EPA United States Environmental Protection Agency

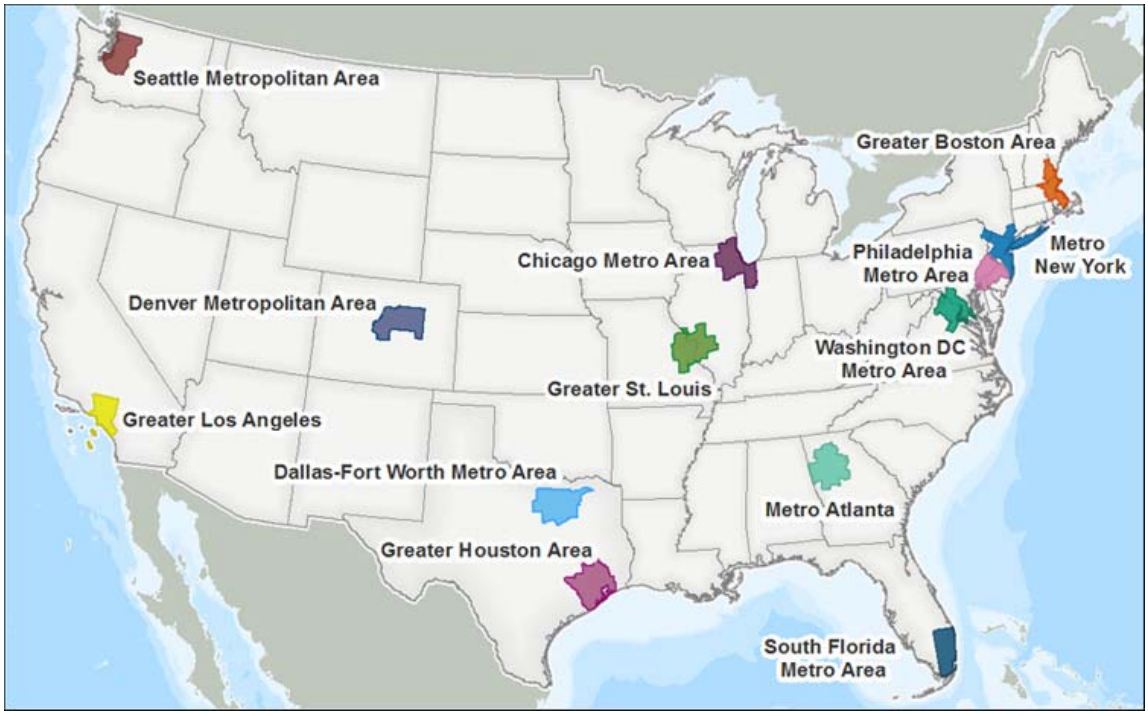
Toxics Release Inventory (TRI) Program

Urban Communities: Introduction

An important goal of TRI is to empower citizens through information that will allow them to better understand industrial activity, environmental releases, and potential risks in their communities. Using information from TRI can help community members make informed decisions about how toxic chemicals are managed in their neighborhoods, and hold companies and governments accountable. TRI data also serve as a rough indicator of facilities' environmental performance and progress over time. Knowing that the data are available to the public often spurs companies to focus on and improve their chemical management practices.

In this section we profile thirteen urban communities in the United States from the standpoint of toxic chemical disposal or other releases. Urban areas are home to more than 80% of the U.S. population. They are also home to many of the industrial facilities that report to TRI. The thirteen urban communities profiled here are the most populous in the United States and the most populous in each EPA Region as defined by Metropolitan Statistical Area (MSA) population. An MSA is an area of one or more socially and economically integrated adjacent counties, cities, or towns. These thirteen urban communities together contain about 29% of the U.S. population and about 19% of the facilities that report to TRI. Listed below, in decreasing order of their population, are the top U.S. MSAs, which are also shown in the following map:

- New York-Northern New Jersey-Long Island, NY-NJ-PA [Español]
- Los Angeles-Long Beach-Santa Ana, CA [Español]
- Chicago-Naperville-Joliet, IL-IN-WI [Español]
- Dallas-Fort Worth-Arlington, TX [Español]
- Philadelphia-Camden-Wilmington, PA-NJ-DE-MD [Español]
- Houston-Sugar Land-Baytown, TX [Español]
- Washington-Arlington-Alexandria, DC-VA-MD-WV [Español]
- Miami-Fort Lauderdale-Pompano Beach, FL [Español]
- Atlanta-Sandy Springs-Marietta, GA [Español]
- Boston-Cambridge-Quincy, MA-NH [Español]
- Seattle-Tacoma-Bellevue, WA [Español]
- St. Louis, MO-IL [Español]
- Denver-Aurora-Broomfield, CO [Español]



Top Major Metropolitan Statistical Areas Map

For each urban community profiled, we graphically show the top TRI reporting industry sectors by quantity of toxic chemicals disposed of or otherwise released; the top chemicals disposed or otherwise released to the air, water, land and underground injection; and trends in the disposal or other releases from 2001 to the most recent year of data, 2010. While facilities have been reporting to TRI for more than two decades, only the years after 2000 are shown here for consistency in presenting the trends from year to year. In several years prior to 2001, industry sectors and chemicals were added to the TRI reporting requirements.

In each urban community profile we list the major industry sectors operating in the community. Much of this information was obtained from local business organizations or chambers of commerce, which advocate on behalf of the business community. It is important to note that not all of the industries mentioned in the urban community profiles are industry sectors required to report to TRI.

You can access much more information on TRI covered facilities and chemicals near your home by using the tools and resources available on the EPA website. For

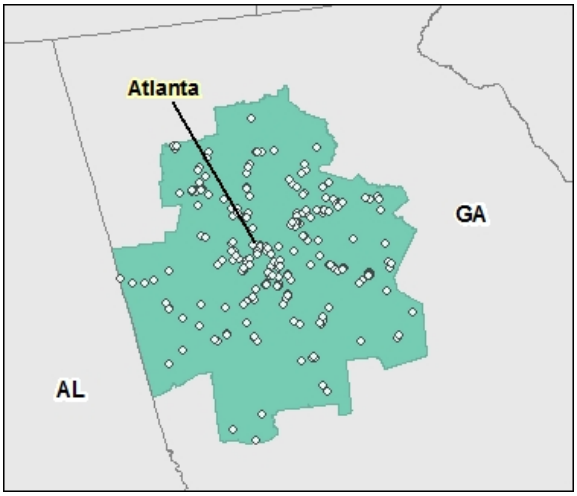
example, using myRTK and TRI Explorer, you can enter your ZIP code to get a list of facilities in your area and detailed information on the toxic chemicals they manage as waste. Additionally, myRTK provides chemical hazard and facility compliance information.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Metropolitan Atlanta



TRI facilities in Metropolitan Atlanta

Quick Facts for 2010:

Number of TRI Facilities:	248
Total On-site and Off-site Disposal or Other Releases:	17.9 million lbs
Total On-site:	17.0 million lbs
•Air:	8.6 million lbs
•Water:	0.3 million lbs
•Land:	8.1 million lbs
•Underground Injection:	none
Total Off-site:	0.9 million lbs

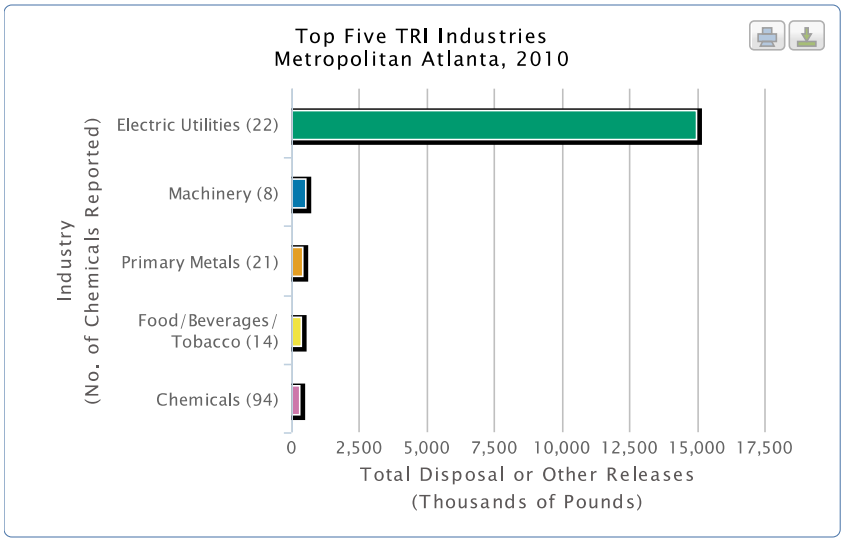
The Atlanta-Sandy Springs-Marietta, GA metropolitan area, also called Metro Atlanta, is made up of 28 counties in north Georgia. Its population of 5.3 million is spread out over a relatively large land area of 8,376 square miles. Although it has the ninth largest population of U.S. metropolitan areas, it is one of the less densely populated large metropolitan areas in the United States.

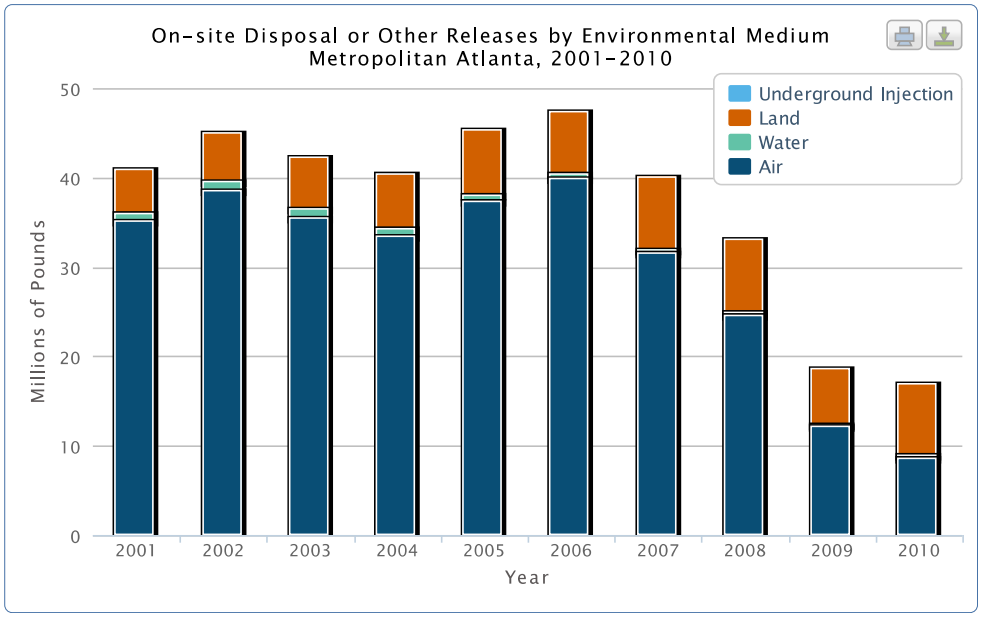
Most of the Metro Atlanta area lies in the Chattahoochee River basin. The Chattahoochee River feeds Lake Lanier, the main source of drinking water for Metro Atlanta.

The main industrial activities in Metro Atlanta include automobile and aircraft manufacturing, primary metals, food and beverage processing, textiles, printing and publishing, chemical manufacturing, and telecommunications hardware. In addition, the metropolitan area generates significant amounts of electric power, primarily from coal-fired plants.

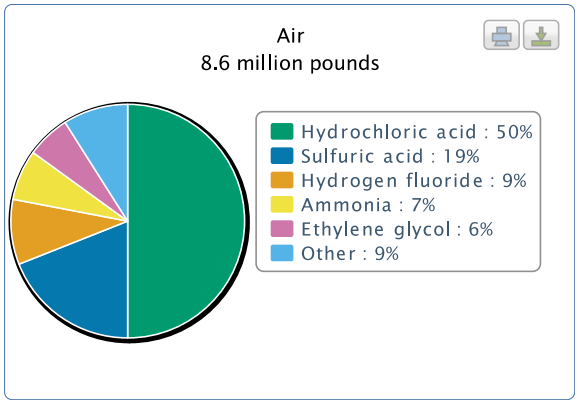
In the Atlanta metropolitan area electric utilities had the largest total disposal or other releases for 2010. Four electric utilities reported 88% of the total on-site disposal or other releases. They also accounted for 80% of total air releases, mainly hydrochloric and sulfuric acids, and 99% of total on-site land disposal or other releases, 45% of which was barium and its compounds. The food products industry reported 65% of total surface water discharges, primarily as nitrate compounds.

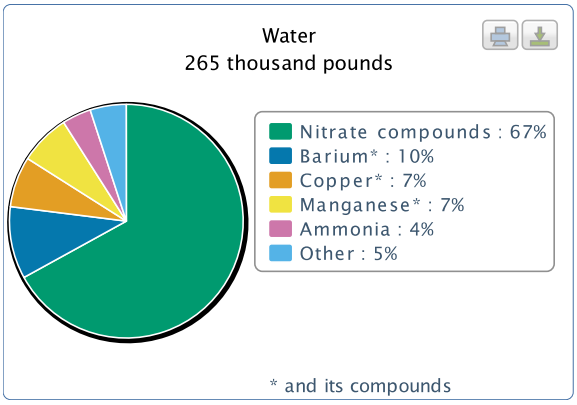
Total on-site disposal or other releases decreased by 58% from 2001 to 2010, including an 8% decrease from 2009 to 2010. A very large decrease (64%) occurred from 2006 to 2010. Air releases decreased by 76% from 2001 to 2010 and by 29% from 2009 to 2010. Electric utilities reported a decrease of 32% from 2009 to 2010 in air releases. However, they had an increase of 9% in surface water discharges and an increase of 34% in on-site land disposal or other releases during that period. Surface water discharges decreased overall by 69% from 2001 to 2010, including an 11% decrease from 2009 to 2010. On-site land disposal or other releases increased from 2001 to 2010 by 65%, including an increase of 32% from 2009 to 2010, primarily due to increases from electric utilities.

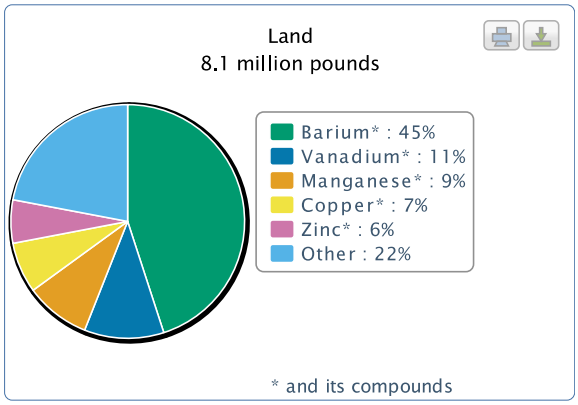




Top Five Chemicals by Environmental Medium
Metropolitan Atlanta, 2010







No underground injection reported

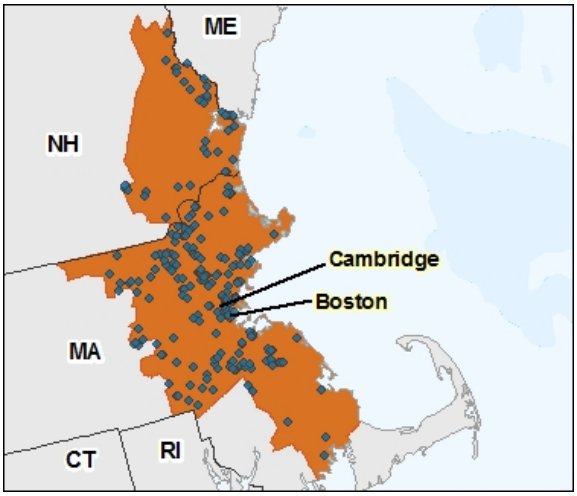
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Greater Boston Area



TRI facilities in Greater Boston Area

Quick Facts for 2010:

Number of TRI Facilities:	255
Total On-site and Off-site Disposal or Other Releases:	1.9 million lbs
Total On-site:	1.3 million lbs
•Air:	1.3 million lbs
•Water:	2 thousand lbs
•Land:	19 thousand lbs
•Underground Injection:	none
Total Off-site:	0.5 million lbs

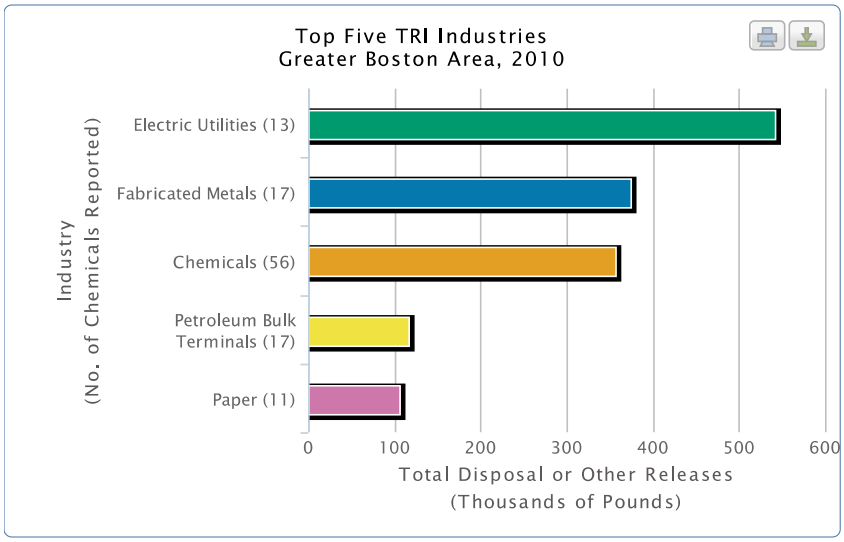
The Boston-Cambridge-Quincy, MA-NH metropolitan area, also referred to as the Greater Boston Area, includes five counties in eastern Massachusetts and two counties in southern New Hampshire. The larger cities in the Greater Boston Area include the Massachusetts cities of Cambridge, Quincy, Lowell, Brockton, Lynn, Newton, Somerville, and Lawrence in Massachusetts, and Nashua, in New Hampshire. Home to over 4.6 million people, Greater Boston is tenth in population among U.S. metropolitan areas.

