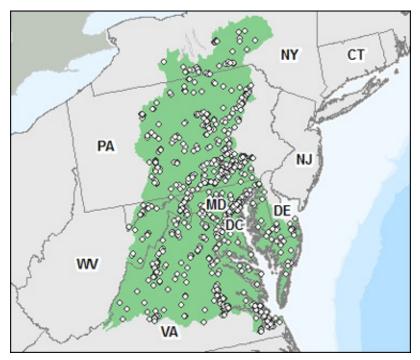


## **Toxics Release Inventory (TRI) Program**

## 2011 TRI National Analysis: Large Aquatic Ecosystems - Chesapeake Bay



TRI facilities in Chesapeake Bay Watershed

## **Quick Facts for 2011**

Number of TRI Facilities:	914
Total On-site and Off-site Disposa	59.4 million lb
or Other Releases:	
Total On-site:	49.5 million lb
• Air:	34.2 million lb
• Water:	8.6 million lb
• Land:	6.6 million lb
Underground Injection:	19 thousand lb
Total Off-site:	9.9 million lb

View definitions of TRI terms

The Chesapeake Bay is the largest estuary in the United States, and its watershed covers an area of 64,000 square miles. It is also home to more than 3,600 species of plants, fish, and animals. More than 350 species of fish are known to live, feed, and spawn in the Bay, and about 500 million pounds of seafood are harvested each year.

Some of the largest sources of TRI chemicals in the Chesapeake Bay watershed are air releases from electric power generating facilities. Hydrochloric and sulfuric acids released by power generating facilities and other industrial sources can fall as acid rain onto the Bay and its watershed, contributing to the acidification of surface waters. This source of acidification has been documented as an important factor in the ongoing decline in the populations of fish species that spawn in the Bay's streams and estuaries, including striped bass, American shad, alewife, menhaden, and herring.

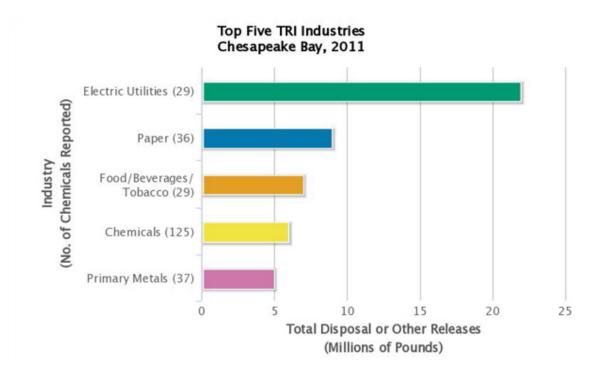
Air releases in the Chesapeake Bay region decreased by 67% from 2003 to 2011, including a decrease of 16% from 2010 to 2011. Four large coal-fired electric power plants in Maryland and one in Pennsylvania showed significant reductions from 2008 to 2010, having installed pollution control equipment during that time period.

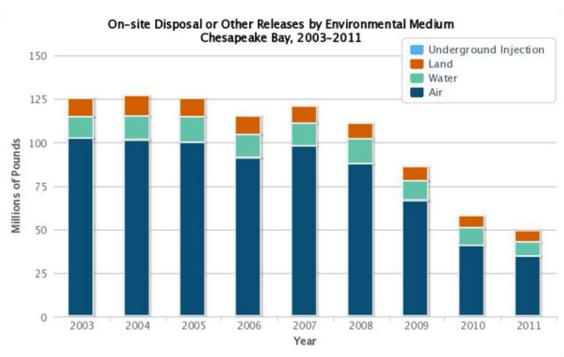
The TRI chemical disposed of or otherwise released in the second largest amount, behind air releases of hydrochloric acid, was nitrate compounds discharged to surface waters, primarily due to releases from numerous poultry and food processing facilities. Excess nitrogen stimulates aquatic plant growth, particularly in nitrogen-limited waters, such as the Chesapeake Bay. Such intense plant growth, or eutrophication, can result in low oxygen levels and "dead zones" in summer months. Surface water discharges decreased by 31% from 2003 to 2011, including a decrease of 14% from 2010 to 2011.

Most of the on-site land disposal or other releases were reported by electric utilities, primarily barium, manganese, and vanadium, as well as these chemicals' compounds. On-site land disposal or other releases decreased by 36% from 2003 to 2011, including a decrease of 8% from 2010 to 2011.

The Chesapeake Bay Program is a multi-jurisdictional partnership working to restore and protect the Bay and its many resources. The Bay Program partners include federal, state and local governments, farmers, developers and homeowners. To learn more about ongoing efforts to protect the Chesapeake Bay Watershed, visit: <a href="https://www.chesapeakebay.net">www.chesapeakebay.net</a> Exit.

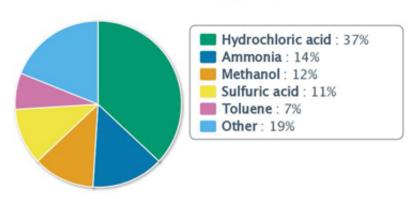
TRI National Analysis Geo-Specific Tables (Excel files)



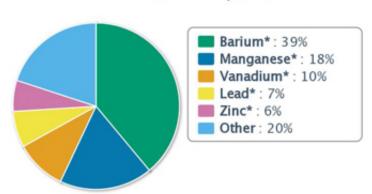


Top Five Chemicals by Environmental Medium Chesapeake Bay, 2011

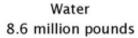
Air 34.2 million pounds

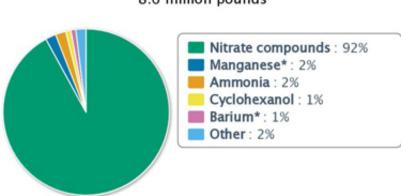


Land 6.6 million pounds

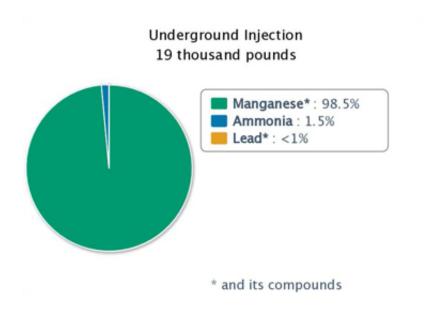


\* and its compounds





\* and its compounds



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