

Energy Data Report

U.S. Department of Energy
Energy Information
Administration
Washington D.C. 20461



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DOE/EIA--0120(79)

DE89 014987

COKE AND COAL CHEMICALS IN 1979

MASTER

Prepared in the Office of Coal and Electric Power Statistics

Released for printing: October 31, 1980

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PREFACE

This Department of Energy, Energy Information Administration (EIA), report continues the annual series on coke and coal chemicals started in the 1920's by the Bureau of Mines, Department of the Interior, as a Mineral Industry Survey. The last Bureau of Mines publication in this continuing series was for 1975. Since that time the Energy Information Administration has published these reports. This report combines the data previously published as 3 separate reports on coke and coal chemicals, coke and breeze distribution, and coke producers in the United States.

The information in this report was collected by the Coal Statistics Division, Office of Coal and Electric Power Statistics, Energy Information Administration, from respondents on Form EIA-5 and 5A. The data contained herein were compiled from mandatory reports submitted by companies that operated coke plants.

The Office of Coal and Electric Power Statistics gratefully acknowledges the cooperation of the respondents in supplying the necessary details that made this report possible.

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GENERAL SUMMARY OF COKE AND COAL CHEMICALS PRODUCTION
AND DISTRIBUTION IN 1979

Coke Production

Coke production in 1979 totaled 52.9 million tons (48.0 million tons from 45 furnace plants and 4.9 million tons from 19 merchant plants), an 8.0 percent increase from the 49.0 million tons produced in 1978. Production was stable during the year, coke output being in excess of 13 million tons during each quarter of 1979. Total apparent consumption (production plus imports, minus exports, plus net change in stocks) declined more than 5.5 percent to 53.8 million tons. Coke exports in 1979 increased 108 percent to 1.4 million tons while coke imports declined 69 percent to approximately 4.0 million tons. West Germany was the source of 57 percent or 2.3 million tons of the coke imports with Japan supplying 25 percent or 1.0 million tons.

The major end use of coke continued to be in blast furnaces, accounting for 92.5 percent of 54.6 million tons distributed by producers. Of the 3.7 million tons of breeze produced, 1.5 million tons was used in agglomerating plants for sintering iron ore.

The average price per ton for sales of coke to blast furnace plants showed an increase of \$1.77 (a 2.2 percent increase) to \$82.37; sales to foundries rose \$8.79 (a 6.6 percent increase) to \$141.92; and sales to other industrial users rose \$11.10 (a 12.8 percent increase) to \$97.65. The average price per ton for sales of coke to all end users decreased by \$0.45 (less than 0.5 percent) to \$106.63.

Coal received by coke plants increased in 1979 to 77.6 million tons, a rise of 17.0 percent from receipts in 1978, while coal carbonized rose 8.4 percent to 77.4 million tons. More than 61 percent of the coal received at coke plants came from captive mines (mines affiliated with coke producers). Over 81 percent of the coal received came from Kentucky, Pennsylvania, Virginia and West Virginia and more than 79 percent of the coal was delivered to Alabama, Indiana, Michigan, Ohio, Pennsylvania and West Virginia.

Coke Distribution

In 1979 distribution of coke and breeze produced in United States totaled 59.3 million tons, a decrease of 2.9 percent from the 61.0 million tons in 1978. During the year coke and breeze were distributed to 44 states. The major destinations, accounting for 67.4 percent of shipments, were; Pennsylvania, 11.8 million tons; Indiana, 10.3 million tons; Ohio 9.1 million tons; Michigan, 4.7 million tons; and Illinois 4.2 million tons.

Distribution of coke in 1979 decreased 3.7 percent from the 1978 level to 54.6 million tons. Shipments to blast furnace plants fell 4.2 percent to 50.6 million tons; to foundries fell 1.3 percent to 2.7 million tons;

and to other industrial plants (including use in heating) rose 17.1 percent to 1.4 million tons. Blast furnaces continued to be the major recipient of coke, accounting for 92.5 percent of the 54.6 million tons shipped. The major destinations of blast furnace coke, accounting for 55.5 percent of shipments, were Pennsylvania, 10.6 million tons; Indiana 9.3 million tons; and Ohio, 8.2 million tons.