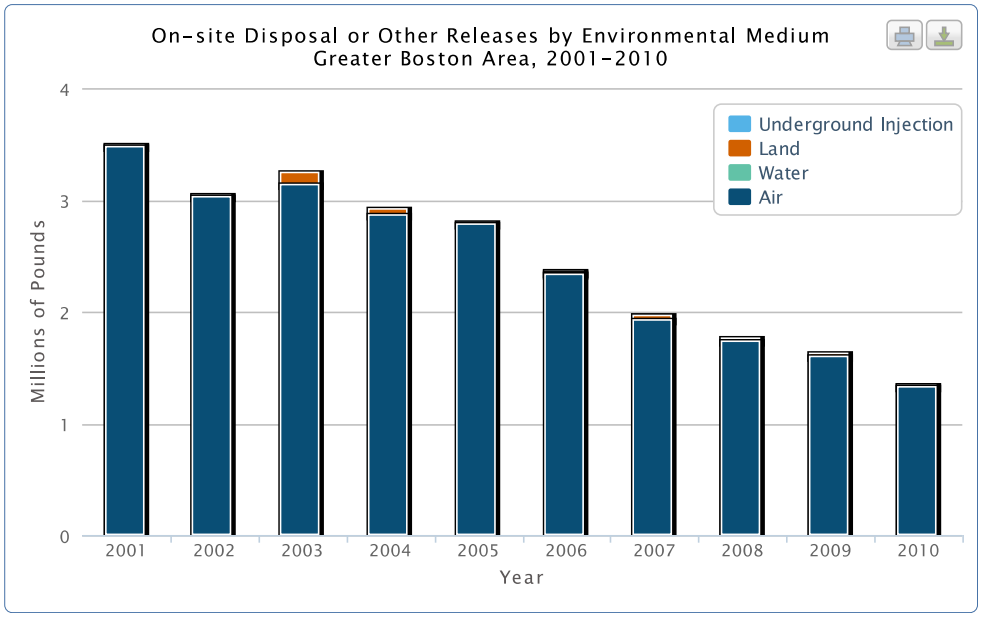
A number of rivers flow through the Greater Boston Area on their way to Boston Harbor and Massachusetts Bay, including the Charles, Mystic, Neponset, Concord, and Merrimack Rivers. Greater Boston's coastal areas include numerous estuaries that provide home and habitat for shellfish and sea grasses and breeding grounds for important commercial offshore marine fisheries.

The Port of Boston is one of the principal seaports on the east coast. In addition, because Boston is home to one of the nation's largest commercial fishing ports, there is a large seafood processing and food storage industry. Greater Boston is also a hub for biotechnology and life sciences. Other important products produced in Greater Boston include medical devices, military and commercial electronics, missiles and missile guidance systems, chemicals, industrial machinery, printing and publishing, rubber products, and apparel.

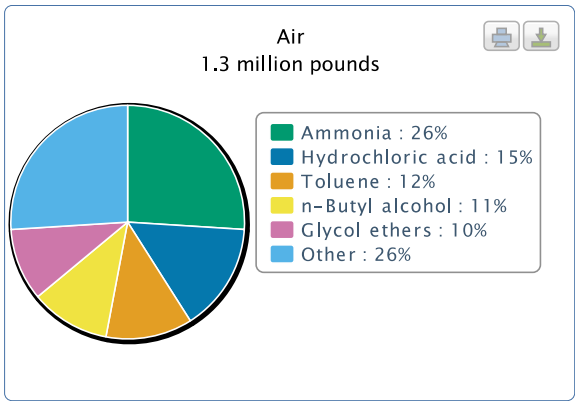
Air releases accounted for 98% of on-site disposal or other releases in the Greater Boston metropolitan area in 2010. Electric utilities had the largest air releases, with 38% of total air releases, mainly comprised of ammonia and hydrochloric acid releases. Fabricated metals facilities had the second largest with 23% of air releases for the area, mainly comprised of n-butyl alcohol and glycol ethers releases.

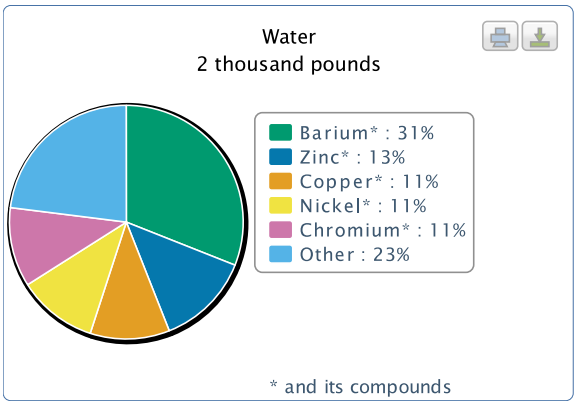
Air releases in the Greater Boston area decreased by 62% from 2001 to 2010 with an 18% decrease from 2009 to 2010. Electric utilities reported a 63% decrease from 2001 to 2010 and a 6% decrease from 2009 to 2010. Fabricated metals facilities decreased air releases by 40% from 2001 to 2010, including a 9% decrease from 2009 to 2010.

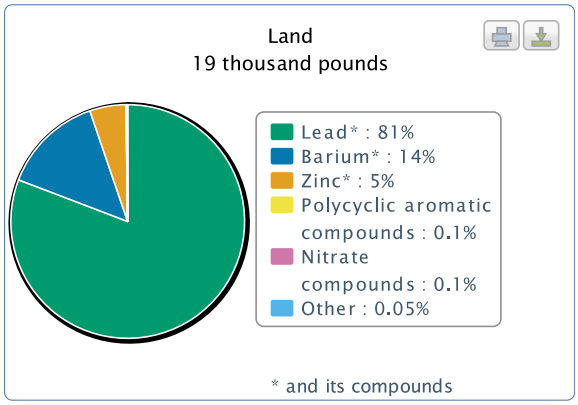




Top Five Chemicals by Environmental Medium
Greater Boston Area, 2010







No underground injection reported

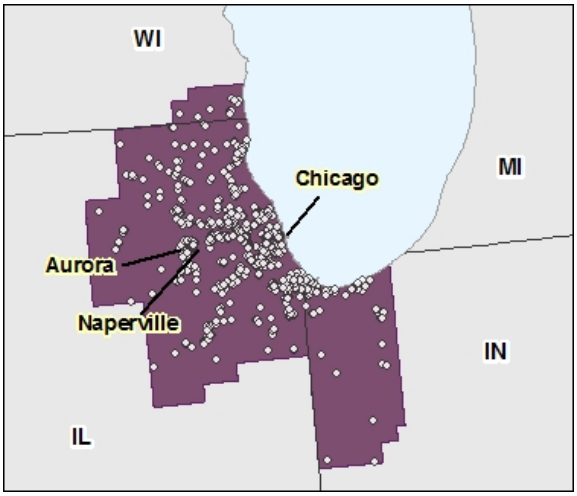
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Chicago Metropolitan Area



TRI facilities in Chicago Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	700
Total On-site and Off-site Disposal or Other Releases:	61.4 million lbs
Total On-site:	32.1 million lbs
•Air:	15.0 million lbs
•Water:	2.8 million lbs
•Land:	13.7 million lbs
•Underground Injection:	0.7 million lbs
Total Off-site:	29.3 million lbs

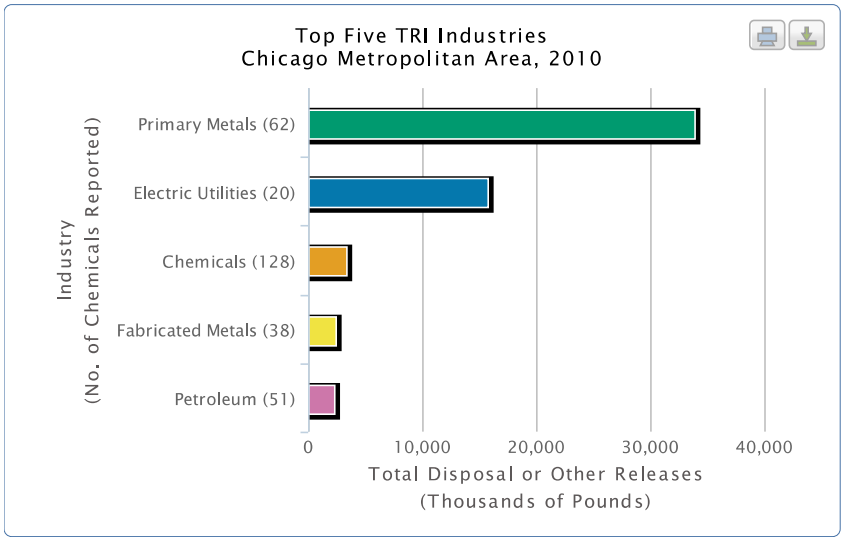
The Chicago-Joliet-Naperville, IL-IN-WI metropolitan area is the third largest in the United States with a population of 9.5 million. It includes nine counties in northern Illinois, four counties in northwest Indiana, and one county in southeast Wisconsin. The metropolitan area covers 9,581 square miles on the Chicago Plain, a flat and broad area along the southwestern curve of Lake Michigan. Principle cities in the metropolitan area include: Chicago, IL; Joliet, IL; Naperville, IL; Elgin, IL; Gary, IN; Evanston, IL; Arlington Heights, IL; Schaumburg, IL; Skokie, IL; and Des Plaines, IL.

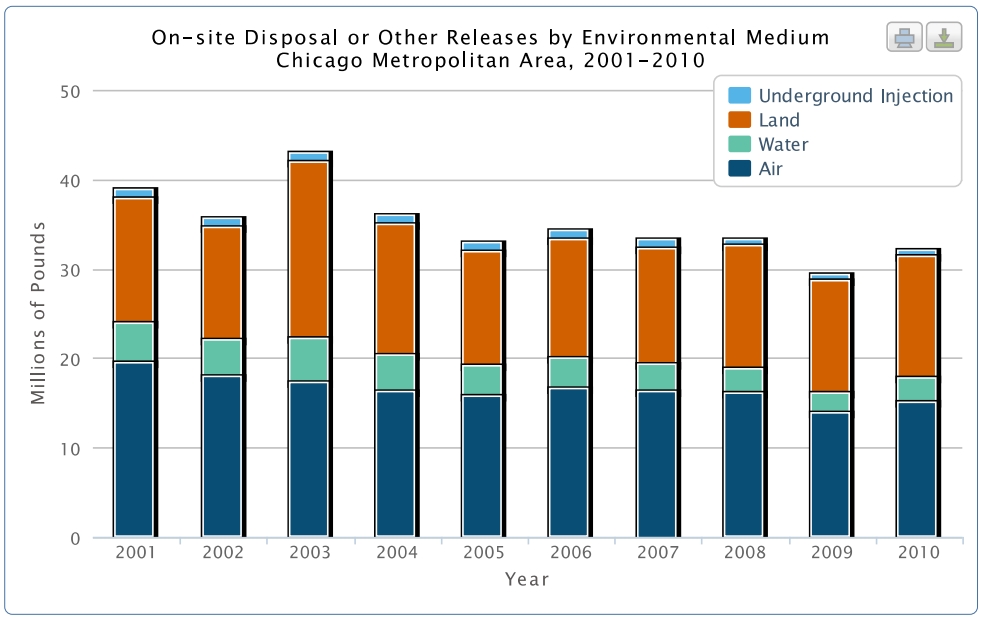
Lake Michigan is the drinking water source for over five million people in the area. Heavy traffic, industrial pollution and sewage overflows threaten the health of the lake. Air pollutants from industries and power plants are also a pollution source as they are deposited from the atmosphere into the lake. Other important waterways in the metropolitan area include the Chicago River, the Des Plaines River, the Fox Chain O'Lakes, and the Fox River.

The Chicago metropolitan area is one of the major industrial centers in the United States, manufacturing chemicals, petroleum products, machinery, food, steel and other metal products, automobiles and other transportation equipment, printed materials, plastic and rubber products, computers, and telecommunications gear. The area is a major electric power producer with several large electric power plants, many coal-fired. It is also an important transportation hub; the Port of Chicago connects the Great Lakes to the Mississippi River via the Illinois River.

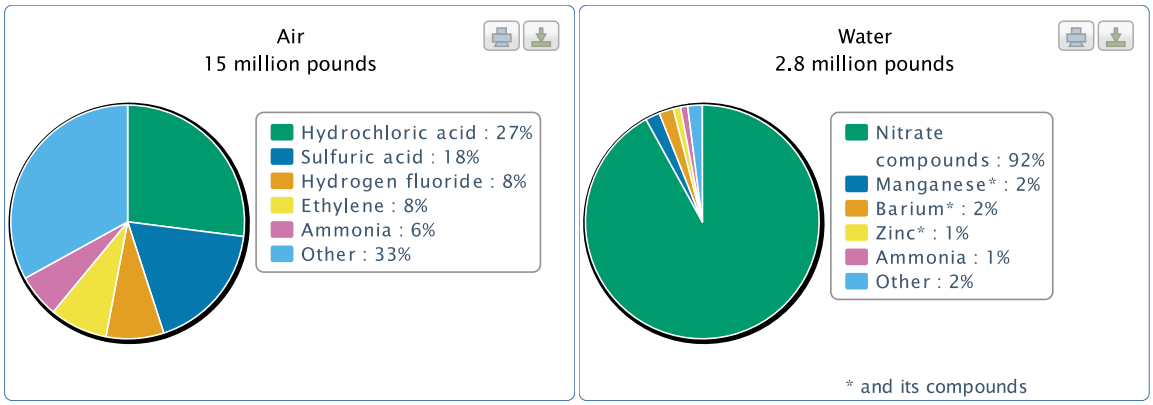
Primary metals facilities (such as iron and steel mills and smelters) had the largest surface water discharges, on-site land disposal or other releases, and on-site underground injection of all sectors in 2010. This sector accounted for more than three-quarters of each type of disposal or other releases listed above in the metropolitan Chicago area. This sector's chemicals with the largest disposal or other releases included nitrate compounds released to water, zinc and manganese and their compounds to on-site landfills and ammonia and phenol in underground injection wells. Electric utilities reported almost 41% of total air releases in the metropolitan Chicago area for 2010. Over half of the air releases from electric utilities was hydrochloric acid.

