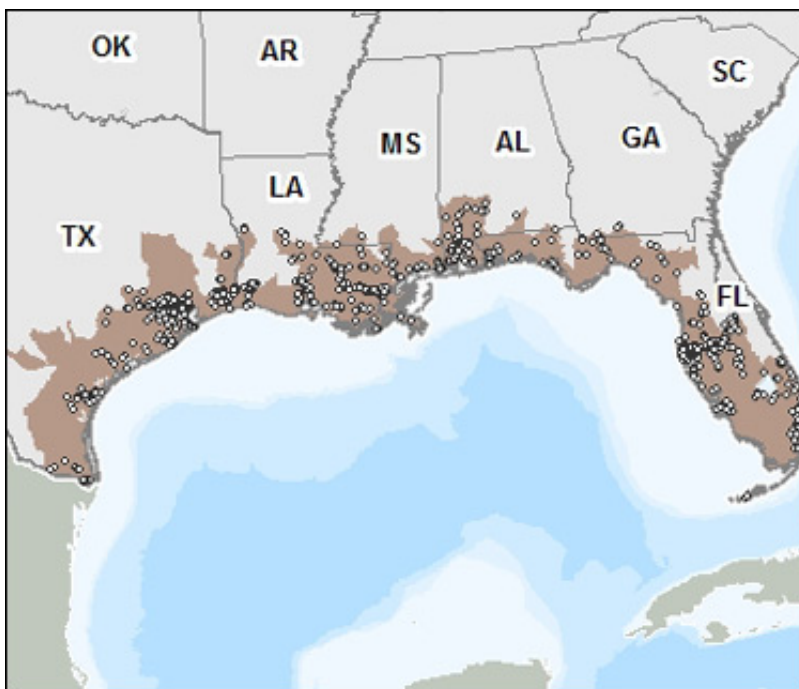




## Toxics Release Inventory (TRI) Program

### 2011 TRI National Analysis: Large Aquatic Ecosystems - Gulf of Mexico



TRI facilities in Gulf of Mexico

### Quick Facts for 2011

Number of TRI Facilities:	<b>1,315</b>
Total On-site and Off-site Disposal or Other Releases:	<b>334.7 million lbs</b>
Total On-site:	<b>305.6 million lbs</b>
• Air:	<b>104.0 million lbs</b>
• Water:	<b>22.3 million lbs</b>
• Land:	<b>27.9 million lbs</b>
• Underground Injection:	<b>151.4 million lbs</b>
Total Off-site:	<b>29.1 million lbs</b>

[View definitions of TRI terms](#)

The Gulf of Mexico is a vast, highly productive body of water in ecological, economic, and social terms. This large aquatic ecosystem (LAE), whose watershed covers an area of 86,800 square miles in the U.S., includes major portions of the U.S. states of Texas, Louisiana, Mississippi, Alabama, and Florida. The Gulf of Mexico ecosystem supports a wide array of natural resource dependent industries, including oil and gas production, marine shipping, agriculture, and tourism. The coastal areas are home to many large petroleum refining and chemical production facilities. The Gulf of Mexico is also one of the largest commercial fishing regions in the United States, and the ecosystem of the Gulf and surrounding land is complex and delicate, shared and used by many people, wildlife, and plant life.

Runoff and discharges from agricultural, industrial, and municipal sources into surface waters bring excessive nutrients and toxic pollutants into the Gulf. One of the world's largest hypoxic or dead zones, where oxygen is too low to support aquatic life, is along the Texas and Louisiana coast, primarily the result of pollution flowing from the Mississippi River. High levels of heavy metals, pesticides, and petroleum are observed in water, sediments and the tissues of many aquatic species.

Almost half of total on-site disposal or other releases were injected underground into on-site wells in 2011. In this region, underground injection is used for the disposal of toxic chemicals, including nitrate compounds, ammonia and acetonitrile, primarily by the chemical manufacturing industry. Underground injection increased by 1% from 2003 to 2011 but decreased by 4% from 2010 to 2011.

