



## **Categorization of Coke Manufacturing Operations**

### **Integrated v. Merchant Facilities Recovery v. Non-Recovery Facilities**

These charts classify coke manufacturing operations depending on whether they are integrated and whether they are recovery facilities. Integrated facilities form part of larger steelmaking operations; merchant facilities do not. Recovery facilities extract byproducts from the coke manufacturing process (e.g. petroleum liquids); non-recovery facilities do not.

Within the three categories (integrated recovery facilities, merchant recovery facilities, and merchant non-recovery facilities), the facilities are ranked by toxic air emissions reported under the Toxic Release Inventory program. Reported emissions relate to the 2014 calendar year.

Generally speaking, the recovery facilities have more emissions of benzene than the non-recovery facilities. (None of the non-recovery facilities reported emissions of benzene, presumably because they burn the chemical). Therefore, the chart lists benzene emissions from the recovery facilities only.

On the other hand, the non-recovery facilities generally have greater emissions of lead, mercury, sulfuric acid, and hydrochloric acid. Therefore, the chart lists these emissions from the recovery facilities. Although not shown on

the chart, some of the largest recovery facilities have substantial emissions of lead, mercury, sulfuric acid, or hydrochloric acid, comparable to those from the non-recovery facilities.

Stack emissions are emissions that are vented to the atmosphere through a device such as a vent, pipe, or chimney. Typically, they are subject to air pollution control equipment as a means of removing air pollutants. Fugitive emissions are emissions that cannot feasibly be captured and controlled by a stack. Typically, they are subject to work practice standards as a means of limiting air pollutants.

Allegheny County is the location of three of the following plants: (1) the former Shenango facility in Pittsburgh, (2) the U.S. Steel facility in Clairton, and (3) the ArcelorMittal facility in Monessen. All three facilities are located on the Monongahela River. Upwind and twenty miles away in West Virginia there is a fourth coke facility that influences the airshed in Allegheny County. That facility is the Mountain State Carbon facility in Follansbee, West Virginia.

Source: EPA Envirofacts Database,

<https://www3.epa.gov/enviro/facts/multisystem.html>

The charts on the following pages provide additional information on these facilities, based on their classification.

## I. Integrated Recovery Facilities (8)

	Facility	TRI webpage	Emissions of Toxic Pollutants
1	USS-Clairton Plant 400 State Street, Clairton, Pennsylvania 15025  (near Monongahela River)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=15025SSCLR400ST&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=15025SSCLR400ST&amp;pPrev=1</a>	Total Emissions: 1,177,370.52 pounds (588 tons)  Benzene: 22,000 pounds in stack emissions (11.0 tons) and 23,000 pounds in fugitive emissions (11.5 tons)
2	USSteel Gary Works 1 North Broadway, Gary, Indiana 46402  (near Mississippi River)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=46402SSGRYONE&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=46402SSGRYONE&amp;pPrev=1</a>	Total Emissions: 628,689.1 pounds (314 tons)  Benzene: 14,000 pounds in stack emissions (7.0 tons) and 4,100 pounds in fugitive emissions (2.05 tons)
3	ArcelorMittal Burns Harbor LLC 250 West US Highway 12, Burns Harbor, Indiana 46304  (near Lake Michigan)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=46304BTHLHBURNS&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=46304BTHLHBURNS&amp;pPrev=1</a>	Total Emissions: 407,469 pounds (203.5 tons)  Benzene: 37,200 pounds in stack emissions (18.6 tons) and 20,800 pounds in fugitive emissions (10.4 tons)
4	US Steel Granite City Works 1951 State Street, Granite City, Illinois 62040  (near Mississippi River)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=62040GRNTC20THS&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=62040GRNTC20THS&amp;pPrev=1</a>	Total Emissions: 177,568.95 pounds (88 tons)  Benzene: 13,000 pounds in stack emissions (6.5 tons) and 5,800 pounds in fugitive emissions (2.9 tons)