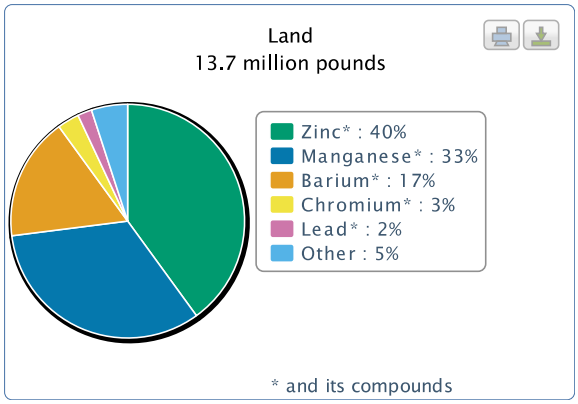
Total on-site disposal or other releases for the Chicago metropolitan area decreased by 17% from 2001 to 2010 but increased by 9% from 2009 to 2010. Air releases decreased 23% from 2001 to 2010 but increased by 8% from 2009 to 2010. Surface water discharges decreased by 38% from 2001 to 2010 but increased by 22% from 2009 to 2010. The primary metals total on-site disposal or other releases decreased by 10% from 2001 to 2010, but increased by 13% from 2009 to 2010. This sector reported a 39% increase in surface water discharges, a 9% increase in on-site land disposal or other releases and a 4% increase in underground injection from 2009 to 2010. Electric utilities' air releases increased by 72% from 2001 to 2010 including an increase of 8% from 2009 to 2010.

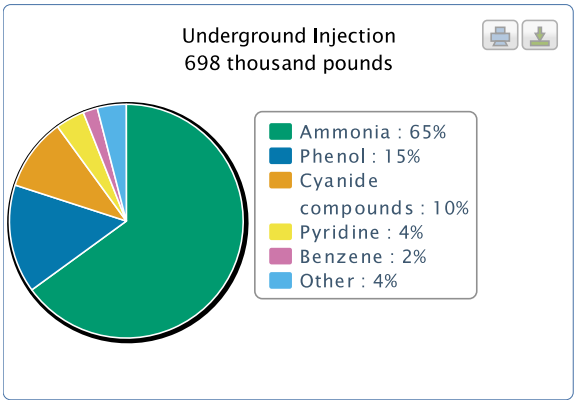




Top Five Chemicals by Environmental Medium
Chicago Metropolitan Area, 2010







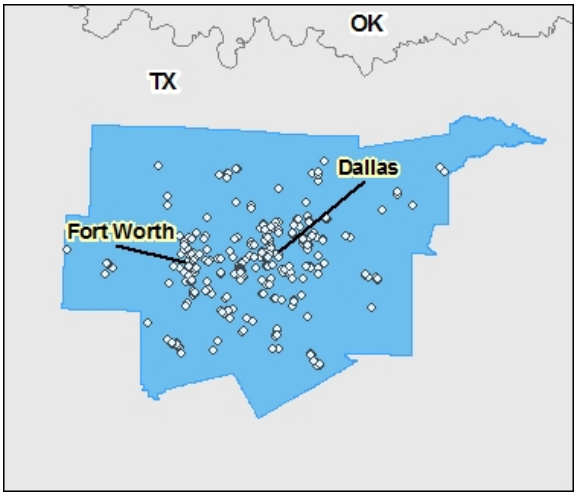
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Dallas-Fort Worth Metropolitan Area



TRI facilities in Dallas-Fort Worth Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	335
Total On-site and Off-site Disposal or Other Releases:	4.4 million lbs
Total On-site:	3.1 million lbs
•Air:	2.4 million lbs
•Water:	6 thousand lbs
•Land:	0.7 million lbs
•Underground Injection:	none
Total Off-site:	1.3 million lbs

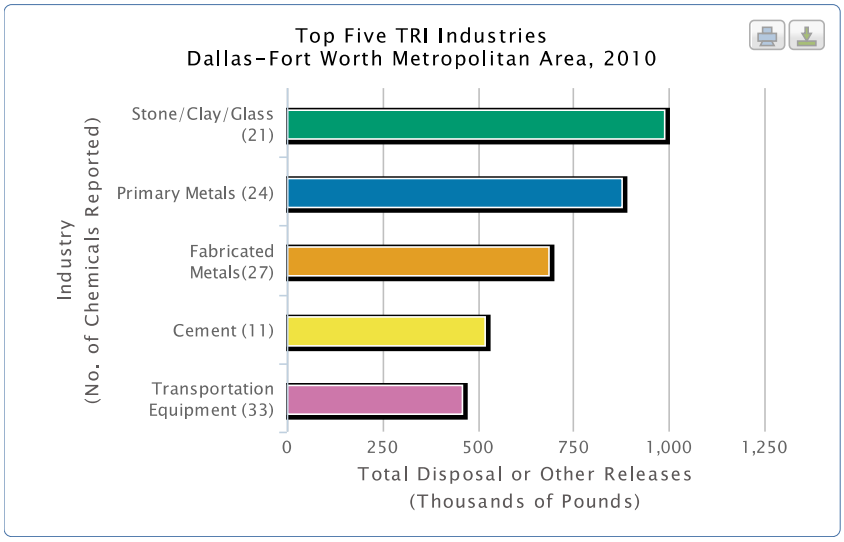
The Dallas-Fort Worth-Arlington, TX metropolitan area is the fourth largest metropolitan statistical area in the United States with a population of 6.4 million. Often called the Dallas-Fort Worth Metroplex, it is comprised of twelve counties in north central Texas. In addition to Dallas, Fort Worth, and Arlington, principal cities include Plano, Irving, Carrollton, Denton, McKinney and Richardson. Developed primarily on prairie, or temperate grasslands, it is one of the larger metropolitan areas covering 9,286 square miles, about the size of New Hampshire.

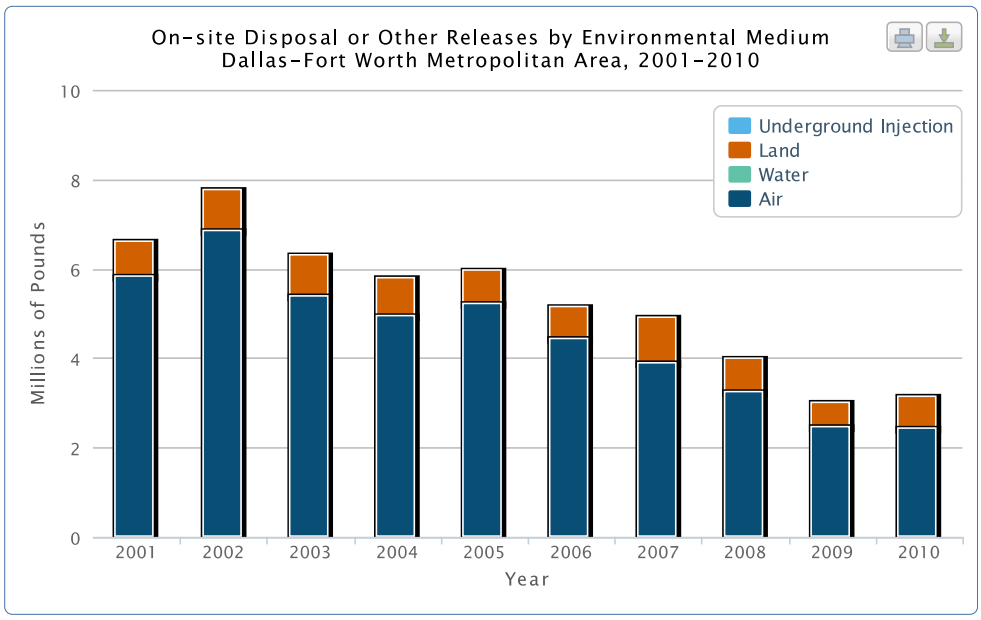
The Trinity River is the major waterway through the city, which is also the source of a number of the metropolitan area's drinking water reservoirs. Other significant water features include White Rock Lake, Bachman Lake, Lake Ray Hubbard, Mountain Creek Lake, and North Lake.

The Dallas-Fort Worth-Arlington metropolitan area is known as a center for high technology, in part because of its electronics and telecommunications manufacturing. It also hosts large petrochemical, aircraft and aircraft parts, machinery, transportation equipment, and food products manufacturing sectors. In addition, the natural gas drilling and extraction industry is growing rapidly as a large natural gas-containing shale formation underlies much of the Metroplex area.

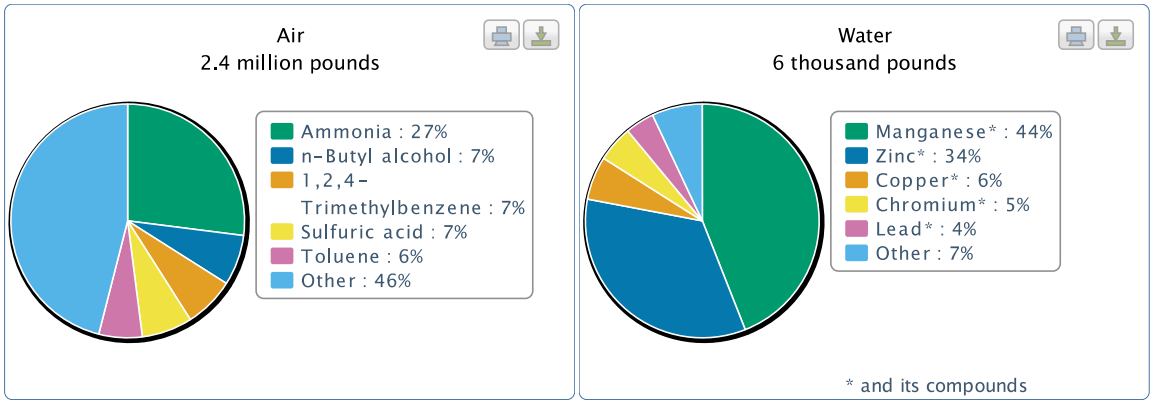
The Stone/Clay/Glass sector in this metropolitan area had the largest total disposal or other releases. This sector includes facilities that manufacture mineral wool, insulation materials, ceramic tile, and concrete products. The sector accounted for 25% of total on-site disposal or other releases for 2010, including 31% of total air releases. Almost two-thirds of this sector's air releases were ammonia. The primary metals sector, which includes steel mills and smelters, accounted for 17% of the total on-site disposal or other releases and had the largest on-site land disposal or other releases. In the Dallas-Fort Worth area, primary metals facilities reported 53% of the total on-site land disposal or other releases, mainly lead and its compounds.

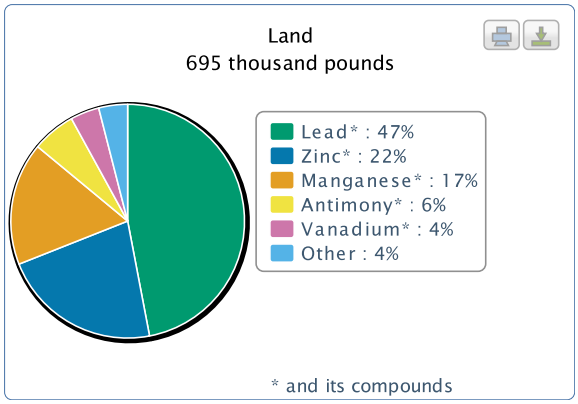
Total on-site disposal or other releases for the Dallas-Fort Worth metropolitan area decreased by 53% from 2001 to 2010, but had a 4% increase from 2009 to 2010. Air releases decreased by 58% from 2001 to 2010, including a 1% decrease from 2009 to 2010. The stone/clay/glass sector decreased its air releases by 2% from 2009 to 2010, but had an overall increase in total on-site disposal or other releases of 1% due primarily to an increase in on-site land disposal or other releases. The primary metals sector also had an overall increase of 1% from 2009 to 2010, but did report a decrease in air releases of 3%.





Top Five Chemicals by Environmental Medium
Dallas-Fort Worth Metropolitan Area, 2010





No underground injection reported

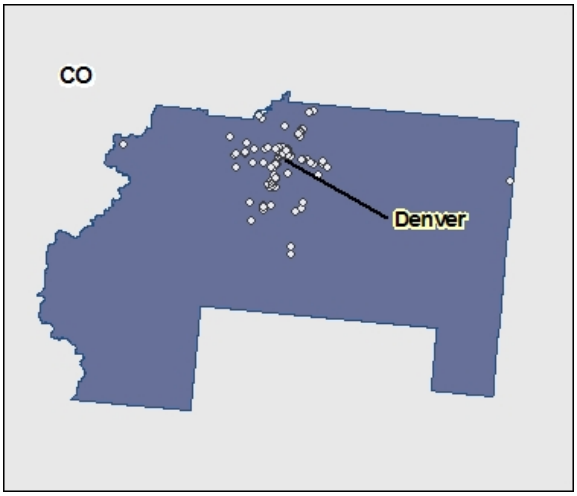
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Denver Metropolitan Area



TRI facilities in Denver Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	100
Total On-site and Off-site Disposal or Other Releases:	5.6 million lbs
Total On-site:	4.4 million lbs
•Air:	0.9 million lbs
•Water:	0.2 million lbs
•Land:	3.4 million lbs
•Underground Injection:	none
Total Off-site:	1.2 million lbs

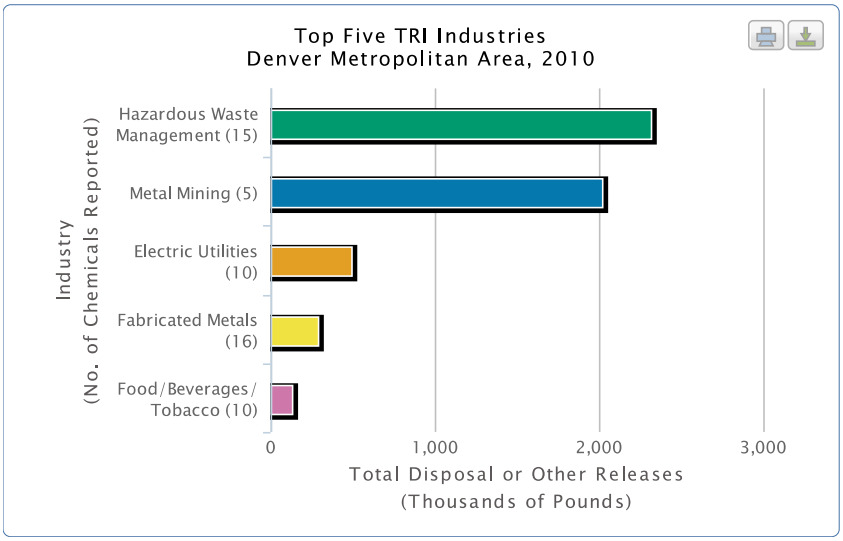
The Denver-Aurora-Broomfield, CO metropolitan area is centered in the South Platte River Valley of Colorado between the Front Range of the Rocky Mountains to the west and the High Plains to the east. The 10 counties surrounding Denver cover 8,414 square miles. The metropolitan area includes the cities of Arvada, Lakewood, Thornton and Westminster. Its population of about 2.5 million people makes it the 21st largest U.S. metropolitan area.

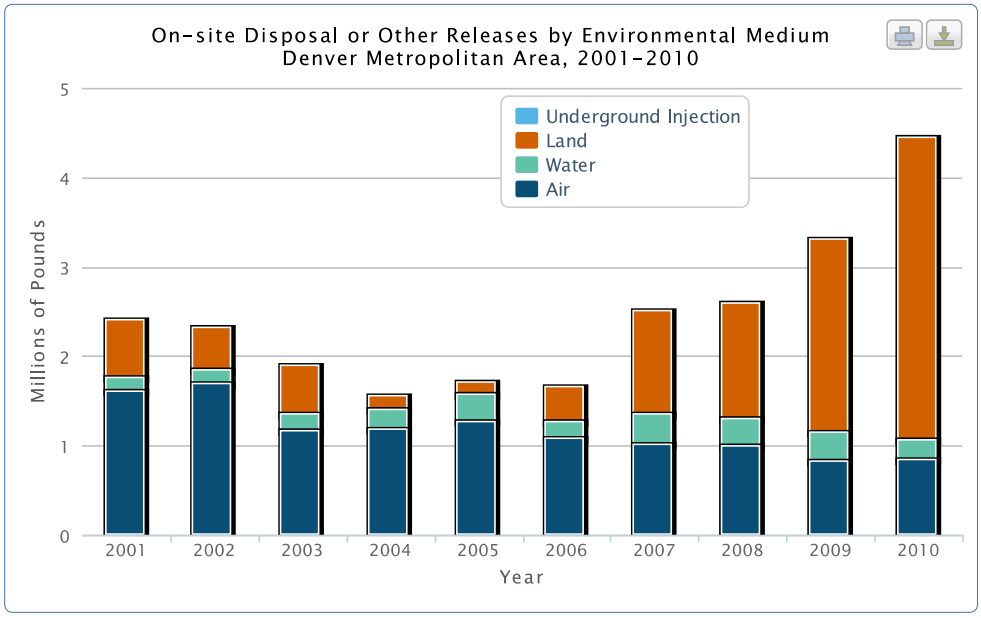
The Denver metropolitan area's economy was historically based upon mining and energy extraction due to its location near the mineral-rich Rocky Mountains. Energy and mining are still important in Denver's economy but the city has also become a major energy research center. The metropolitan area is also a regional transportation hub for the western United States. It hosts a number of federal agency headquarters and regional offices.