Air releases were more than one-third of the total on-site disposal or other releases. The largest amounts of TRI air releases in the Gulf of Mexico aquatic ecosystem were ammonia and ethylene, primarily from chemical manufacturers; hydrochloric acid, primarily from electric utilities; and methanol, primarily from pulp and paper mills. Air releases decreased by 37% from 2003 to 2011 and by 2% from 2010 to 2011.

Nitrate compounds constituted the largest TRI surface water discharges in 2011, primarily from petroleum refining and chemical manufacturers. Surface water discharges accounted for 7% of total on-site disposal or other releases for 2011 and decreased by 25% from 2003 to 2011 and by 1% from 2010 to 2011.

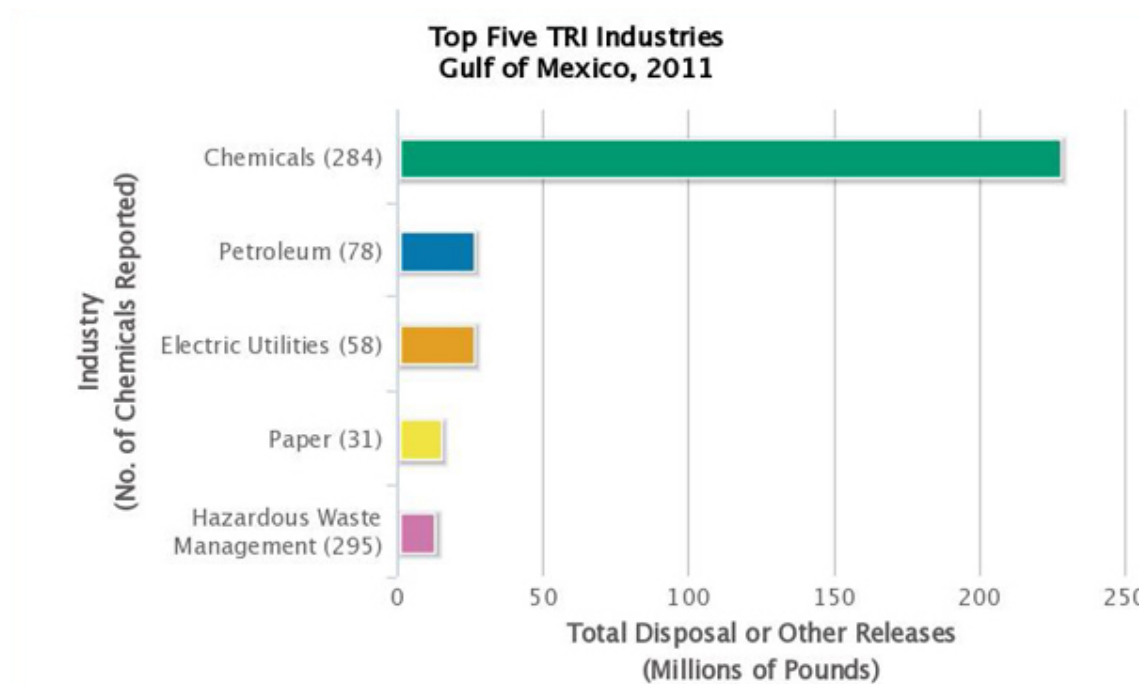
Electric utilities had the largest on-site land disposal or other releases in 2011, primarily comprised of barium and its compounds. Hazardous waste management facilities reported the second largest amounts, mainly comprised of nickel and its compounds and asbestos. Chemical manufacturers had the largest on-site land disposal of manganese and lead and their compounds. On-site land disposal or other releases decreased by 6% from 2010 to 2011, but increased overall by 7% from 2003 to 2011.