Breeze distribution rose 8.9 percent in 1979 to 4.6 million tons. Shipments to steam plants increased 19.8 percent to 0.2 million tons; to agglomerating plants decreased 6.3 percent to 1.5 million tons; and to other industrial plants rose 17.3 percent to 3.0 million tons. The major destinations of breeze were Pennsylvania, 0.9 million tons; Indiana, 0.8 million tons; and Ohio, 0.5 million tons.

Coke and breeze exported by coke producers increased 26.0 percent in 1979 to 402 thousand tons. Coke exports by coke producers rose 6.3 percent to 286 thousand tons while breeze exports rose 132 percent to 116 thousand tons. Canada received 59.7 percent of the 1979 coke and breeze export total.

Coke Producers

The coke industry of the United States in 1979 operated 64 plants: 45 classified as furnace and 19 as merchant. Furnace plants are those owned by iron and steel companies whose principal business is producing blast furnace coke for their own use. Merchant plants are either associated with chemical companies or gas utilities, or operate to produce coke and coal chemical materials for sale in the open market. Four plants ceased production in 1979, two each in Minnesota and West Virginia.

Coke plants are listed alphabetically by state in the appendix. This list includes the name and address of the company, plant name, classification (furnace or merchant) and major uses of coke and coal-chemical materials produced. An end-use is considered a major use if it is 20 percent or more of the plant's total disposal of coke. All plants except two (one beehive and one nonrecovery slot oven) produced crude coal tar. Forty-nine plants produced some type of ammonia product. Fourteen plants recovered intermediate light oil and fifty recovered crude light oil.

Table 1. Salient Coke Statistics
(Thousand Short Tons, Thousand Dollars)

	1975	1976	1977	1978	1979
U.S. Coke Production and Disposition					
Production-----	57,207	58,333	53,509	49,009	52,943
Exports-----	1,273	1,315	1,241	693	1,440
Imports-----	1,819	1,311	1,829	5,722	3,974
Producers' Stocks, December 31-----	5,001	6,491	6,444	3,534	5,185
Consumption, Apparent-----	53,687	56,834	54,144	56,984	53,826
Coke Consumed in Iron Furnaces-----	48,817	51,561	48,510	51,286	50,008
Coke Consumed for All Other Purposes-----	4,870	5,273	5,634	5,662	3,818
World Coke Production-----	417,437	424,851	411,763	401,987	375,863
Value of Coal-Chemical Materials Used or Sold-	\$653,958	\$919,834	\$882,901	\$922,693 ^r	\$1,203,441
Value of Coke and Breeze Used or Sold-----	\$4,607,292	\$5,020,857	\$4,652,776	\$5,634,847 ^r	\$5,458,568
Total Value of All Products Used or Sold ^a ---	5,261,250	\$5,940,691	\$5,535,677	\$6,557,540 ^r	\$6,662,009

^aData may not add to totals shown because of independent rounding.

^rRevised.

Source: Imports, Form IM 145, Monthly Report, Bureau of Census, U.S. Department of Commerce. Exports, Form EM 522, Monthly Report, Bureau of Census, U.S. Department of Commerce. Coke consumed in iron furnaces, American Iron and Steel Institute Annual Statistical Report. World Coke Production 1975-1977, Technical Data Services, Bureau of Mines, U.S. Department of the Interior. World Coke Production 1978, World Energy Supplies, Series J, No. 22, General Statistical Office, United Nations. World Coke Production 1979, World Energy Supplies, Series J, No. 23, General Statistical Office, United Nations. Remainder of data compiled from Form EIA-5, Monthly Survey of Coke and Coal-Chemical Materials, and Form EIA-5A, Annual Survey of Coke and Coal-Chemical Materials, Energy Information Administration, U.S. Department of Energy.

