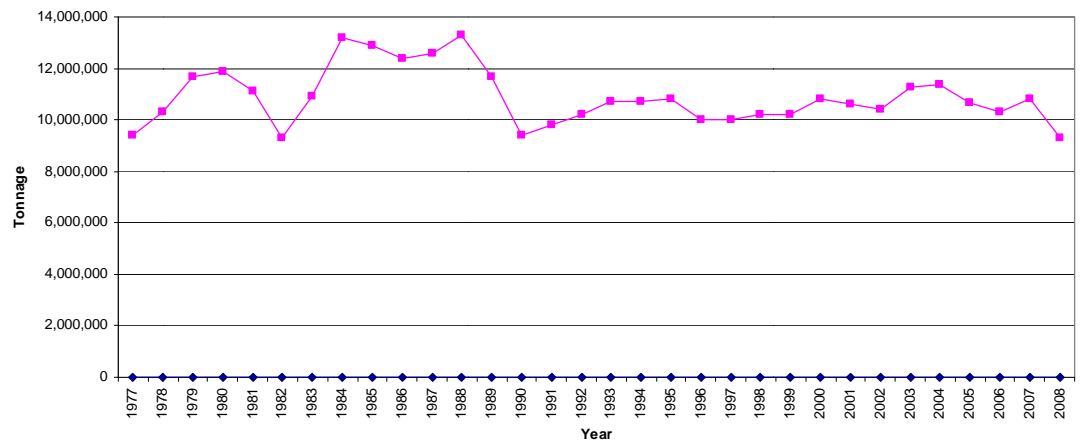


Chemicals

The Ohio River basin's sixth largest commodity group is chemicals. There were 231 waterside chemical plants, docks and terminals in the basin which shipped or received chemical commodities by barge in 2008.

As with the utility companies, chemical companies have historically been attracted to a plentiful supply of water and raw materials. These companies also take advantage of the transportation savings provided by barges and the lock and dam system on the basin's waterways. In the Ohio River Basin, important clusters of waterside chemical plants have developed along the lower Monongahela and upper Ohio Rivers; along the Ohio River from Parkersburg, West Virginia through Huntington, West Virginia to Portsmouth, Ohio; in the Louisville, Kentucky area and along in the Tennessee and Kanawha River valleys (see map).

Ohio River Basin Waterborne Commerce - Chemicals 1977 - 2008



WATERWAYS
COUNCIL, INC.

801 North Quincy Street
Suite 200
Arlington, VA 22203
(703) 373-2261

www.waterwayscouncil.org

Chemicals

Chemical plants located along the lower Monongahela River and upper Ohio for access to coal and salt deposits and chemical raw materials from coking plants. Plastics plants located in the Parkersburg area due to the proximity to auto parts and plastics manufacturers. In the Huntington-Portsmouth area, much of the plant development was tied to the Ashland Oil refinery at Catlettsburg, Kentucky or the Armco Steel mill in Ashland, Kentucky. The chemical complex at Louisville developed during World War II, when the Defense Department looked for a waterside location to manufacture synthetic rubber. Chemical plants were also attracted to the cheap electricity of the Tennessee Valley and the salt, coal and mineral deposits of the Kanawha Valley.

2008 chemical shipments on the Ohio River basin's waterways totaled just over 9.2 million tons, or 3.5% of all barge cargo. Of this amount, 6.9 million tons were shipped into the basin from outside. Just over 622 thousand tons were shipped out of the basin, and 1.6 million tons moved within the Ohio River System. Chemicals are a high-value commodity.

This 9.2 million tons moving by barge in 2008 had a combined value of \$4.5 billion, which is over 14 per cent of the value of the basin's commodities moving by water.

The largest chemical commodity that moves by barge in the basin is other hydrocarbons, which is used in the manufacture of various fuels. Over 68% of the 2.7 billion tons of hydrocarbons which moved in 2008 originated in the Louisiana and Texas areas and moved to docks in the Ohio River Basin. Nitrogen fertilizers were next. Almost 1.6 million tons of various types of fertilizers also move in barges. Alcohols, which is used in the manufacture of acetone and phenols for the manufacture of products such as building materials, carpets, automotive parts, cosmetics, and medicines, is the third ranking waterborne chemical.

Ohio River Basin Barge Traffic Top Chemicals – 2008 (values in millions of \$)		
Chemical	Tonnage	Value
OTHER HYDROCARBONS	2,760,511	\$428
NITROGENOUS FERT	1,553,746	\$149
ALCOHOLS	1,372,681	\$633
SODIUM HYDROXIDE	773,399	\$63
POTASSIC FERT	600,487	\$98
NITROGEN FUNC COMP.	334,366	\$1,461
ORGANIC COMP NEC	326,099	\$383
INORG ELEM OXIDES & HALOGEN SALTS	298,689	\$117
FERT & MIXES NEC	286,058	\$512
CARBOXYLIC ACIDS	283,194	\$226
<i>Source: U.S. Army Corps of Engineers Waterborne Commerce Statistics</i>		

Chemicals

Most of the chemicals that moved by barge in the Ohio River basin originated in Louisiana and Texas. The leading basin state in chemical shipments was Illinois.

Ohio River Basin Barge Traffic Chemicals Shipped by State – 2008 (values in millions of \$)			
State	Tonnage	Value	Top Chemical
Louisiana	4,567,283	\$1,492	Urea Fertilizer
Texas	2,076,627	\$1,937	Cumene
Kentucky	584,512	\$77	Aqueous Sodium Hydroxide
Illinois	567,553	\$186	Non-Denatured Ethyl Alcoh
Alabama	345,970	\$392	Xylenes, Pure
<i>Source: U.S. Army Corps of Engineers Waterborne Commerce Statistics</i>			

The main destinations for chemical barges in the basin were plants and docks in Ohio, which received over 2.3 million tons. Kentucky received more than 2.0 million tons of chemicals. Alabama facilities received over 900 thousand million tons of specialized chemicals worth over \$1.1 billion.

Ohio River Basin Barge Traffic Chemicals Received by State – 2008 (values in millions of \$)			
State	Tonnage	Value	Top Chemical
Ohio	2,305,647	\$756	Styrene
Kentucky	2,087,189	\$805	Dichloroethane
West Virginia	978,183	\$451	Methanol
Alabama	906,041	\$1,115	Xylenes, Pure
Indiana	861,975	\$186	Cumene
<i>Source: U.S. Army Corps of Engineers Waterborne Commerce Statistics</i>			