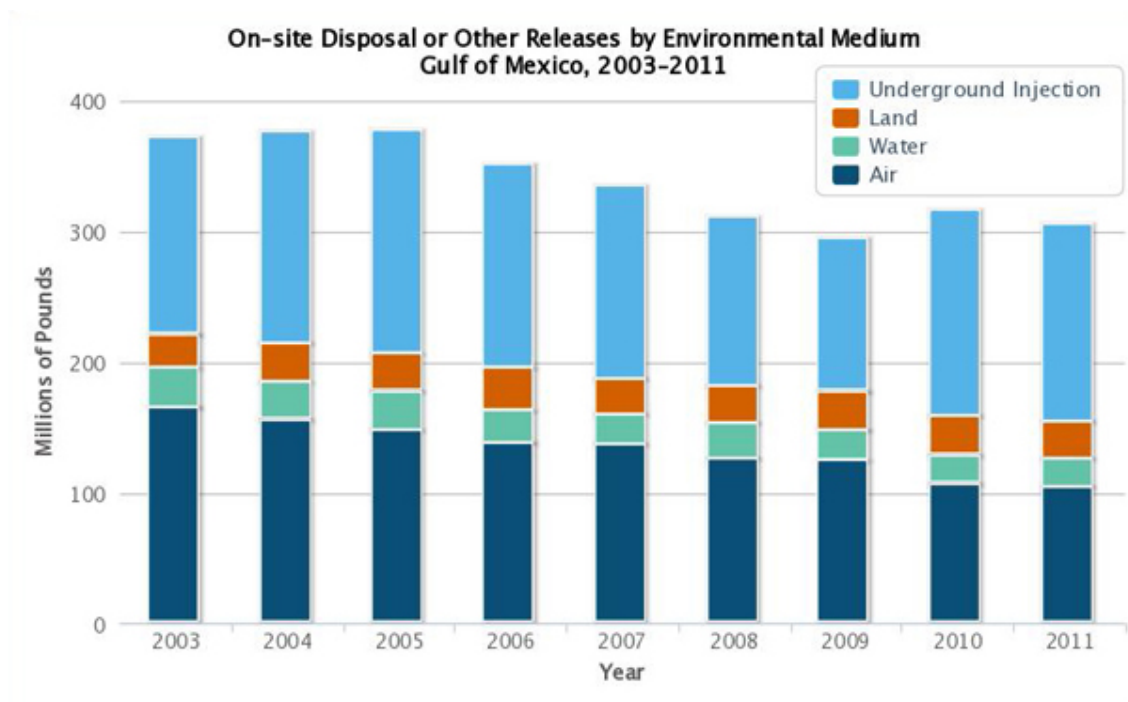
Note that these releases do not reflect releases of chemicals from the British Petroleum offshore oil spill in 2010. Under section 313 of the Emergency Planning and Community Right-to-Know Act, the TRI reporting requirements apply only to facilities in industrial sectors designated by certain North American Industrial Classification System (NAICS)

codes. Facilities that extract crude petroleum or natural gas from the earth, such as the British Petroleum offshore oil well facility in the Gulf of Mexico, are classified in NAICS 211111, which is not currently subject to TRI reporting requirements.

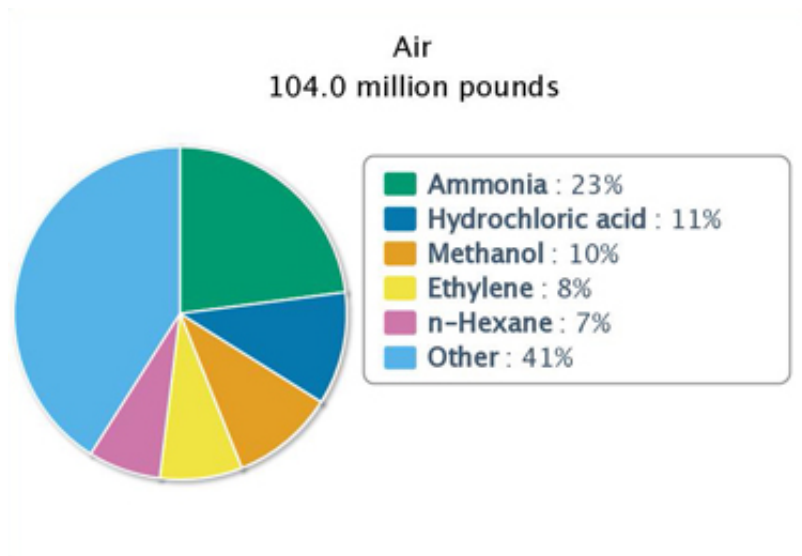
A number of federal, state and local groups are concerned about the impact of these releases and other threats to the Gulf of Mexico ecosystem. The 2004 Gulf of Mexico Alliance initiated by the five Gulf states and the 1998 U.S. EPA's Gulf of Mexico Program both monitor and protect the health of the Gulf of Mexico ecosystem. To learn more about ongoing efforts to protect the Gulf of Mexico, visit: [www.epa.gov/gmpo](http://www.epa.gov/gmpo).