5	<p>Mountain State Carbon, LLC</p> <p>1851 Main Street, Follansbee, West Virginia 26037</p> <p>(near Ohio River)</p>	<p><a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=26037WHLNGROUTE&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=26037WHLNGROUTE&amp;pPrev=1</a></p>	<p>Total Emissions: 132,553 pounds (66 tons)</p> <p>Benzene: 22,000 pounds in stack emissions (11.0 tons) and 27,000 pounds in fugitive emissions (13.5 tons)</p>
6	<p>AK Steel Corp.</p> <p>1801 Crawford Street, Middletown, Ohio 45044</p> <p>(near Great Miami River)</p>	<p><a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=45043RMCNC1801C&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=45043RMCNC1801C&amp;pPrev=1</a></p>	<p>Total Emissions: 82,063 pounds (41 tons))</p> <p>Benzene: 18,320 pounds in stack emissions (9.2 tons) and 9,671 pounds in fugitive emissions (3.8 tons)</p>
7	<p>ArcelorMittal Cleveland LLC dba ArcelorMittal Warren</p> <p>2234 Main Ave. SW, Warren, Ohio 44481</p> <p>(near Mahoning River)</p>	<p><a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=44482LTVST2234M&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=44482LTVST2234M&amp;pPrev=1</a></p>	<p>Total Emissions: 55,129.04 pounds (27.5 tons))</p> <p>Benzene: 22,121 pounds in fugitive emissions (11 tons)</p>
8	<p>ArcelorMittal Monessen LLC Coke Plant</p> <p>345 Donner Avenue, Monessen, Pennsylvania 15062</p> <p>(near Monongahela River)</p>	<p><a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=15062MNSSN345DO&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=15062MNSSN345DO&amp;pPrev=1</a></p>	<p>Total Emissions: 34,265 pounds (17.1 tons)</p> <p>Benzene: 6,855 pounds in stack emissions (3.4 tons) and 3,036 pounds in fugitive emissions (1.5 tons)</p>

## II. Merchant Recovery Facilities (6)

	Facility	TRI webpage	Total Emissions of Toxic Pollutants
1	EES Coke Battery, LLC 1400 Zug Island, River Rouge, Michigan 48218 (near Detroit River)	<a href="http://oaspub.e&lt;br/&gt;pa.gov/enviro/tr&lt;br/&gt;is_control_v2.tri&lt;br/&gt;s_print?tris_id=4&lt;br/&gt;8218SCKBT14ZU&lt;br/&gt;G&amp;pPrev=1">http://oaspub.e pa.gov/enviro/tr is_control_v2.tri s_print?tris_id=4 8218SCKBT14ZU G&amp;pPrev=1</a>	Total Emissions: 275,636.4 pounds (137.8 tons)  Benzene: 76,574 pounds in stack emissions (38.8 tons) and 4,656 pounds in fugitive emissions (2.3 tons)
2	Drummond Co., Inc. (ABC Coke Division) One Railroad Avenue, Tarrant City, Alabama 35217	<a href="http://oaspub.e&lt;br/&gt;pa.gov/enviro/tr&lt;br/&gt;is_control_v2.tri&lt;br/&gt;s_print?tris_id=3&lt;br/&gt;5217BCCKDRAIL&lt;br/&gt;R&amp;pPrev=1">http://oaspub.e pa.gov/enviro/tr is_control_v2.tri s_print?tris_id=3 5217BCCKDRAIL R&amp;pPrev=1</a>	Total Emissions: 56,156 pounds (28 tons)  Benzene: 6,287 pounds in stack emissions (3.1 tons) and 2,802 pounds in fugitive emissions (1.4 tons)
3	Shenango, Inc. 200 Neville Road, Pittsburgh, Pennsylvania 15225  (near Ohio River)	<a href="http://oaspub.e&lt;br/&gt;pa.gov/enviro/tr&lt;br/&gt;is_control_v2.tri&lt;br/&gt;s_print?tris_id=1&lt;br/&gt;5225SHNNG200&lt;br/&gt;NE&amp;pPrev=1">http://oaspub.e pa.gov/enviro/tr is_control_v2.tri s_print?tris_id=1 5225SHNNG200 NE&amp;pPrev=1</a>	Total Emissions: 49,920.9 pounds (24.9 tons)  Benzene: 19,461 pounds in stack emissions (9.7 tons) and 4,865 pounds in fugitive emissions (2.4 tons)
4	Walter Coke, Inc. 3500 35 <sup>th</sup> Avenue North, Birmingham, Alabama 35207	<a href="http://oaspub.e&lt;br/&gt;pa.gov/enviro/tr&lt;br/&gt;is_control_v2.tri&lt;br/&gt;s_print?tris_id=3&lt;br/&gt;5207SLSSN3500&lt;br/&gt;3&amp;pPrev=1">http://oaspub.e pa.gov/enviro/tr is_control_v2.tri s_print?tris_id=3 5207SLSSN3500 3&amp;pPrev=1</a>	Total Emissions: 30,635.6 pounds (15 tons)  Benzene: 3,653 pounds in stack emissions (1.8 tons) and 1,708 pounds in fugitive emissions (0.85 tons)
5	Tonawanda Coke Corp. 3875 River Road,	<a href="http://oaspub.e&lt;br/&gt;pa.gov/enviro/tr&lt;br/&gt;is_control_v2.tri">http://oaspub.e pa.gov/enviro/tr is_control_v2.tri</a>	Total Emissions: 8,674.48 pounds (4.3 tons))