Table 2. Statistical Summary of the Coke Industry in the United States

	1978	1979
Coke produced:		
At merchant plants-----thousand short tons--	3,753	4,950
At furnace plants-----thousand short tons--	45,256	47,993
Total ^a -----thousand short tons--	49,009	52,943
Breeze produced-----thousand short tons--	3,990	3,693
Coal carbonized:		
Bituminous:		
Quantity (thousand short tons)-----	71,078	77,010
Value (thousand dollars)-----	\$3,700,732	\$3,905,447
Average price per ton (dollars)-----	\$52.07	\$50.71
Anthracite:		
Quantity (thousand short tons)-----	316	359
Value (thousand dollars)-----	\$15,343	\$16,145
Average price per ton (dollars)-----	\$48.55	\$44.97
Total ^a		
Quantity (thousand short tons)-----	71,394	77,369
Value (thousand dollars)-----	\$3,716,076	\$3,921,592
Average price per ton (dollars)-----	\$52.05	\$50.69
Average yield of coal carbonized (percent):		
Coke-----per weight-----	68.65	68.43
Breeze-----	5.59	4.77
Coke used by producing companies:		
In blast furnaces:		
Quantity (thousand short tons)-----	50,830	47,245
Value (thousand dollars)-----	\$4,876,985	\$4,540,897
In foundries:		
Quantity (thousand short tons)-----	92	146
Value (thousand dollars)-----	\$11,311	\$19,219
For other industrial uses:		
Quantity (thousand short tons)-----	250	179
Value (thousand dollars)-----	\$22,611	\$16,426
Coke sold (commercial sales):		
To blast furnaces:		
Quantity (thousand short tons)-----	1,958	3,308
Value (thousand dollars)-----	\$157,824	\$272,482
Average price per ton (dollars)-----	\$80.60	\$82.37
To foundries:		
Quantity (thousand short tons)-----	2,716	2,576
Value (thousand dollars)-----	\$361,576	\$365,595
Average price per ton (dollars)-----	\$133.13	\$141.92
To other industrial uses:		
Quantity (thousand short tons)-----	922	1,191
Value (thousand dollars)-----	\$79,799	\$116,303
Average price per ton (dollars)-----	\$86.55	\$97.65

See footnotes at end of table.

Table 2. Statistical Summary of the Coke Industry in the United States
(Continued)

	1978	1979
Breeze used by producing companies:		
In steam plants:		
Quantity (thousand short tons)-----	167	200
Value (thousand dollars)-----	\$5,094	\$5,215
In agglomerating plants:		
Quantity (thousand short tons)-----	1,550	1,453
Value (thousand dollars)-----	\$43,120	\$41,788
For other industrial uses:		
Quantity (thousand short tons)-----	805	745
Value (thousand dollars)-----	\$24,119	\$20,486
Breeze sold (commercial sales):		
Quantity (thousand short tons)-----	1,736	2,240
Value (thousand dollars)-----	\$52,408	\$60,157
Average price per ton (dollars)-----	\$30.19	\$26.86
Coal-chemical materials produced:		
Crude tar:		
Quantity (thousand gallons)-----	540,628	591,475
Yield (gallons per ton of coal)-----	7.63 ^r	7.71
Ammonia as sulfate:		
Quantity (thousand short tons)-----	451	470
Crude light oil:		
Quantity (thousand gallons)-----	161,792	175,226
Yield (gallons per ton of coal)-----	2.64 ^r	2.48
Coke oven gas:		
Quantity (million cubic feet)-----	782,160	834,303
Yield (thousand cubic feet per ton of coal)-----	11.08	10.88
Disposition:		
Percent burned in coking process-----	39.04	38.71
Percent surplus used or sold-----	59.73	59.19
Percent wasted-----	1.23	-2.10
Value of coal-chemical materials used or sold:		
Crude tar and derivatives:		
Used-----thousand dollars--	\$103,394	\$123,051 ^b
Sold-----thousand dollars--	\$156,354	\$230,514
Ammonia products ^c -----thousand dollars--	\$26,102	\$28,738
Crude light oil and derivatives ^d -----thousand dollars--	\$139,431 ^r	\$172,454
Surplus gas-----thousand dollars--	\$497,412	\$648,684

^aData may not add to totals shown due to independent rounding.