#### TRI National Analysis Geo-Specific Tables (Excel files)

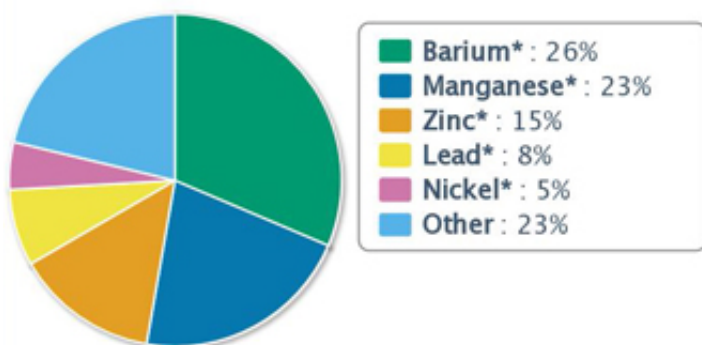




### Top Five Chemicals by Environmental Medium Gulf of Mexico, 2011

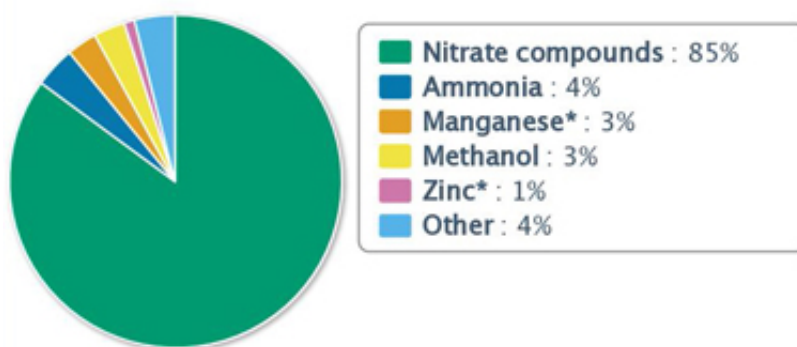


**Land**  
27.9 million pounds



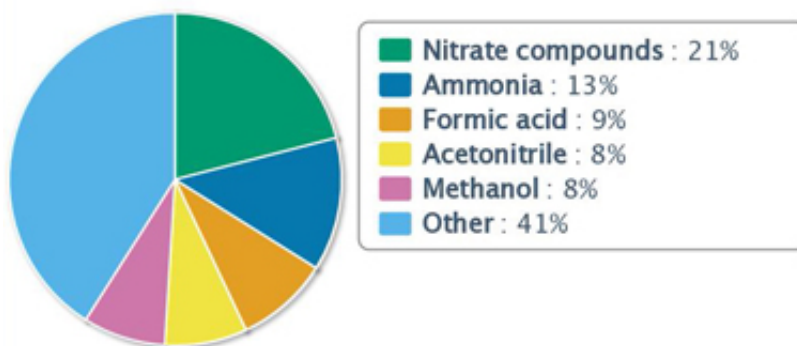
\* and its compounds

**Water**  
22.3 million pounds



\* and its compounds

**Underground Injection**  
151.4 million pounds



Note: This page was published in January of 2013 and uses the TRI National Analysis dataset made public in [TRI Explorer](#) in November 2012.

---

Last updated on March 16, 2014