The metropolitan area has a varied manufacturing base, producing food and beverages, printed materials, mining and farming machinery, electrical instruments, rubber goods, fabricated metal products, chemicals and allied stone and clay products, clothing, transportation equipment, scientific instruments, feed, flour, and luggage.

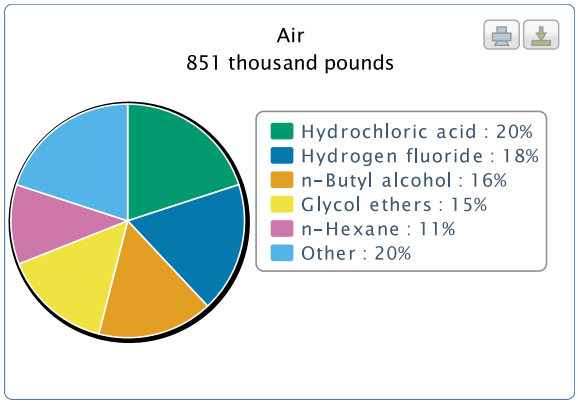
Land disposal accounted for more than three-quarters (76%) of total on-site disposal or other releases in the Denver metropolitan area in 2010. One hazardous waste management facility accounted for 69% of the on-site land disposal and one metal mine accounted for almost all of the remainder. While the hazardous waste facility's land disposal consisted of mainly aluminum oxide, lead and its compounds, and chromium and its compounds, the mining facility's consisted mainly of manganese and its compounds. Electric utilities and fabricated metals facilities each accounted for almost one-third (32%) of total air releases for 2010. Electric utilities' air releases were mainly hydrochloric acid and hydrogen fluoride. Fabricated metals facilities' air releases were mainly n-butyl alcohol and glycol ethers.

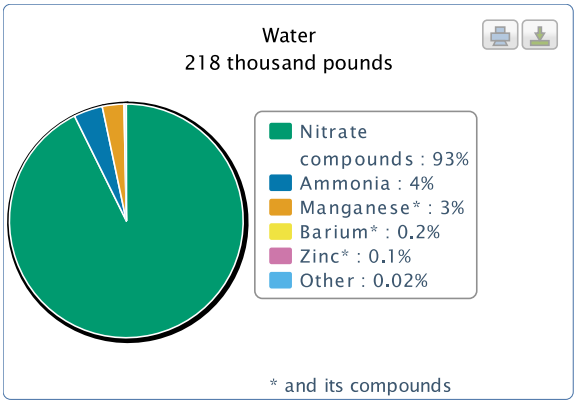
From 2001 to 2010, total on-site disposal or other releases increased by 85%, with an 18% increase from 2009 to 2010. Both on-site land disposal and surface water discharges increased between 2001 and 2010, while air releases decreased. However, air releases increased by 4% from 2009 to 2010 while surface water discharges decreased by 32%. On-site land disposal in 2010 was five times the amount reported 2001, with a 29% increase from 2009 to 2010. One hazardous waste management facility accounted for the large increase from 2001 to 2010 and reported a 40% increase from 2009 to 2010.

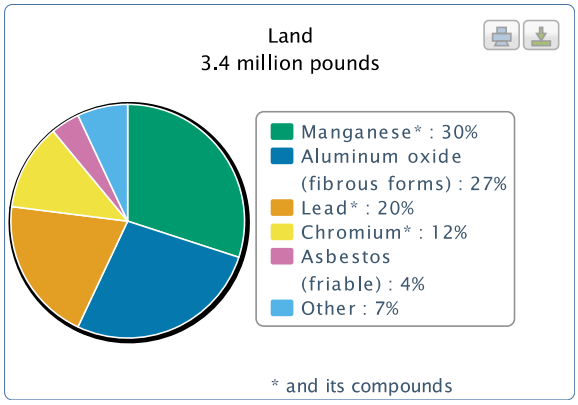




Top Five Chemicals by Environmental Medium
Denver Metropolitan Area, 2010







No underground injection reported

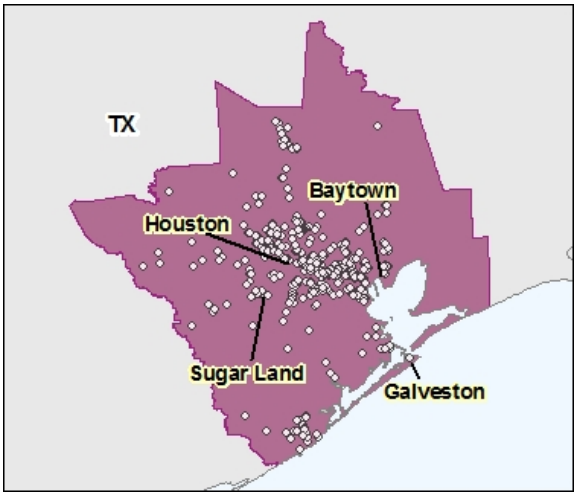
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Greater Houston Area



TRI facilities in Greater Houston Area

Quick Facts for 2010:

Number of TRI Facilities:	464
Total On-site and Off-site Disposal or Other Releases:	75.4 million lbs
Total On-site:	68.0 million lbs
•Air:	20.8 million lbs
•Water:	5.3 million lbs
•Land:	4.4 million lbs
•Underground Injection:	37.5 million lbs
Total Off-site:	7.4 million lbs

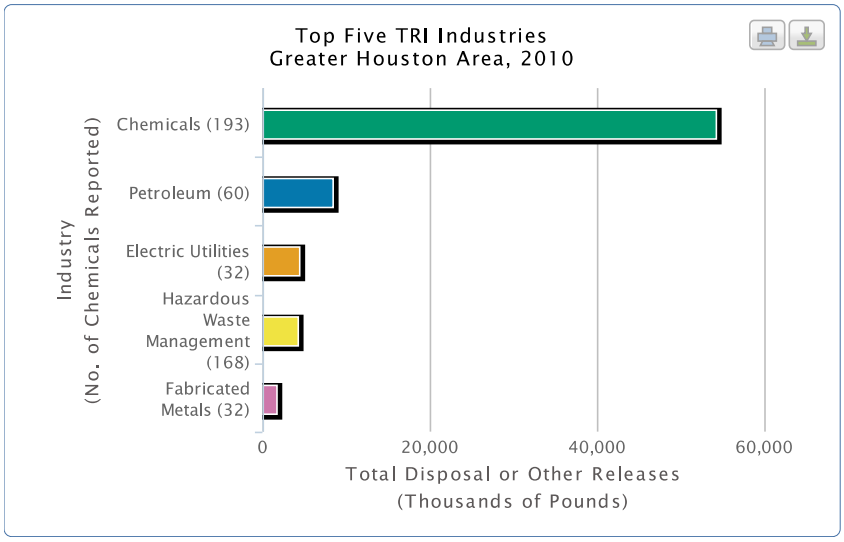
The Houston-Sugar Land-Baytown metropolitan statistical area is a 10-county urban community located along the Gulf Coast region in southeast Texas. The metropolitan area is often referred to as "Greater Houston." It is the sixth-largest metropolitan area in the United States with a population of 5.9 million. The metropolitan area is one of the largest in size, covering 10,062 square miles, which is only slightly smaller than the state of Massachusetts. Much of the metropolitan area was built on forested land, marshes, swamp, or prairie.

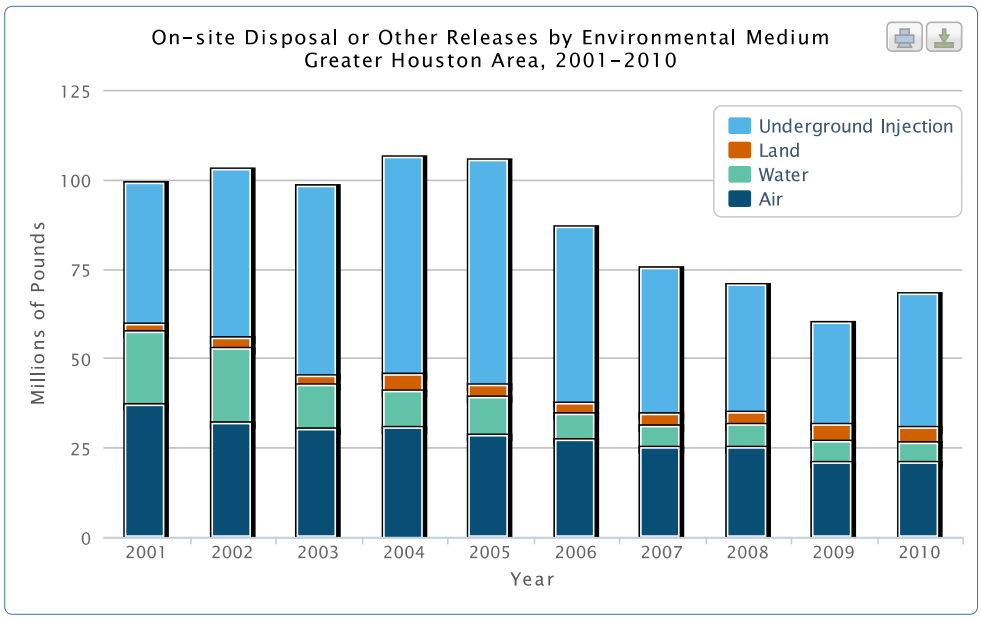
Galveston Bay is a large and productive estuary located within the Houston-Sugar Land-Baytown metropolitan area supporting a substantial commercial fishing industry. Numerous bayous, rivers, and wetlands ring the Bay and support their own ecosystems.

Much of the economic activity within the metropolitan area is based on shipping and manufacturing. According to the Greater Houston Partnership, an organization advocating for regional businesses, Galveston Bay and the Buffalo Bayou together form one of the most important shipping hubs in the world. The area is also home to the largest petrochemical manufacturing region in the United States, as well as major production facilities for sugar, synthetic rubber, fertilizers, insecticides, aeronautics, and oilfield equipment.

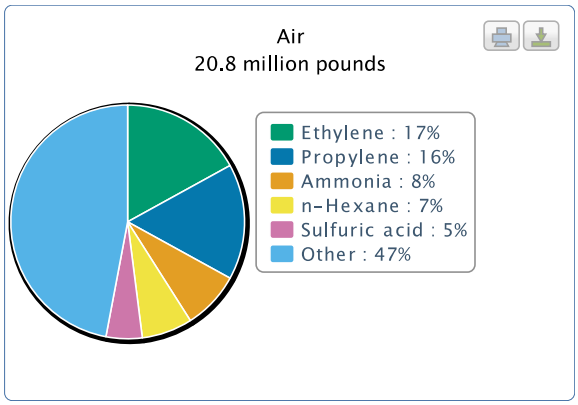
Chemical manufacturers had the largest total disposal or other releases in the Greater Houston metropolitan area. They accounted for three-quarters of the total on-site disposal or other releases. They also had the largest underground injection (with 89% of the total), air releases (with 66% of the total) and surface water discharges (with 57% of the total). From this sector, ammonia accounted for 32% of underground injection, ethylene and propylene accounted for 42% of total air releases, and nitrate compounds were 93% of its surface water discharges. One inorganic chemical manufacturer reported 47% of the total underground injection in this area. Electric utilities had the largest on-site land disposal or other releases with 78% of the total, mainly comprised of barium and its compounds.

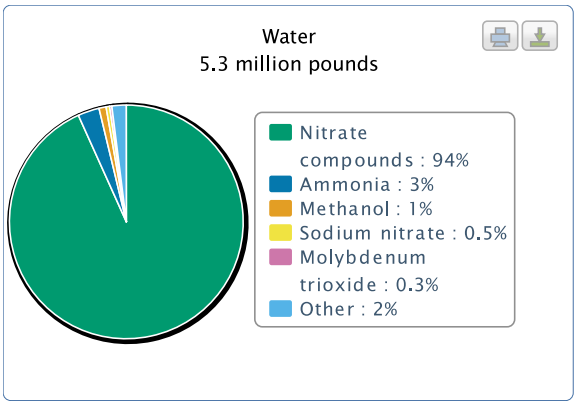
Total on-site disposal or other releases decreased by 31% from 2001 to 2010, but increased by 14% from 2009 to 2010, primarily due to a 32% increase in underground injection. The chemical manufacturing sector had an increase of 21% in on-site disposal or other releases from 2009 to 2010, including an increase of 36% in underground injection. Three-quarters of the increase in underground injection was due to one inorganic chemical manufacturer. The petroleum refining sector had a decrease of 6% from 2009 to 2010 in total on-site disposal or other releases. Electric utilities showed an overall decrease of 8%.

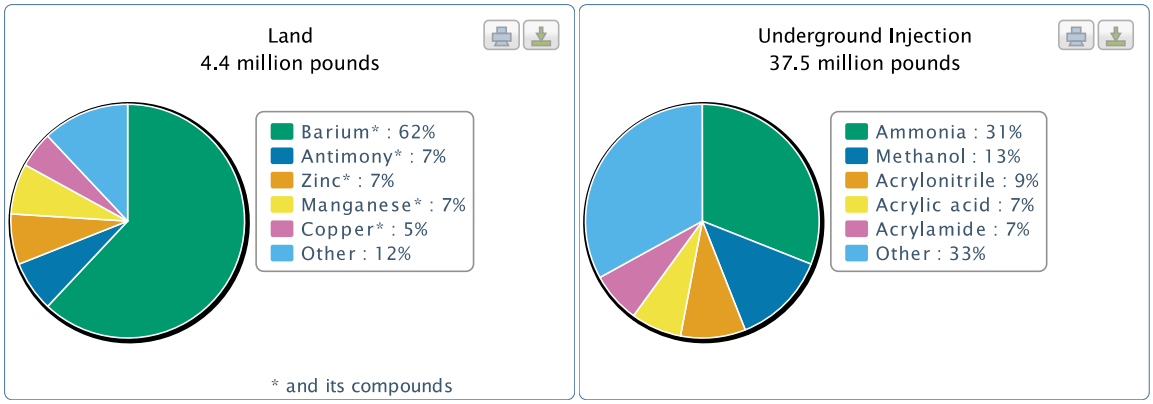




Top Five Chemicals by Environmental Medium
Greater Houston Area, 2010







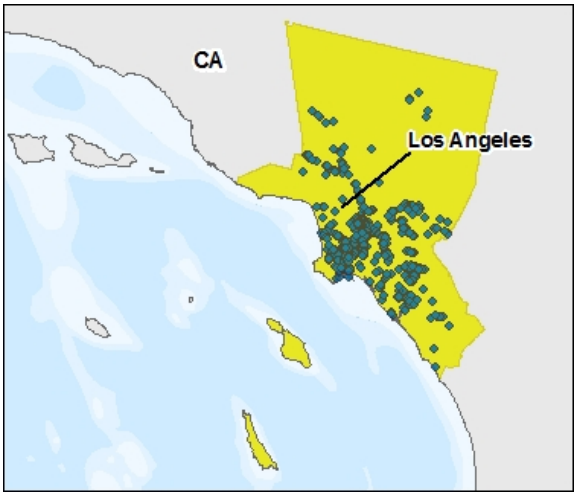
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Greater Los Angeles



TRI facilities in Greater Los Angeles

Quick Facts for 2010:

Number of TRI Facilities:	512
Total On-site and Off-site Disposal or Other Releases:	6.4 million lbs
Total On-site:	4 million lbs
•Air:	3.1 million lbs
•Water:	0.8 million lbs
•Land:	0.1 million lbs
•Underground Injection:	none
Total Off-site:	2.4 million lbs