^bIncludes crude tar only, derivative data uncollected.

^cIncludes ammonium sulfate, ammonia liquor, and di- and mono-ammonium phosphate.

^dIncludes intermediate light oil.

^rRevised.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, and Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 3. United States Coke Production and Disposition by Producing State in 1979
(Thousands of Short Tons, Thousands of Dollars)

Producing State	Coke Yield ^a	Quantity Produced	Used by Producing Companies					
			In Blast Furnaces		For Other Purposes ^b		Total ^b Used	
			Quantity	Value	Quantity	Value	Quantity	Value
Alabama-----	70.91	4,672	2,541	\$239,132	36	\$5,461	2,577	\$244,594
California, Colorado, Utah-----	62.31	2,634	2,838	286,406	(w)	(w)	(w)	(w)
Illinois-----	61.72	1,364	2,241	246,693	(w)	(w)	(w)	(w)
Indiana-----	66.10	8,301	8,385	832,341	(w)	(w)	(w)	(w)
Kentucky, Missouri, Tennessee, Texas--	71.67	1,771	(w)	(w)	(w)	(w)	(w)	(w)
Maryland, New York-----	71.07	4,554	4,040	394,045	(w)	(w)	(w)	(w)
Michigan, Minnesota, Wisconsin-----	70.62	3,499	3,398	343,763	(w)	(w)	(w)	(w)
Ohio-----	67.77	8,250	7,610	672,530	91	8,782	7,701	681,312
Pennsylvania-----	69.80	14,298	12,538	1,152,257	92	8,745	12,630	1,161,002
Virginia, West Virginia-----	68.02	3,601	(w)	(w)	(w)	(w)	(w)	(w)
Not Revealable-----	--	--	3,653	373,731	107	12,655	24,663	2,489,634
Total, Merchant Plants-----	74.48	4,950	11	745	50	7,686	61	8,431
Total, Furnace Plants-----	67.86	47,993	47,234	4,540,152	275	27,958	47,510	4,568,111
U.S. Total ^c , 1979-----	68.43	52,943	47,245	\$4,540,897	326	\$35,644	47,571	\$4,576,542
U.S. Total, 1978-----	68.65	49,009	50,830	4,876,985	342	33,922	51,172	4,910,907

Producing State	Commercial Sales								Stocks On Hand Dec. 31
	To Blast Furnace Plants		To Foundries		To Other Industrial Plants		Total ^b Sold		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Alabama-----	657	\$59,978	756	\$104,250	218	\$25,693	1,632	\$189,920	548
California, Colorado, Utah-----	0	0	0	0	(w)	(w)	(w)	(w)	(w)
Illinois-----	(w)	(w)	0	0	0	0	(w)	(w)	276
Indiana-----	(w)	(w)	(w)	(w)	(w)	(w)	(w)	(w)	740
Kentucky, Missouri, Tennessee, Texas--	(w)	(w)	(w)	(w)	118	14,595	1,032	85,486	118
Maryland, New York-----	0	0	(w)	(w)	(w)	(w)	(w)	(w)	431
Michigan, Minnesota, Wisconsin-----	54	5,533	425	61,922	186	16,561	665	84,016	(w)
Ohio-----	768	71,174	267	37,416	105	8,288	1,141	116,878	703
Pennsylvania-----	659	63,725	471	65,982	268	25,276	1,398	154,983	1,110
Virginia, West Virginia-----	(w)	(w)	(w)	(w)	(w)	(w)	(w)	(w)	(w)
Not Revealable-----	1,169	72,073	656	96,025	296	25,890	1,206	123,096	1,260
Total, Merchant Plants-----	1,501	99,364	2,292	326,679	851	88,073	4,644	514,116	595
Total, Furnace Plants-----	1,807	173,119	284	38,916	340	28,229	2,431	240,264	4,590
U.S. Total ^c , 1979-----	3,308	\$272,482	2,576	\$365,595	1,191	\$116,303	7,075	\$754,380	5,185
U.S. Total, 1978-----	1,958	157,824	2,716	361,576	922	79,799	5,597	599,198	3,534

^aCoke yield is calculated as percent by weight of coke per short ton of coal carbonized.

