

# U.S./Mexico Border Report Arizona Section: 2005 Toxics Release Inventory

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

# Arizona Section of U.S./Mexico Border

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. The EPA has made public the 2005 data on toxic chemicals that were released to the air, water, and land of Arizona's Border Region.\*

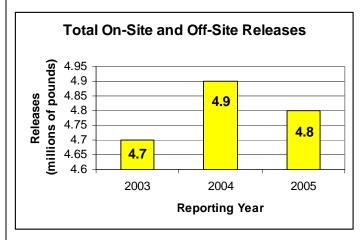
### **Releases and Risk**

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.

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.

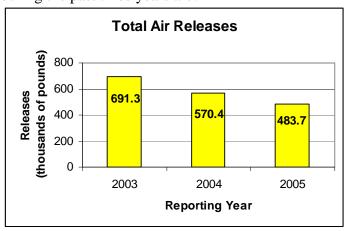
A facility is subject to TRI reporting requirements if it: has ten or more full-time employees; is classified under a reportable Standard Industrial Classification (SIC) code; and manufactures, processes, or otherwise uses any of the listed toxic chemicals in amounts greater than the threshold quantities. For most chemicals the thresholds are 25,000 pounds for manufactured or processed, and 10,000 pounds for otherwise used.

Total reported on-site and off-site releases in the Border area of Arizona during the past three years are:\*\*



In comparison to the rest of the state, the Border area of Arizona comprises only 7% of the state's total 65.2 million releases.

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



## **Chemical Releases**

<sup>\*</sup> 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.

<sup>\*\*</sup> Year to year data comparisons do not reflect changes in reporting requirements.

#### **Trends in Chemicals Released**

In 2005, 69 facilities in the Border area of Arizona reported releases of approximately 4.8 million pounds of toxic chemical to the TRI Program. The following chart tracks releases to the environment for reporting years 2003 through 2005.

Total Releases for Reporting Years 2003 - 2005							
Year	Air	Water	On-Site Land	Under- ground Injection	Off-Site		
2003	691,295	6,031	3,828,293	0	145,412		
2004	570,389	6,204	4,131,827	0	167,523		
2005	483,669	5,683	4,054,362	0	220,547		

### **Largest Releases by Industry Type**

During 2005, two industries account for 93% of the total 4.8 million pounds of reported releases in the Border area of Arizona. They are:

Industry	Percentage of Total Releases
Copper Mining	80%
Electricity Generation	13%

## **Largest Releases by Chemical Type**

The top five chemicals released in the Border area of Arizona in 2005, ranked by total on-site and off-site releases, are:

Chemical	Release (pounds)	Percentage of Total Releases
Lead Compounds	2,629,605	55%
Chromium Compounds	444,291	9%
Copper Compounds	210,193	4%
Barium Compounds	197,271	4%
Barium	146,566	3%

#### **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. Phelps Dodge Sierrita Inc. (Green Valley, Pima County) with 2.3 million pounds (70% lead compound releases).
- 2. ASARCO LLC Mission Complex (Sahuarita, Pima County) with 1.3 million pounds (77% lead compound releases).
- 3. Arizona Electric Power Cooperative Inc (Cochise, Cochise County) with 388 thousand pounds (51% barium compound releases).
- 4. Irvington Generating Station (Tucson, Pima County) with 226 thousand pounds (65% barium releases).
- 5. Phelps Dodge Mining Co Copper Queen Branch (Bisbee, Cochise County) with 200 thousand pounds (100% copper compound releases).
- 6. Learjet Inc. (Tucson, Pima County) with 55 thousand pounds (50% ethylbenzene and 50% naphthalene releases).
- 7. AACCO Cast Products Inc (Benson, Cochise County) with 42 thousand pounds (85% copper releases).
- 8. Hart & Cooley Inc (Tucson, Pima County) with 38 thousand pounds (100% glycol ether releases).
- 9. Imation Corp (Tucson, Pima County) with 24 thousand pounds (78% chromium compound releases).
- 10. U.S. Army Yuma Proving Ground (Yuma, Yuma County) with 24 thousand pounds (49% copper and 49% nitroglycerin releases).

#### **On-line Access**

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

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

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

 $\underline{http://www.epa.gov/triexplorer}$ 

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