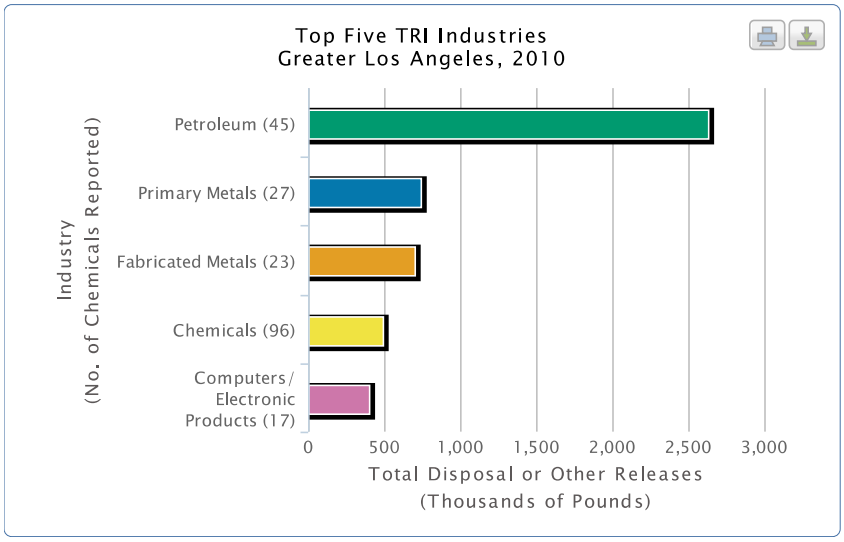
The Los Angeles-Long Beach-Santa Ana, CA metropolitan area is also known as the Greater Los Angeles Area. With an estimated population of 12.8 million, it is the second most populous metropolitan area in the United States. It includes Los Angeles and Orange Counties and the principal cities of Los Angeles, Long Beach, Santa Ana, Anaheim, Irvine, Glendale, Pomona, Pasadena, Torrance, Orange, Burbank, Compton, Santa Monica, and Newport Beach. The total land area of the combined statistical area is 4,850 square miles. The Los Angeles area occupies part of a mountain-rimmed basin fronting on the Pacific Ocean. It is bounded by the Santa Monica Mountains to the north and by the San Gabriel Mountains to the east. Owing to this geography, the Los Angeles Basin and the San Fernando Valley can suffer from severe air pollution when atmospheric inversions hold in the emissions from vehicles, ocean vessels, manufacturing, and other sources.

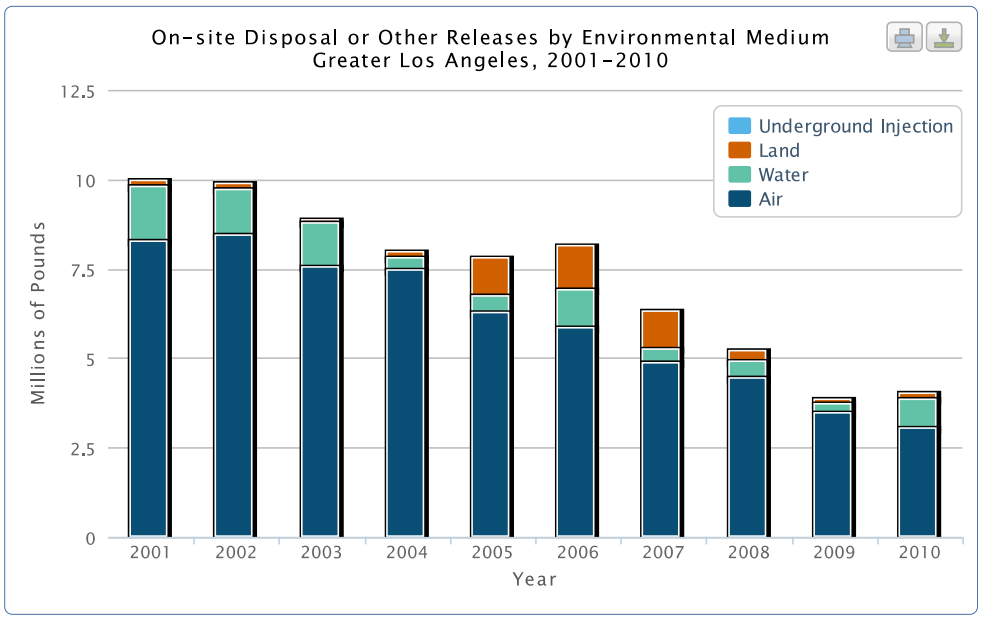
Greater Los Angeles is the nation's second largest industrial and commercial center, after the New York Metropolitan area. The Port of Los Angeles and Port of Long Beach are the center of imports and exports for U.S. trade on the Pacific Coast. According to the Port of Los Angeles, when considered together, the ports of Los Angeles and Long Beach comprise the fifth busiest port in the world.

While there is a diversity of manufacturing in the Greater Los Angeles area, there is a significant presence of aerospace industry, which includes the manufacturing of commercial and military aircraft and various space systems. Also significant are the assembly of automobiles and other vehicles, fabrication of metal parts, the making of tires, and an electronics sector that has undergone significant growth over the past decade. The Greater Los Angeles Area also hosts large petroleum refining and petrochemical industries.

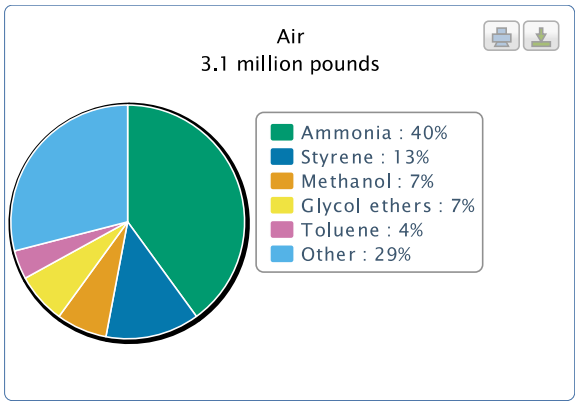
Petroleum refineries in the Greater Los Angeles metropolitan area had the largest air releases of any TRI sector, with 51% of the total. Almost two-thirds (66%) of the air releases from the petroleum sector were ammonia. One refinery reported over 99% of all surface water discharges in this area mainly as nitrate compounds.

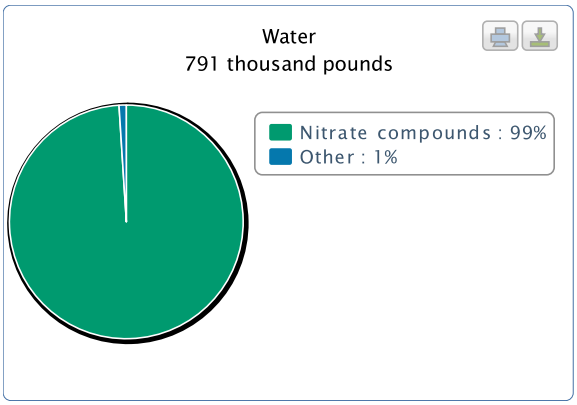
Total on-site disposal or other releases for the Greater Los Angeles metropolitan area decreased by 60% from 2001 to 2010. However, they increased by 4% from 2009 to 2010. Air releases, which represented 76% of all on-site disposal or other releases in 2010, decreased by 63% from 2001 to 2010 and by 12% from 2009 to 2010. Petroleum refineries decreased their air releases by 50% from 2001 to 2010, including a 9% decrease from 2009 to 2010. Surface water discharges decreased by 48% from 2001 to 2010, but they more than tripled from 2009 to 2010, due primarily to one petroleum refinery's increase of over 560 thousand pounds of nitrate compounds. On-site land disposal or other releases also increased by 15% from 2009 to 2010 but showed an overall decrease of 12% from 2001 to 2010.

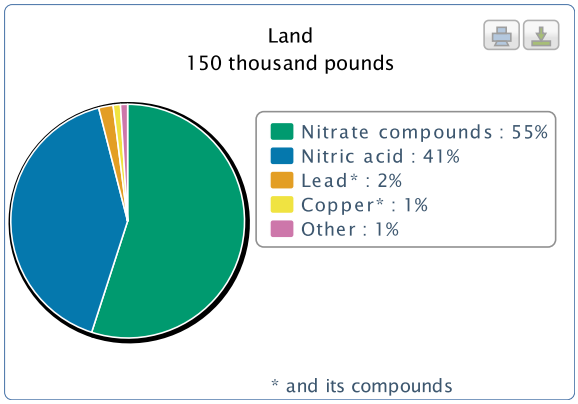




Top Five Chemicals by Environmental Medium
Greater Los Angeles, 2010







No underground injection reported

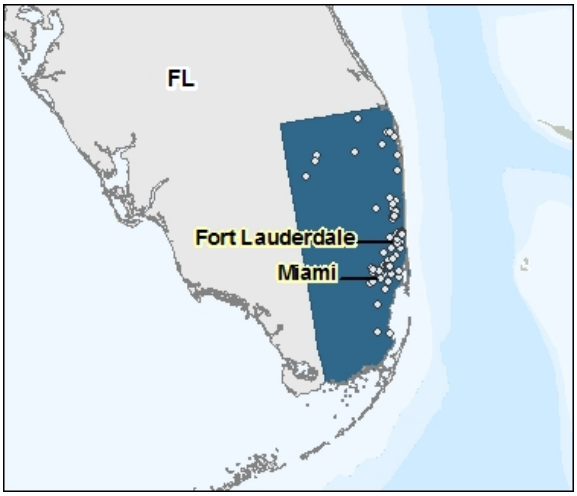
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: South Florida Metropolitan Area



TRI facilities in South Florida Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	81
Total On-site and Off-site Disposal or Other Releases:	1.5 million lbs
Total On-site:	1.4 million lbs
•Air:	1.1 million lbs
•Water:	2 lbs
•Land:	0.2 million lbs
•Underground Injection:	1 lb
Total Off-site:	0.1 million lbs

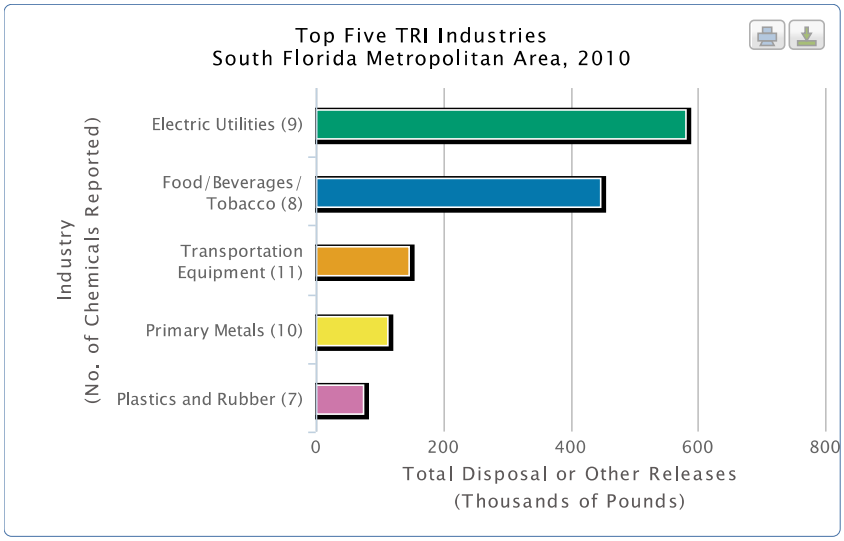
The Miami-Fort Lauderdale-Pompano Beach, FL metropolitan area, also called the South Florida metropolitan area, or the Miami metropolitan area, covers Miami-Dade County, Broward County, and Palm Beach County. Other principal cities include West Palm Beach, Miami Beach, Boca Raton, Homestead, and Delray Beach. While the metropolitan area covers 6,137 square miles, most of the 5.6 million people live in the over 100 mile long strip of land between the Everglades to the west and the Atlantic Ocean to the east.

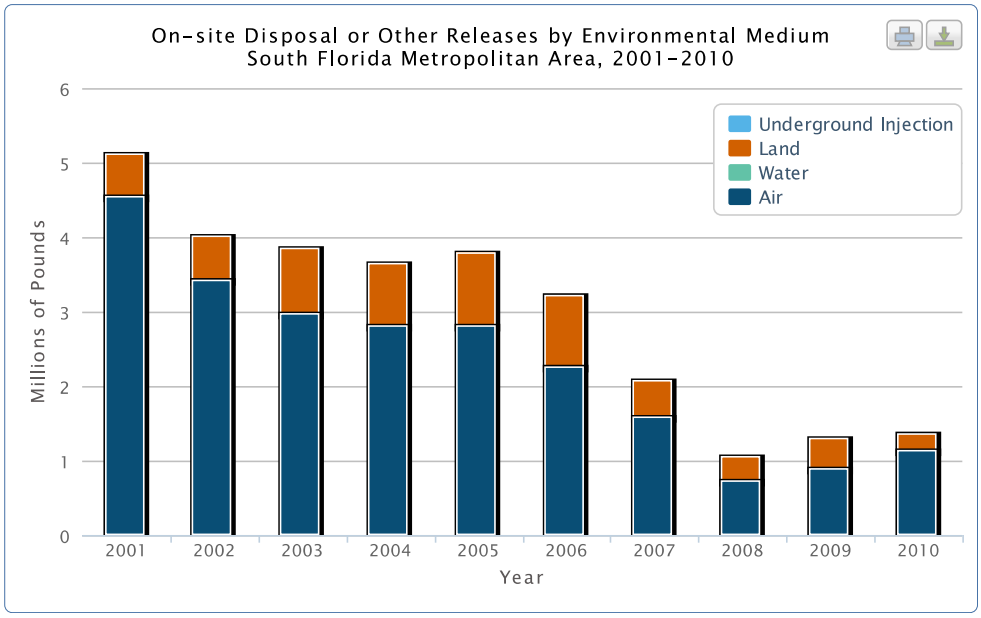
The Everglades, Biscayne Bay, the inner estuaries and mangroves, and sea grass beds of South Florida provide habitat, nurseries and feeding grounds for large populations of fish and invertebrates. These areas, as well as many of the coral reefs in South Florida, are some of the most productive ecological communities in the United States.

There is a wide variety of industrial activity in the metropolitan area including manufacturing of apparel, textiles, books and magazines, pharmaceuticals, medical and diagnostic testing equipment, plastics, aluminum products, furniture, transportation equipment, cement, and electronic components, as well as food processing. In addition, the Port of Miami is the ninth largest in the United States.

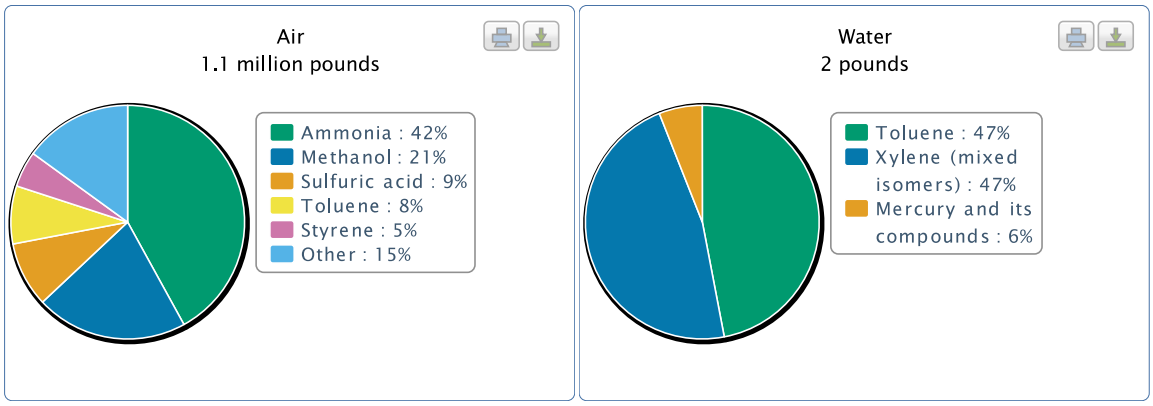
Electric utilities reported the largest air releases, with 51% of total air releases for the Miami metropolitan area for 2010. Ammonia accounted for 82% of total air releases from electric utilities. The food products industry had the second largest air releases with 20% of the total. One facility in the food products industry, a sugar cane refinery, reported over 99% of the on-site land disposal or other releases, mainly composed of atrazine.