^bComprised of 146,146 tons valued at \$19,218,722 used in foundries; 179,470 tons valued at \$16,425,532 used for other purposes.

^cData may not add to totals shown due to independent rounding.

^wWithheld to avoid disclosing individual company data.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 4. United States Breeze Production and Disposition by Producing State-1979
(Thousands of Short Tons, Thousands of Dollars)

Producing State	Breeze Yield ^a	Quantity Produced	Used by Producers								Stocks On Hand Dec. 31
			In Steam Plants		In Agglomerating Plants		For Other Industrial Use		Sold		
			Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Alabama-----	3.08	203	0	0	(w)	(w)	93	\$2,873	154	\$5,485	57
California, Colorado, Utah-----	4.90	207	0	0	186	\$7,065	(w)	(w)	(w)	(w)	(w)
Illinois-----	7.58	168	(w)	(w)	(w)	(w)	12	299	128	3,275	54
Indiana-----	7.30	917	0	0	363	9,511	240	6,305	426	9,312	518
Kentucky, Missouri, Tennessee, Texas---	5.25	130	(w)	(w)	(w)	(w)	(w)	(w)	80	1,731	66
Maryland, New York-----	4.44	285	(w)	(w)	(w)	(w)	38	1,170	(w)	(w)	112
Michigan, Minnesota, Wisconsin-----	4.23	210	(w)	(w)	(w)	(w)	(w)	(w)	149	3,444	(w)
Ohio-----	5.03	612	(w)	(w)	(w)	(w)	119	3,166	514	11,678	141
Pennsylvania-----	3.28	673	(w)	(w)	269	6,605	121	3,628	418	12,705	185
Virginia, West Virginia-----	5.47	290	(w)	(w)	(w)	(w)	(w)	(w)	(w)	(w)	(w)
Not Revealeable-----	--	--	200	\$5,215	636	18,608	121	3,046	371	12,526	184
Total, Merchant Plants-----	4.74	315	117	3,378	0	0	133	3,880	147	4,110	166
Total, Furnace Plants-----	4.78	3,379	83	1,837	1,453	41,788	612	16,607	2,092	56,047	1,151
U.S. Total ^b , Merchant Plants-----	4.77	3,693	200	\$5,215	1,453	\$41,788	745	\$20,486	2,240	\$60,157	1,317
U.S. Total, Furnace Plants-----	5.59	3,990	167	5,094	1,550	43,120	805	24,119	1,736	52,408	1,641

^aBreeze is calculated as percent by weight of breeze per short ton of coal carbonized.

^bData may not add to totals shown due to independent rounding.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials, Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 5. United States Coke Imports by Country of Origin-1979

Country of Origin	Quantity (thousand short tons)	FAS Value ^a (thousand dollars)
Argentina-----	49	\$863
Belgium and Luxembourg-----	146	11,213
Canada-----	136	11,012
France-----	258	22,821
Italy-----	48	3,991
Japan-----	983	81,392
Korea, Republic of-----	6	664
Mexico-----	(b)	12
Netherlands-----	17	1,721
Norway-----	15	689
United Kingdom-----	53	4,804
West Germany-----	2,262	200,906
Total ^c , 1979-----	3,974	\$340,088
Total, 1978-----	5,722	410,958

^aFAS means free alongside ship at port in specified country.

^bLess than 500 tons.

^cData may not add to totals shown due to independent rounding.

Source: Form IM 145, Monthly Report, Bureau of Census, U.S.

