



Toxics Release Inventory Update New Mexico Border Counties* Reporting Years 2009-2011



-- January 2013

U.S. EPA Region 6: US-Mexico Border 2020 Program

This report provides data from the Toxics Release Inventory (TRI) for the facilities¹ in New Mexico that are located within 100 kilometers of the U.S.-Mexico Border. *Only two of the four border counties, Dona Ana and Grant, had reportable releases within the New Mexico border region.

What is TRI?

TRI is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

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. The determination of potential risk to human health, and/or the environment depends upon many factors, including the toxicity of the chemical, the fate of the chemical in the environment, and the amount and duration of human or other exposure to the chemical. 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 System (NAICS) Code;

and manufactures, processes, or otherwise uses any of the TRI chemicals in amounts above established threshold amounts. For most chemicals, the thresholds are 25,000 pounds for "manufactured" or "processed," and 10,000 pounds for "otherwise used." However, depending on the chemical, EPA may have set a lower reporting threshold, such as certain chemicals categorized as persistent bioaccumulative toxic (PBT) chemicals.

TRI Chemical Releases to the Environment: 2009-2011

Total (on-site and off-site) TRI chemical releases reported in the New Mexico - Mexico Border Region during the past three years are displayed in the Table 1 below:^{2,3}

Year	Total Releases (lbs)	Air (lbs)	Water (lbs)	Land (lbs)	Off-Site (lbs)
2009	3,491,754	28,397	775	3,461,500	1,082
2010	2,457,327	23,052	2,029	2,431,950	296
2011	3,220,100	25,591	2,825	3,191,400	283

Table 1. Total Releases for 2009-2011.

Releases from Air, Land and Off-site steadily decreased from 2009 thru 2011, with the exception of water releases (with 2011 releases increasing approximately 264% from 2009).

TRI Chemical Releases: 2009

In 2009, reported releases in the Border area of New Mexico (approximately 3.5 million pounds) accounted for about 23% of the State's approximately 15.3 million pounds of reported releases. The highest releases coming from land disposal³ associated with lead compounds. Five facilities within Dona Ana and Grant County reported releases (see Table 2)

¹ 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.

² Year to year data comparisons do not reflect changes in reporting requirements.

³ Chino Mines Co. (Grant County) and U.S. Army Garrison -White Sands (Dona Ana County) were excluded from total releases as these two facilities lie just beyond the 100km border region.



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Facility	Total Releases (lbs) – All chemicals reported
Freeport McMoran Tyrone Inc. (Grant County)	3,479,309
Sterigenics US LLC (Dona Ana County)	11,485
REA Magnet Wire Co. (Dona Ana County)	706
NASA Johnson Space Center (Dona Ana County)	246
FXI (Dona Ana County)	8

Table 2. Facilities Reported in NM border counties* (2009).

TRI Chemical Releases: 2010

In 2010, reported releases in the Border area of New Mexico (approximately 2.46 million pounds) accounted for about 20% of the State's 12.49 million pounds of reported releases. The highest releases coming from land disposal⁴ associated with lead compounds. Five facilities within Dona Ana and Grant County reported releases (see Table 3).

Facility	Total Releases (lbs) – All chemicals reported
Freeport McMoran Tyrone Inc. (Grant County)	2,444,081
Sterigenics US LLC (Dona Ana County)	12,421
Tyson Prepared Food Inc. (Dona Ana County)	627
FXI (Dona Ana County)	151
NASA Johnson Space Center (Dona Ana County)	47

Table 3. Facilities Reported in NM border counties* (2010).

TRI Chemical Releases: 2011

In 2011, reported releases in the Border area of New Mexico (approximately 3.22 million pounds) accounted for about 22% of the State's 14.4 million pounds of reported releases. Seven facilities within Dona Ana and Grant County reported releases (see Table 4).