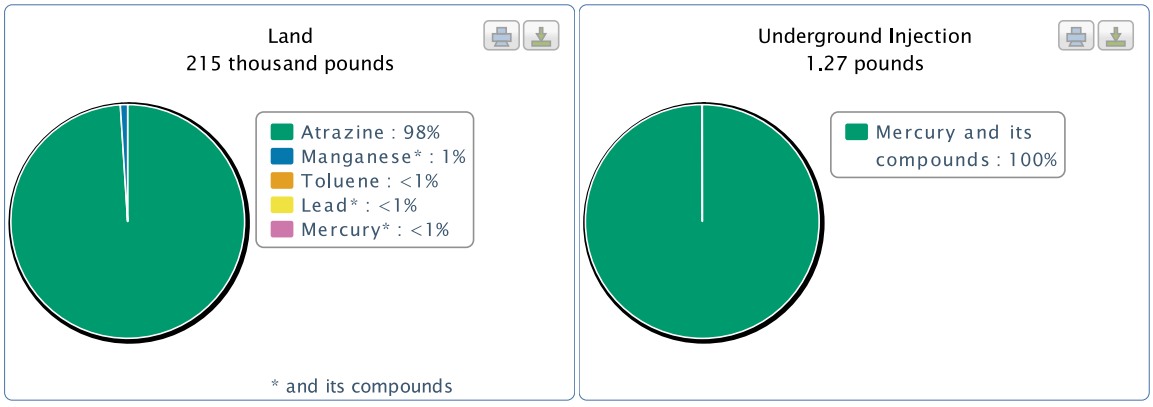
Total on-site disposal or other releases decreased by 73% from 2001 to 2010. However, from 2009 to 2010, they increased by 5% with air releases increasing by 29%. Electric utilities showed an increase of 56% in air releases from 2009 to 2010. The food products industry showed a 3% increase in air releases from 2009 to 2010, due to a methanol increase from one sugar cane mill.





Top Five Chemicals by Environmental Medium
South Florida Metropolitan Area, 2010





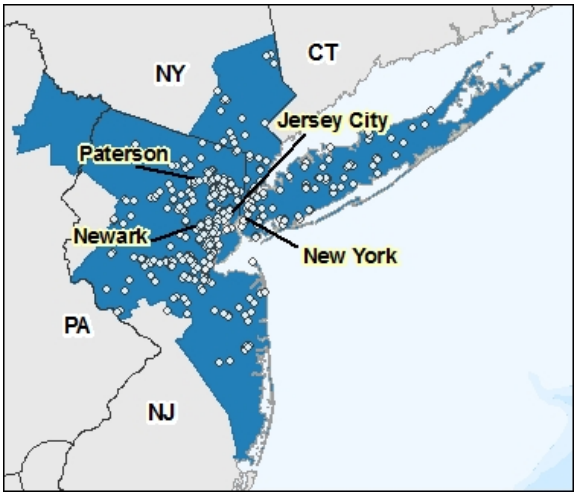
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Metropolitan New York



TRI facilities in Metropolitan New York

Quick Facts for 2010:

Number of TRI Facilities:	419
Total On-site and Off-site Disposal or Other Releases:	6.6 million lbs
Total On-site:	4.3 million lbs
•Air:	1.8 million lbs
•Water:	2.4 million lbs
•Land:	13 thousand lbs
•Underground Injection:	none
Total Off-site:	2.3 million lbs

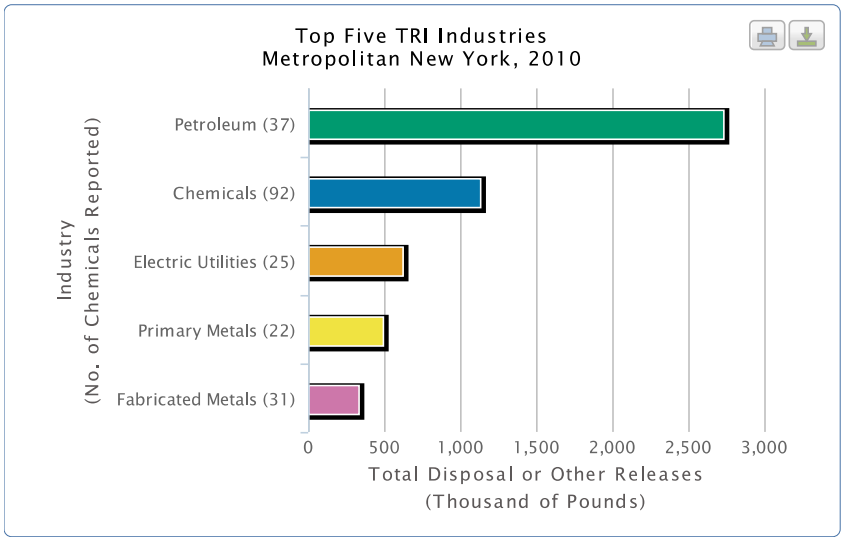
The New York-Northern New Jersey-Long Island, NY-NJ-PA metropolitan area, also known as Metropolitan New York, Greater New York, or the Tri-State area, is the most populous metropolitan area in the United States, with an estimated population of 18.9 million. It is also one of the most densely populated urban areas in the United States. The metropolitan area includes ten counties in New York State (those coinciding with the five boroughs of New York City, the two counties of Long Island, and three counties in the lower Hudson Valley); 12 counties in Northern and Central New Jersey; and one county in northeastern Pennsylvania. In addition to New York City, other cities include: Newark, NJ; Edison, NJ; White Plains, NY; Wayne, NJ; and New Brunswick, NJ.

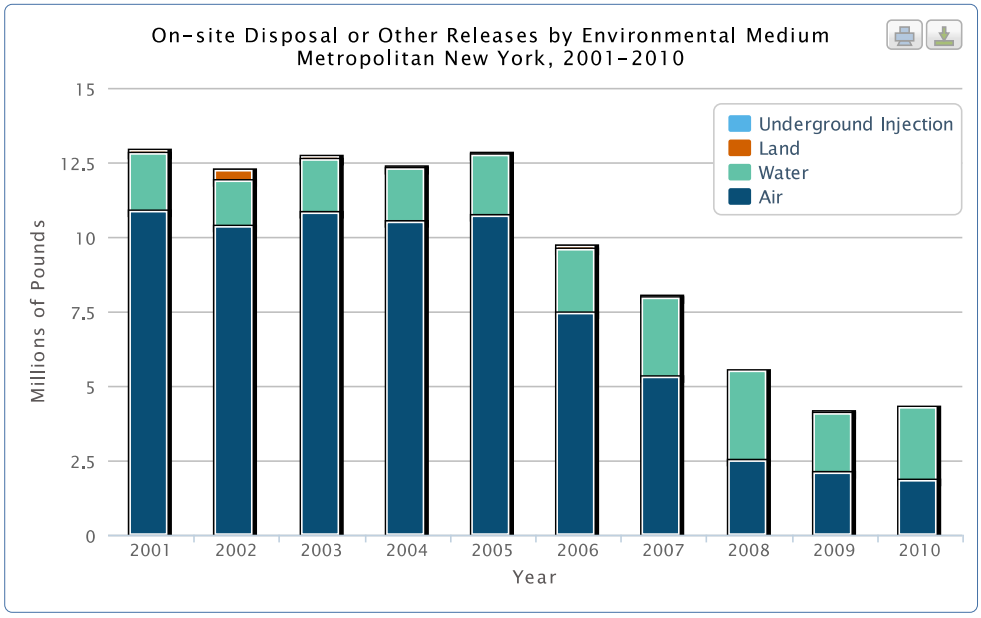
The metropolitan area covers about 6,720 square miles of land situated near and around several important water bodies, including the Hudson River, Delaware River, Long Island Sound, New York Bay, East River, Newark Bay, Jamaica Bay, Raritan Bay, and New York Bight (Atlantic Ocean). Many of these water bodies are important coastal estuaries.

The New York metropolitan area hosts a large and diverse manufacturing sector. Some of the principal industries include petroleum refining, chemicals, pharmaceuticals, apparel, electric utilities, printing and publishing, metal products, automobile parts, processed foods, and furniture. The area also serves as a major transportation hub, with the Port of New York and New Jersey, being the largest port complex on the East Coast and the third largest in the United States.

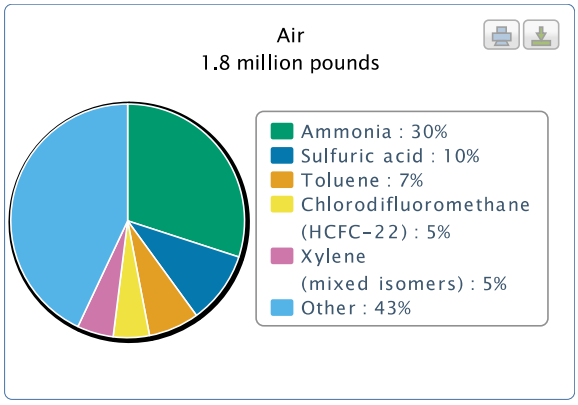
Petroleum refineries had the largest on-site total disposal or other releases, due to almost 2.4 million pounds of surface water discharges of nitrate compounds from one refinery. Electric utilities had the largest air releases, with almost 619 thousand pounds, 70% of which was releases of ammonia.

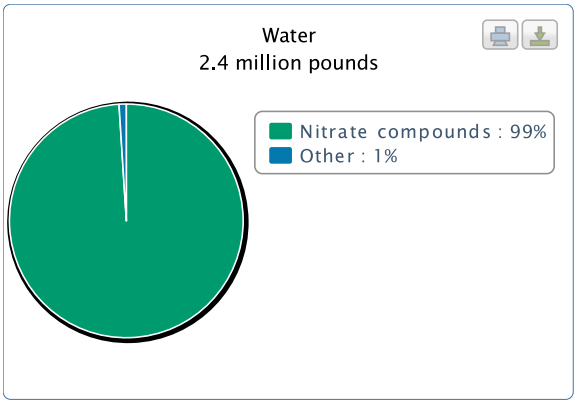
Total on-site disposal or other releases for the metropolitan New York area decreased by 67% from 2001 to 2010, including a decrease of 83% in air releases and 88% in on-site land disposal or other releases. Electric utilities decreased their air releases by 92% from 2005 to 2010, including a decrease of 32% from 2009 to 2010. However, overall surface water discharges in the metropolitan New York area increased by 25% from 2001 to 2010, including an increase of 21% from 2009 to 2010. The increase from 2009 to 2010 was primarily due to an increase from one petroleum refinery of over 400 thousand pounds of nitrate compounds.

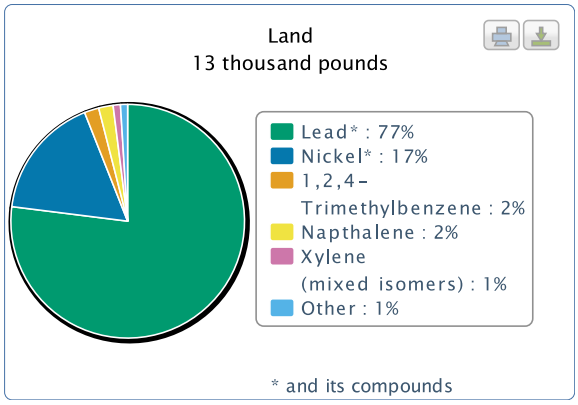




Top Five Chemicals by Environmental Medium
Metropolitan New York, 2010







No underground injection reported

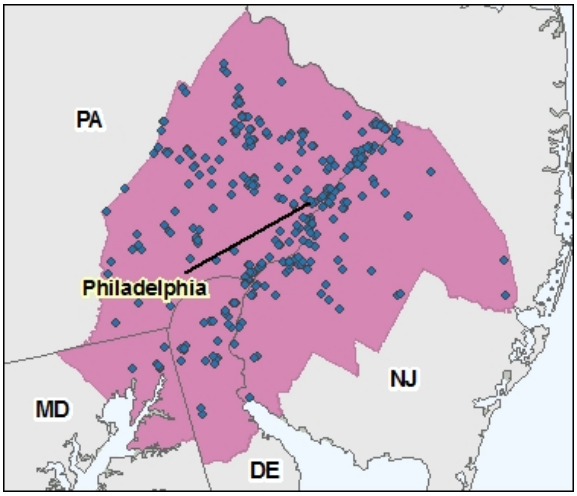
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Philadelphia Metropolitan Area



TRI facilities in Philadelphia Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	314
Total On-site and Off-site Disposal or Other Releases:	18.5 million lbs
Total On-site:	12.7 million lbs
•Air:	4.8 million lbs
•Water:	7.2 million lbs
•Land:	0.7 million lbs
•Underground Injection:	none
Total Off-site:	5.8 million lbs

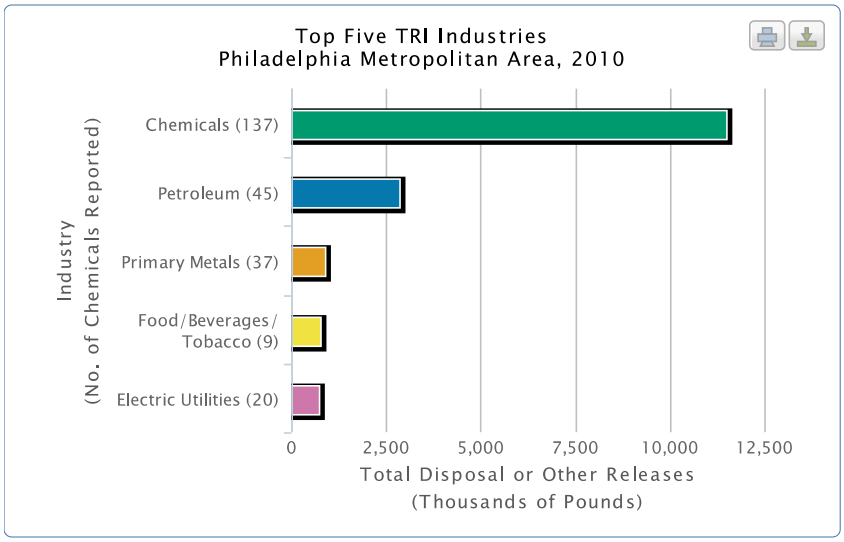
The Philadelphia-Camden-Wilmington, PA-NJ-DE-MD metropolitan area covers 5,118 square miles in four states: five counties in southeastern Pennsylvania, four counties in southern New Jersey, one county in northern Delaware, and one county in northeastern Maryland.

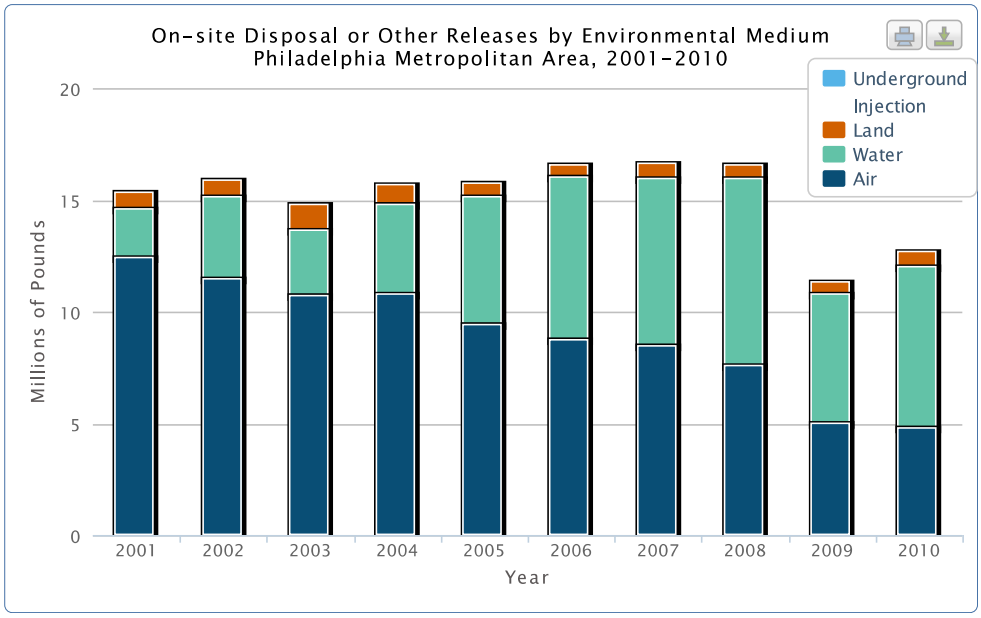
The metropolitan area is also called the Delaware Valley because the Delaware River flows through the area and into the Delaware Bay, both important estuaries. Other major rivers and waterways include the Schuylkill River, the Lower Susquehanna River, and the upper most portion of the Chesapeake Bay. It is the fifth largest metropolitan area in the United States with a population of about 6 million.