Department of Commerce

Table 6. United States Coke Exports by Receiving Country-1979

Receiving Country	Quantity (thousand short tons)	FAS Value ^a (thousand dollars)
Belgium and Luxembourg-----	46	\$1,616
Canada-----	598	38,895
Guatemala-----	2	317
Mexico-----	61	8,074
Netherlands-----	394	15,459
Spain-----	89	3,976
Turkey-----	29	883
United Kingdom-----	24	854
Venezuela-----	48	2,997
West Germany-----	148	7,530
Other Countries ^b -----	1	154
Total ^c , 1979-----	1,440	\$80,757
Total, 1978-----	693	49,226

^aFAS means free alongside ship at United States port.

^bIncludes Australia, Bahamas, Brazil, Dominican Republic, Honduras, Jamaica, Japan, Nicaragua, Panama and Saudi Arabia.

^cData may not add to totals shown due to independent rounding.

Source: Form EM 522, Monthly Report, Bureau of Census, U.S. Department of Commerce.

Table 7. Coal Carbonization at United States Coke Plants, by State Location-1979

State Location of Carbonization	Quantity Carbonized (thousand short tons)	Average Sulfur Content of Coal by Weight on a Dry Basis (percent)	Coal Value		Coal Carbonized per Short Ton of Coke Produced (short tons)
			(thousand dollars)	Average Price (dollars)	
Alabama-----	6,588	0.8	\$318,040	\$48.28	1.41
California, Colorado, Utah-----	4,227	0.7	197,121	46.63	1.61
Illinois-----	2,210	1.0	108,207	48.96	1.62
Indiana-----	12,559	0.9	631,024	50.25	1.51
Kentucky, Missouri, Tennessee, Texas--	2,471	0.9	116,197	47.02	1.40
Maryland, New York-----	6,408	1.0	398,568	62.20	1.41
Michigan, Minnesota, Wisconsin-----	4,955	0.9	292,455	59.02	1.42
Ohio-----	12,174	0.9	575,777	47.30	1.48
Pennsylvania-----	20,483	1.1	1,031,720	50.37	1.43
Virginia, West Virginia-----	5,294	1.1	252,485	47.69	1.47
Total, Merchant Plants-----	6,646	0.8	357,042	53.72	1.34
Total, Furnace Plants-----	70,724	1.0	3,564,551	50.40	1.47
U.S. Total ^a , 1979-----	77,369	1.0	\$3,921,592	\$50.69	1.46
U.S. Total, 1978-----	71,394	0.9	3,716,076	52.05	1.46

^aData may not add to totals shown due to independent rounding.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials--Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 8. Coal Received at United States Coke Plants by Volatile Content^a
and State Location of Coke Plant-1979
(Thousands of Short Tons)

State Location of Coke Plant	Coal Receipts						Total ^c
	High-Volatile		Medium-Volatile		Low-Volatile ^b		
	Quantity	Percent of Total	Quantity	Percent of Total	Quantity	Percent of Total	
Alabama-----	2,398	36.6	2,276	34.8	1,872	28.6	6,545
California, Colorado, Utah-----	3,110	74.2	886	21.1	197	4.7	4,192
Illinois-----	1,756	81.5	12	0.6	386	17.9	2,154
Indiana-----	8,393	65.2	1,998	15.5	2,486	19.3	12,877
Kentucky, Missouri, Tennessee, Texas---	1,052	50.1	627	29.9	420	20.0	2,099
Maryland, New York-----	4,321	64.4	378	5.6	2,010	30.0	6,708
Michigan, Minnesota, Wisconsin-----	2,572	53.1	487	10.0	1,787	36.9	4,847
Ohio-----	8,360	71.8	532	4.6	2,745	23.6	11,637
Pennsylvania-----	14,375	67.5	2,254	10.6	4,652	21.9	21,281
Virginia, West Virginia-----	3,537	67.1	838	15.9	894	17.0	5,269
Total, Merchant Plants-----	2,581	31.6	2,801	34.3	2,787	34.1	8,169
Total, Furnace Plants-----	47,292	68.1	7,486	10.8	14,661	21.1	69,439
U.S. Total ^c , 1979-----	49,873	64.3	10,287	13.2	17,448	22.5	77,608
U.S. Total, 1978-----	42,943	64.7	11,244	17.0	12,146	18.3	66,338

^aPercent by weight of volatile matter in coal on moisture-free (dry) basis; high volatile-over 31%, medium volatile - 22%-31% and low volatile - 14%-22%.