Facility	Total Releases (lbs) All chemicals reported
Freeport McMoran Tyrone Inc. (Grant County)	3,205,785
Sterigenics US LLC (Dona Ana County)	13,068
Olam spices and Vegetable Ingredients(Dona Ana County)	1050
FXI (Dona Ana County)	154
L&M Radiator (Dona Ana County)	33
Santa Teresa Border Patrol Station (Dona Ana County)	6
NASA Johnson Space Center (Dona Ana County)	3

Table 4. Facilities Reported in NM border counties* (2011).

Top TRI Chemical Releases: 2009-2011

	County	Facility	Chemical	Total Releases (lbs)	Source
2009	Grant	FREEPORT MCMORAN TYRONE INC	LEAD COMPOUNDS	3,460,054	Air, Water, Land
	Grant	FREEPORT MCMORAN TYRONE INC	SULFURIC ACID (1994 AND AFTER ACID AEROSOLS ONLY)	16,000	Air
	Dona Ana	STERIGENICS US LLC	ETHYLENE OXIDE	11,485	Air
	Grant	FREEPORT MCMORAN TYRONE INC	COPPER COMPOUNDS	2,500	Air, Land, Water, Off-Site
2010	Grant	FREEPORT MCMORAN TYRONE INC	LEAD COMPOUNDS	2,430,926	Air, Water, Land
	Dona Ana	STERIGENICS US LLC	ETHYLENE OXIDE	12,421	Air
	Grant	FREEPORT MCMORAN TYRONE INC	SULFURIC ACID (1994 AND AFTER ACID AEROSOLS ONLY)	9,000	Air
	Grant	FREEPORT MCMORAN TYRONE INC	COPPER COMPOUNDS	3,150	Land, Water, Off-Site
2011	Grant	FREEPORT MCMORAN TYRONE INC	LEAD COMPOUNDS	3,191,685	Air, Water, Land
	Dona Ana	STERIGENICS US LLC	ETHYLENE OXIDE	13,068	Air
	Grant	FREEPORT MCMORAN TYRONE INC	SULFURIC ACID (1994 AND AFTER ACID AEROSOLS ONLY)	9,700	Air
	Grant	FREEPORT MCMORAN TYRONE INC	COPPER COMPOUNDS	3,650	Land, Water, Off-Site

Table 5. Top Chemicals Released by Facility

From 2009-2011 TRI reporting years, Freeport McMoran Tyrone Inc. (Grant, New Mexico) ranked as the top industry in the NM-Border Region for highest chemicals released. Sterigenics also ranked among the top industry chemical releasers (See Table 5).

⁴ Other land disposal is the disposal of the toxic chemical to land at the facility that does not fall into one of the other on-site land release categories found in Sections 5.5.1 through 5.5.3 on the TRI Form R. Other disposal includes such activities as placement in waste piles and spills or leaks. Data from Section 5.5.4 on the TRI Form R.



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Persistent, bioaccumulative, and toxic (PBT) chemicals: 2009-2011

Some of the chemicals on the TRI chemical list have been designated as persistent, bioaccumulative, and toxic (PBT) chemicals. PBT chemicals are of particular concern not only because they are toxic, but also because they remain in the environment for long periods of time, and they tend to build up, or bioaccumulate, in the tissue of organisms. The table below outlines the PBTs reported in New Mexico for 2009-2011 years. The only PBT chemicals identified were lead and lead compounds. The quantities of lead compounds disposed of or otherwise released fell and rose between 2009 and 2011; trends were primarily driven by changes in on-site land disposal or other releases from the metal mining sector. The quantities for lead decreased from 2009-2011; the releases for lead were associated to air releases.

	Lead Total On-Site & Off-Site Release (pounds)	Lead Compounds Total On-Site & Off-Site Release (pounds)
2009	246	3,460,054
2010	47	2,430,926
2011	9	3,191,685

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>

For additional information, please contact:
U.S. EPA Region 6 Border Program
Maria Sisneros
4050 Rio Bravo, Suite 100
El Paso, Texas 79902
(915) 533-7273
sisneros.maria@epa.gov