The making of chemicals, including pharmaceuticals, is the area's leading manufacturing activity. Other important products manufactured in the Delaware Valley include medical devices, personal care products, food products, computer and electronic products, industrial machinery, fabricated metal products, petroleum products, rubber and plastic products, and printed materials.

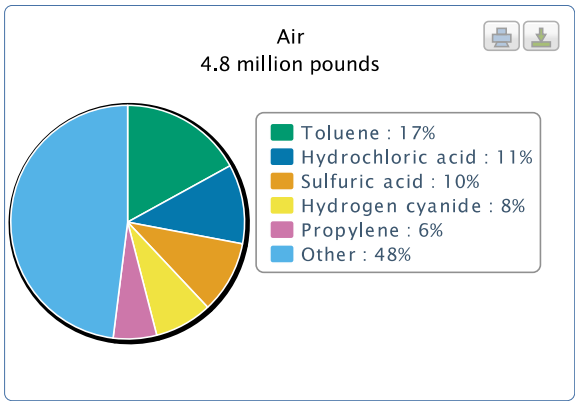
Chemical manufacturers had the largest total disposal or other releases in the Philadelphia metropolitan area due to their surface water discharges. One petrochemical plant in New Jersey accounted for 75% of surface water discharges in the area for 2010, primarily composed of nitrate compounds to the Delaware River. Petroleum refineries had the largest on-site air releases in this area for 2010. Air releases of hydrogen cyanide and sulfuric acid comprised 45% of the total for the petroleum sector in this area. Six refineries located in Pennsylvania, New Jersey, and Delaware accounted for 33% of the total air releases.

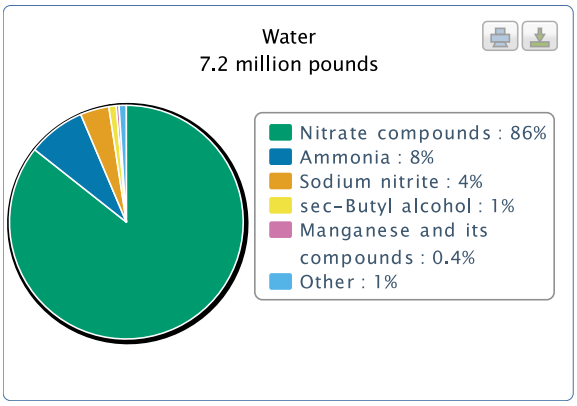
Total on-site disposal or other releases for the Philadelphia metropolitan area decreased by 17% from 2001 to 2010, due to a decrease of 32% from 2008 to 2009. Total on-site disposal or other releases increased by 12% from 2009 to 2010. Total surface water discharges more than tripled from 2001 to 2008, decreased 31% from 2008 to 2009, and then increased again by 24% from 2009 to 2010. Air releases decreased by 61% from 2001 to 2010 including a decrease of 4% from 2009 to 2010.

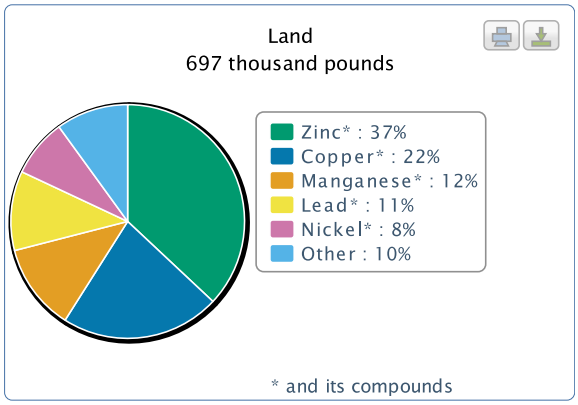




Top Five Chemicals by Environmental Medium
Philadelphia Metropolitan Area, 2010







No underground injection reported

These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Seattle Metropolitan Area

TRI facilities in Seattle Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	130
Total On-site and Off-site Disposal or Other Releases:	2.7 million lbs
Total On-site:	2.2 million lbs
•Air:	1.8 million lbs
•Water:	0.4 million lbs
•Land:	82 thousand lbs
•Underground Injection:	3 lbs
Total Off-site:	0.5 million lbs

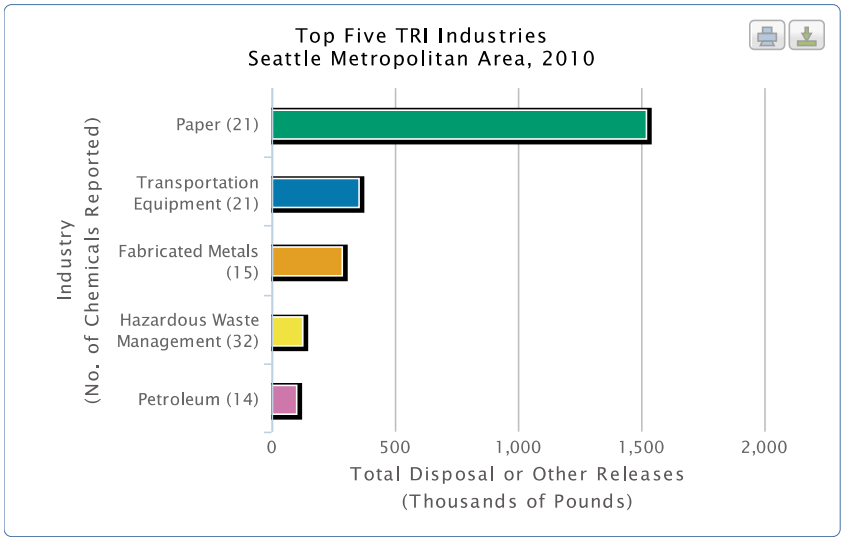
The Seattle-Tacoma-Bellevue, WA metropolitan statistical area in the Puget Sound region of Washington is comprised of King, Snohomish, and Pierce counties. With a population of 3.4 million, it is the 15th largest U.S. metropolitan statistical area. Other cities in the Seattle metropolitan area include Tacoma, Bellevue, Everett, Kent, Renton, and Auburn.

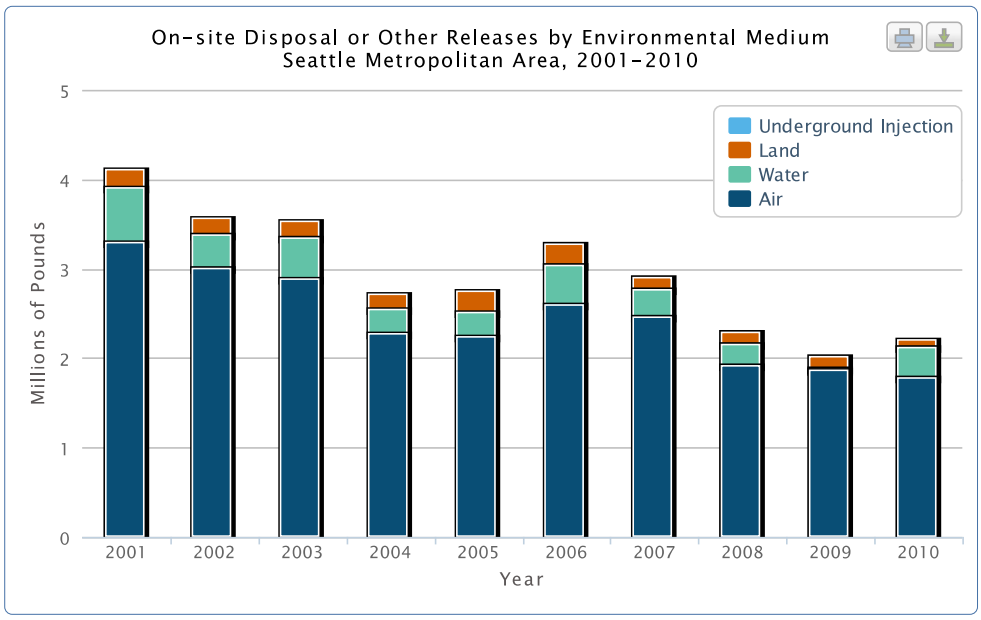
Economic activity within the metropolitan area includes the manufacturing of aircraft, ships, biomedical products, forest products, seafood products, aluminum, steel, textiles, clothing, electronics, and metal and glass products. In addition, the Port of Seattle is a major port city for trans-Pacific and European trade and is the fifth largest container port in the United States.

The Seattle metropolitan area sits on the shores of the Puget Sound, a large system of salt water estuaries. Puget Sound is one of the most ecologically diverse estuaries in North America. However, like other urban areas of the country with neighboring estuaries, the growing population and industrial activity in the Seattle metropolitan area impacts this important natural resource.

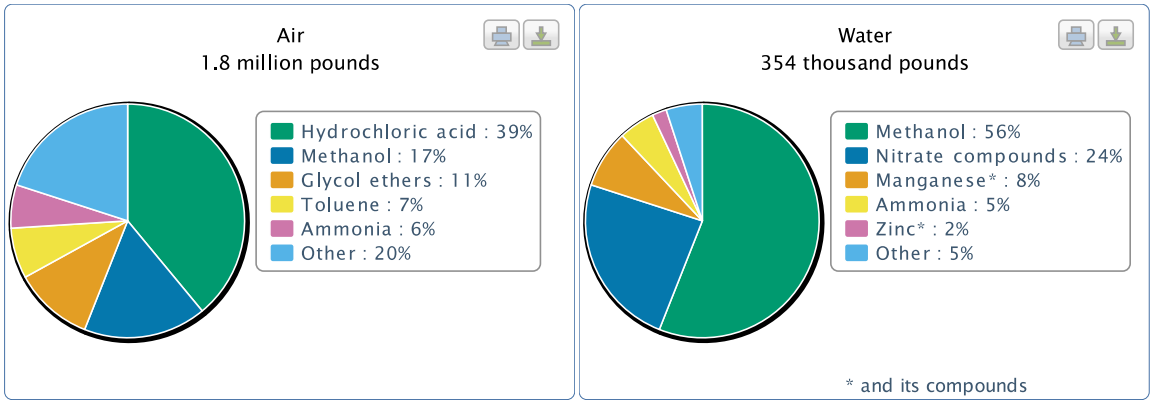
Air releases accounted for 80% of total on-site disposal or other releases in the Seattle metropolitan area during 2010. The paper products sector reported 63% of the total air releases, mainly composed of hydrochloric acid and methanol. This sector also accounted for more than 99% of chemicals discharged to surface water, mainly methanol and nitrate compounds. One pulp and paper mill accounted for 50% of all air releases and 74% of all surface water discharges reported by facilities in the Seattle metropolitan area.

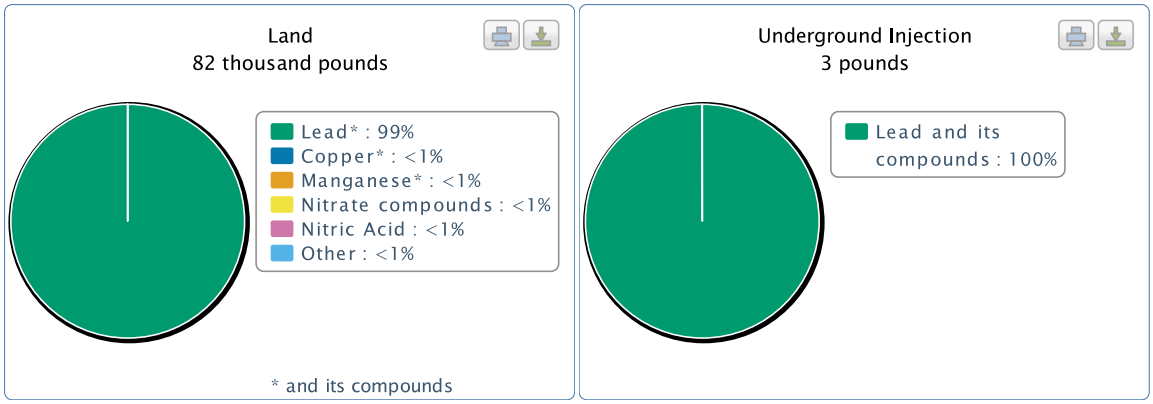
From 2001 to 2010, total on-site disposal or other releases decreased by 46% but had a slight increase (0.4%) from 2009 to 2010. Air releases decreased by 46% from 2001 to 2010 with a 5% decrease from 2009 to 2010. The paper products industry decreased air releases by 9% from 2001 to 2010, with a slight (1%) decrease from 2009 to 2010. Surface water discharges decreased by 43% from 2001 to 2010 but increased by 70% from 2009 to 2010. The paper products industry decreased chemicals discharged to water by 42% from 2001 to 2010 but had a 71% increase from 2009 to 2010, due to one pulp and paper mill that more than doubled its surface water discharges from 2009 to 2010.





Top Five Chemicals by Environmental Medium
Seattle Metropolitan Area, 2010





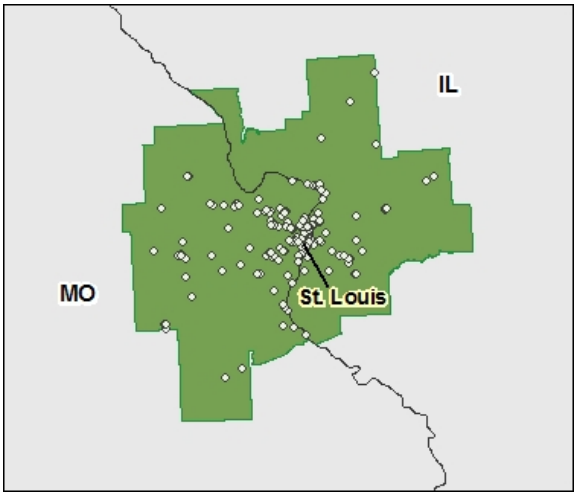
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Greater St. Louis



TRI facilities in Greater St. Louis

Quick Facts for 2010:

Number of TRI Facilities:	198
Total On-site and Off-site Disposal or Other Releases:	30.9 million lbs
Total On-site:	27.2 million lbs
•Air:	5.3 million lbs
•Water:	1.2 million lbs
•Land:	20.7 million lbs
•Underground Injection:	none
Total Off-site:	3.7 million lbs

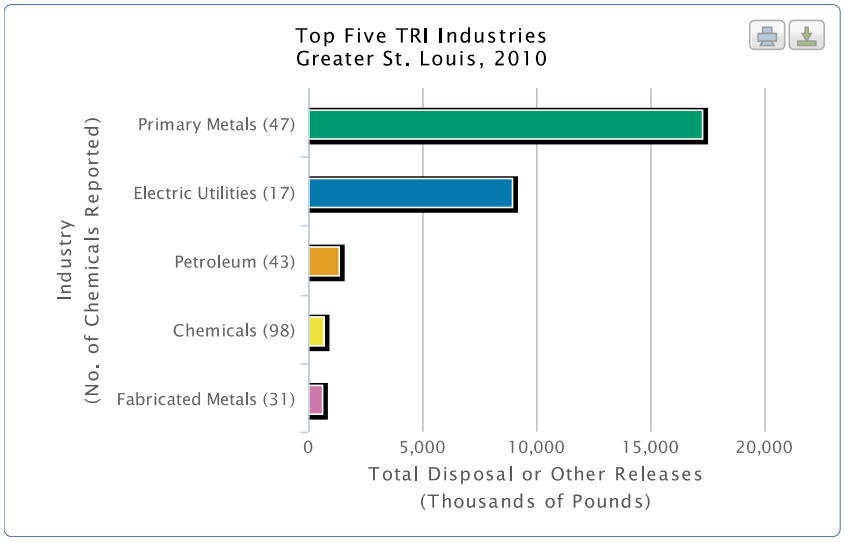
The St. Louis, MO-IL metropolitan statistical area, also known as Greater St. Louis, is comprised of the city of St. Louis, eight counties in southwestern Illinois and eight counties in eastern Missouri. Greater St. Louis also includes the Missouri cities of St. Charles, St. Peters, Florissant, Chesterfield, and University City, as well as the Illinois cities of East St. Louis, Belleville, Granite City, and Alton. With a population of 2.8 million people, it is the 18th largest metropolitan area in the United States.