	Tonawanda, New York 14150  (near Niagara River)	<a href="#">s_print?tris_id=14150TNWND3875R&amp;pPrev=1</a>	Benzene: 1,991 pounds in stack emissions (0.95 tons) and 2,326 pounds in fugitive emissions (1.2 tons)
6	Erie Coke Corp. 925 East Bay Drive, Erie, Pennsylvania 16507  (near Lake Erie)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=16512RCKCRFOO&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=16512RCKCRFOO&amp;pPrev=1</a>	Total Emissions: 7,633.2 pounds (3.8 tons)  Benzene: 4,463 pounds in fugitive emissions (2.2 tons) and 1,924 pounds in stack emissions (0.96 tons)

### III. Merchant Non-Recovery Facilities (5)

	Facility	TRI webpage	Total Emissions of Toxic Pollutants
1	Jewell Coke Co., L.P. 1034 Dismal River Road, Oakwood, Virginia 24631	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=24656JWLLCHWY46&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=24656JWLLCHWY46&amp;pPrev=1</a>	Total Emissions: 1,315,394 pounds (657 tons)  Hydrochloric Acid: 1,311,698 pounds (655.8 tons)  Lead: 3589 pounds (17.9 tons)  Mercury: 107 pounds (0.05 tons)
2	Indiana Harbor Coke Company, L.P. 3210 Watling Mail Code 2-990, East Chicago, Indiana 46312  (near Lake Michigan)	<a href="https://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=46312NDNHR3210W&amp;pPrev=1">https://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=46312NDNHR3210W&amp;pPrev=1</a>	Total Emissions: 353,341.1 pounds (176.7 tons)  Hydrochloric Acid: 352,180.96 pounds (176.1 tons)  Lead: 1,062.78 pounds (0.53 tons)  Mercury: 97.31 pounds (0.05 tons)
3	Haverhill Coke Co., LLC 2446 Gallia Pike, Franklin Furnace, Ohio 45629  (near Ohio River)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=4562WHVRHL2446G&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=4562WHVRHL2446G&amp;pPrev=1</a>	Total Emissions: 212,676.9 pounds (106.3 tons)  Hydrochloric Acid: 212,000 pounds (106 tons)  Lead: 542.8 pounds (0.27 tons)  Mercury: 134.1 pounds (0.07 tons)
4	Gateway Energy & Coke Co.  2585 Edwardsville Road, Granite City,	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=6204WGTWYN25">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=6204WGTWYN25</a>	Total Emissions: 182,612.1 pounds (91 tons))  Hydrochloric Acid: 181,955 pounds (90.5 tons)



	Illinois 62040 (near Mississippi River)	<a href="#">85E&amp;pPrev=1</a>	Lead: 387.9 pounds (0.19 tons) Mercury: 269.2 pounds (0.13 tons)
5	Suncoke Energy Middletown Operations 3353 Yankee Road, Middletown, Ohio 45044  (near Great Miami River)	<a href="http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=4504WSNCKN3353Y&amp;pPrev=1">http://oaspub.epa.gov/enviro/tris_control_v2.tris_print?tris_id=4504WSNCKN3353Y&amp;pPrev=1</a>	Total Emissions: 31,792 pounds (15.5 tons) Hydrochloric Acid: 6,638 pounds (3.3 tons) Lead: 108 pounds (0.05 tons) Mercury: 34 pounds (0.17 tons) Sulfuric acid: 25,012 pounds (12.5 tons)