
Chromium Compounds	506,125	8%
Barium	346,193	5%
Manganese	339,243	5%
Barium Compounds	282,060	4%

Facilities Releasing Largest Quantities of Chemicals

Ten facilities, listed in descending order, released the largest total on-site and off-site releases in the Border area of Arizona:

1. ASARCO LLC Mission Complex (Sahuarita, Pima County) with 3.3 million pounds (84% lead compound releases).
2. Phelps Dodge Sierrita Inc. (Green Valley, Pima County) with 1.9 million pounds (48% lead compound releases).
3. Arizona Electric Power Cooperative Inc. (Cochise, Cochise County) with 524 thousand pounds (54% barium compound releases).
4. Irvington Generating Station (Tucson, Pima County) with 409 thousand pounds (85% barium releases).
5. Learjet Inc. (Tucson, Pima County) with 55 thousand pounds (50% ethylbenzene and 50% naphthalene releases).
6. Hart & Cooley Inc. (Tucson, Pima County) with 46 thousand pounds (100% glycol ether releases).
7. Tuscon Outstanding Products (Tuscon, Pima County) with 26 thousand pounds (100% styrene releases).
8. Inter-Fab Inc. (Tuscon, Pima County) with 22 thousand pounds (100 % styrene releases).
9. Hexcel Corp. (Casa Grande, Pinal County) with 21 thousand pounds (34% phenol releases)
10. Southwest Fiberglass LLC (Tuscon, Pima County) with 17 thousand pounds (100% styrene releases).

On-line Access

For national information on data releases, see:
<http://www.epa.gov/tri>

The TRI data is available through Envirofacts Warehouse, EPA's internet site for distributing environmental information at:

<http://www.epa.gov/enviro>
 or the TRI Explorer tool:
<http://www.epa.gov/triexplorer>

U.S. EPA Region 9 TRI Program
Mariela Lopez (415) 972-3771