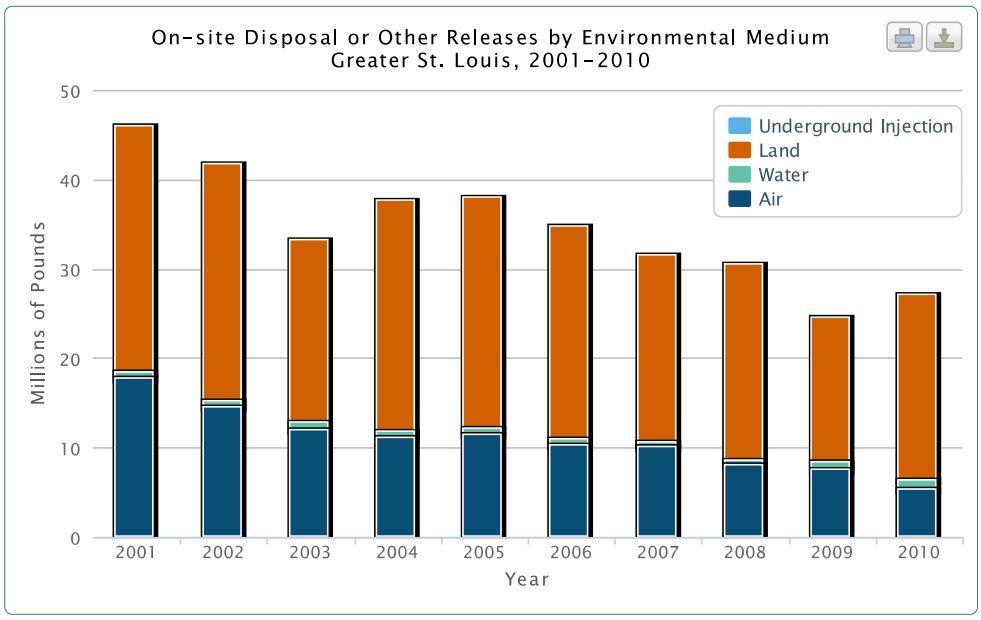
Greater St. Louis covers 8,846 square miles at the confluence of the Missouri and Mississippi rivers. These rivers play an important role in the history and current economy of Greater St. Louis. Transport of large quantities of bulk commodities such as grain, coal, salt, chemicals, and petroleum products through the Port of St. Louis make it the third-largest inland port in the country.

Greater St. Louis has historically been a center of transportation equipment manufacturing. The metropolitan area is home to plants that manufacture automobiles and automotive parts, railway cars, and aircraft. The area also hosts several iron and steel mills and petrochemical plants. Greater St. Louis economy also includes production of: lead and other non-ferrous metals; machinery; appliances; food products, including meat and beer; granary products; pharmaceuticals; paints; apparel; and paper products.

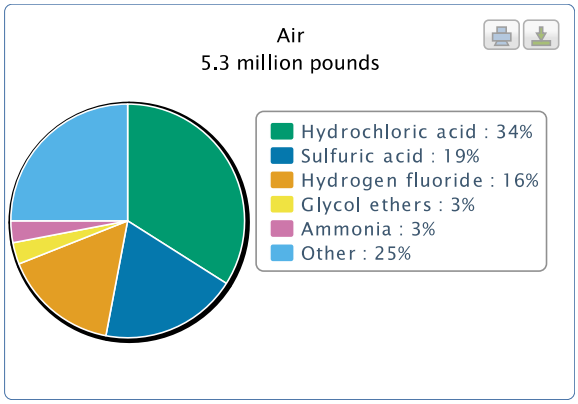
On-site land disposal accounted for over three-quarters (76%) of total on-site disposal or other releases in Greater St. Louis in 2010. The primary metals sector, which includes smelters, iron and steel mills, foundries and metal casting, accounted for 67% of total on-site land disposal or other releases, of which 69% was zinc and its compounds. Electric utilities reported over half (52%) of air releases in the Greater St. Louis area in 2010. Hydrochloric acid, hydrogen fluoride and sulfuric acid accounted for 98% of these air releases.

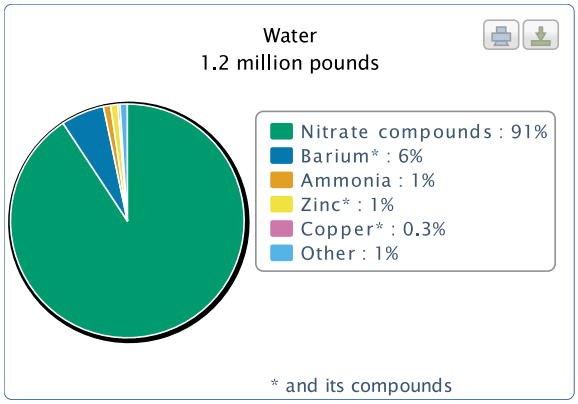
On-site disposal or other releases in the Greater St. Louis area decreased by 41% from 2001 to 2010 but increased by 11% from 2009 to 2010. Air releases decreased by 70% from 2001 to 2010 and by 30% from 2009 to 2010. On-site land disposal or other releases decreased by 25% from 2001 to 2010 but increased by 28% from 2009 to 2010. Primary metals facilities reported an overall increase of 38% from 2009 to 2010 in on-site land disposal or other releases primarily due to an increase reported by one steel mill in Illinois which more than doubled its on-site land disposal of zinc compounds. Air releases from electric utilities decreased by 26% from 2009 to 2010.

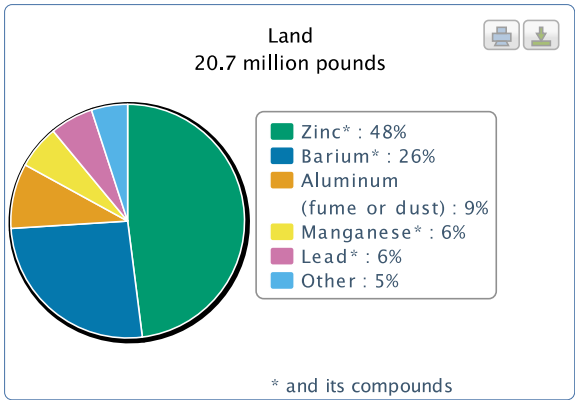




Top Five Chemicals by Environmental Medium
Greater St. Louis, 2010







No underground injection reported

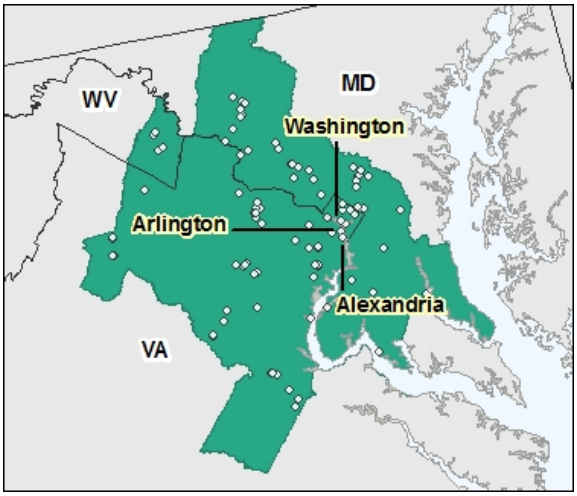
These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012

EPA United States Environmental Protection Agency

Toxics Release Inventory (TRI) Program

Urban Communities: Washington DC Metropolitan Area



TRI facilities in Washington DC Metropolitan Area

Quick Facts for 2010:

Number of TRI Facilities:	93
Total On-site and Off-site Disposal or Other Releases:	3.9 million lbs
Total On-site:	1.6 million lbs
•Air:	1.2 million lbs
•Water:	0.3 million lbs
•Land:	0.2 million lbs
•Underground Injection:	none
Total Off-site:	2.3 million lbs

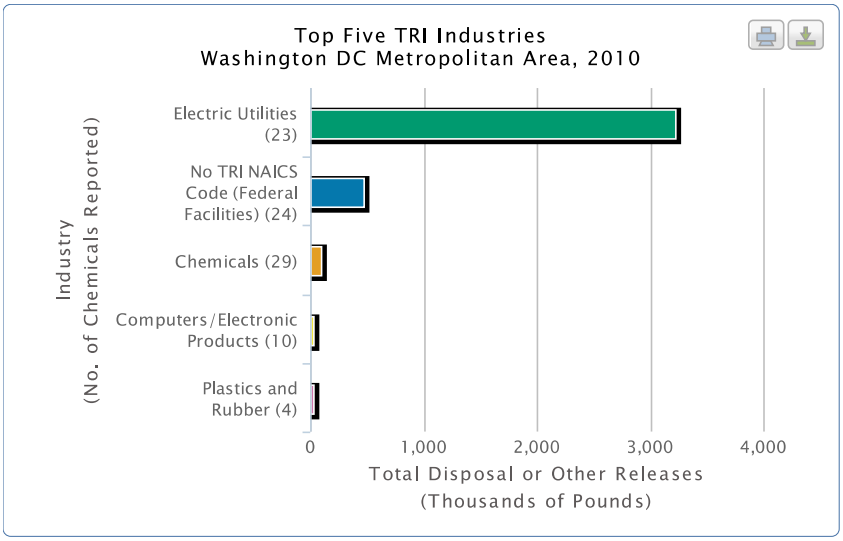
The Washington-Arlington-Alexandria, DC-VA-MD-WV metropolitan statistical area, also known as the Washington DC Metropolitan Area, covers 5,564 square miles spread over five counties in Maryland, ten counties in northern Virginia, and one county in eastern West Virginia. This metropolitan area has a population of 5.6 million, making it the eighth largest in the country. Other principal cities in the metropolitan area include Reston, VA; Bethesda, MD; Gaithersburg, MD; Rockville, MD; and Frederick, MD.

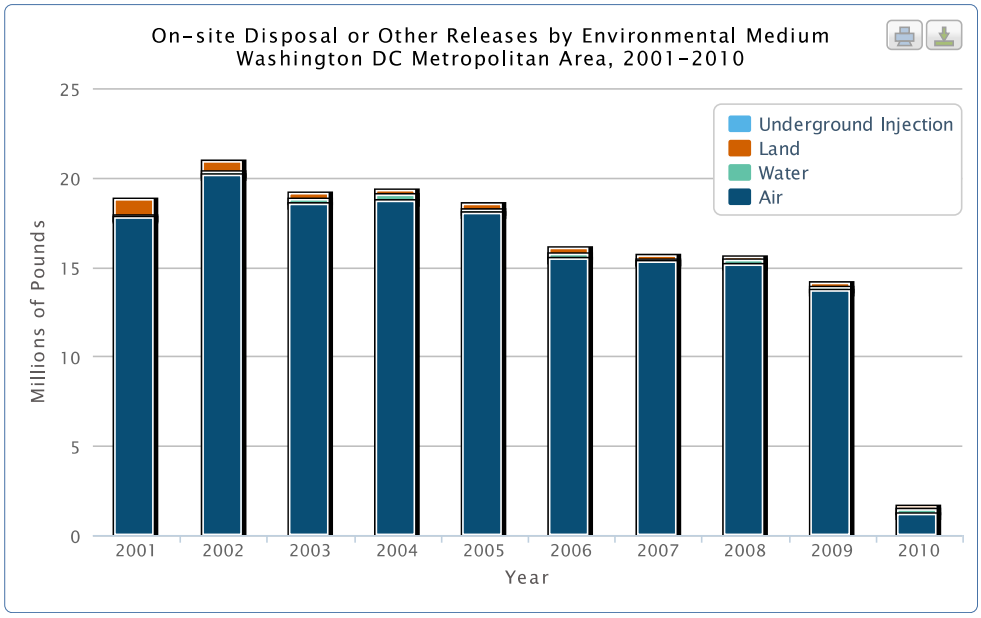
Much of the Washington metropolitan area lies in the Potomac River Basin. The Potomac River and numerous tributaries, including the Anacostia River and Rock Creek, serve as important estuaries as they flow through the area and into the Chesapeake Bay, the largest of 130 estuaries in the United States.

As the Federal Government provides the underlying basis of the economy in the region, there are numerous federal facilities and military installations in and around the Washington metropolitan area, including hospitals, research and development facilities, and defense sites. The area has a large publishing and printing industry and a significant biotechnology sector; overall it does not have a large manufacturing sector.

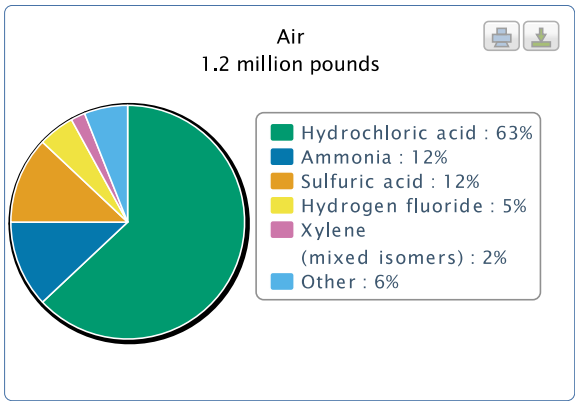
Electric utilities had the largest total disposal or other releases and reported 66% of the total on-site in the Washington metropolitan area for 2010. They accounted for 86% of total air releases in the area, of which 71% was hydrochloric acid. Federal facilities (shown in the no TRI NAICS code category) reported 87% of surface water discharges, mainly nitrate compounds, and more than 99% of on-site land disposal or other releases, mainly copper and lead and their compounds.

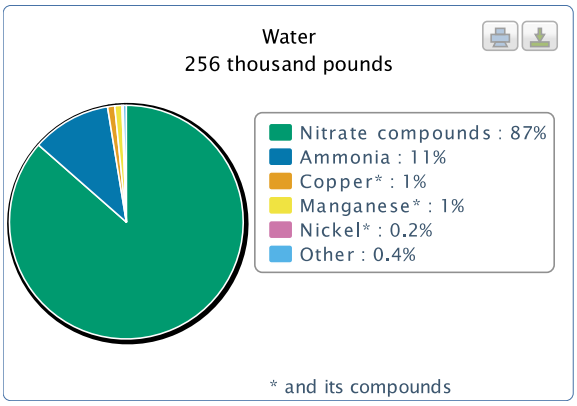
Total on-site disposal or other releases decreased by 89% from 2009 to 2010 for an overall decrease of 92% 2001 to 2010, primarily from a reduction in air releases. Air releases decreased 91% from 2009 to 2010. The significant reduction was reported by three coal-fired electric power plants located in Maryland. They are owned by one company and each installed pollution control equipment during the period 2009-2010. On-site land disposal or other releases decreased by 16% from 2009 to 2010 for an overall decrease of 83% from 2001 to 2010. However, surface water discharges more than tripled from 2001 to 2010, including a 12% increase from 2009 to 2010. Both electric utilities and Federal Facilities reported increases in surface water discharges.

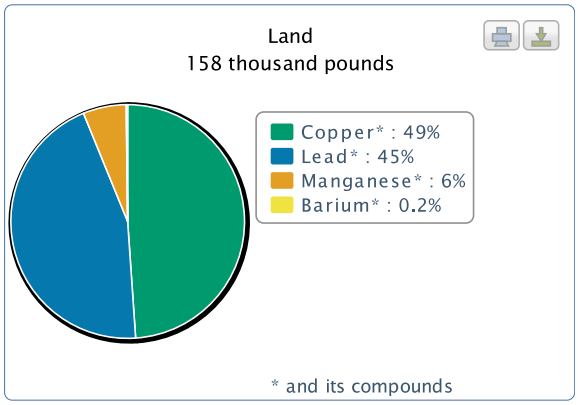




Top Five Chemicals by Environmental Medium
Washington DC Metropolitan Area, 2010







No underground injection reported

These charts represent the top five TRI chemicals in pounds released for this urban community, and do not include all chemicals of concern nor the priority or importance of those chemicals within the urban community.

Last updated on Thursday, January 05, 2012