^bLow volatile also includes 307 thousand short tons of Pennsylvania anthracite.

^cData may not add to totals shown due to independent rounding.

Source: Form-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 9. Coal Received at United States Coke Plants by Volatile Content^a and State and County of Origin-1979
(Thousands of Short Tons)

Origin of Coal State County	Coal Receipts			Total ^c
	Volatile Content			
	High	Medium	Low ^b	
Alabama:				
Bibb-----	247	0	0	247
Blount-----	0	164	0	164
Dekalb-----	0	40	76	116
Jefferson-----	899	1,837	1,245	3,981
Shelby-----	10	0	0	10
Tuscaloosa-----	47	0	0	47
Walker-----	598	0	0	598
Total ^c -----	1,801	2,041	1,321	5,163
Arkansas:				
Franklin-----	0	0	72	72
Sebastian-----	0	0	50	50
Total ^c -----	0	0	122	122
Colorado:				
Archuleta-----	0	61	0	61
Delta-----	533	0	0	533
Garfield-----	13	13	0	26
Gunnison-----	170	0	0	170
La Plata-----	10	0	0	10
Las Animas-----	768	0	0	768
Pitkin-----	0	811	0	811
Total ^c -----	1,494	886	0	2,379
Georgia:				
Dade-----	0	49	0	49
Total ^c -----	0	49	0	49
Illinois:				
Franklin-----	845	0	0	845
Jefferson-----	2,005	0	0	2,005
Saline-----	60	0	0	60
Total ^c -----	2,910	0	0	2,910
Kentucky:				
Floyd-----	6	0	0	6
Greenup-----	(d)	0	0	(d)
Harlan-----	2,988	0	0	2,988
Knott-----	1,293	0	0	1,293
Letcher-----	1,722	0	0	1,722
Perry-----	7	0	0	7
Pike-----	3,860	0	0	3,860
Whitley-----	58	0	0	58
Total ^c -----	9,933	0	0	9,933
Maryland:				
Garrett-----	1	0	0	1
Total ^c -----	1	0	0	1
New Mexico:				
Colfax-----	677	0	0	677
Total ^c -----	677	0	0	677
Ohio:				
Harrison-----	61	0	0	61
Total ^c -----	61	0	0	61
Oklahoma:				
Haskell-----	1	162	0	162
Le Flore-----	0	110	125	235
Rogers-----	356	0	0	356
Total ^c -----	357	272	125	754

See footnotes at end of table

Table 9. Coal Received at United States Coke Plants by Volatile Content^a and State and County of Origin-1979 (Continued)
(Thousands of Short Tons)

Origin of Coal State County	Coal Receipts			Total ^c
	Volatile Content			
	High	Medium	Low ^b	
Pennsylvania:				
Anthracite:				
Carbon-----	0	0	(d)	(d)
Lehigh-----	0	0	6	6
Luzerne-----	0	0	70	70
Schuylkill-----	0	0	231	231
Bituminous:				
Allegheny-----	1,784	0	0	1,784
Armstrong-----	203	0	0	203
Butler-----	240	0	0	240
Cambria-----	0	1,398	2,469	3,867
Centre-----	0	367	0	367
Clearfield-----	0	41	70	111
Fayette-----	156	0	0	156
Greene-----	6,040	0	0	6,040
Jefferson-----	0	17	0	17
Somerset-----	0	0	1,352	1,352
Washington-----	7,290	0	0	7,290
Westmoreland-----	959	0	0	959
Total ^c -----	16,673	1,823	4,198	22,694
Tennessee:				
Claiborne-----	2	0	0	2
Morgan-----	0	4	0	4
Total ^c -----	2	4	0	6
Utah:				
Carbon-----	866	0	0	866
Emery-----	118	0	0	118
Total ^c -----	984	0	0	984
Virginia:				
Buchanan-----	592	2,072	1,129	3,793
Dickenson-----	6	278	0	284
Tazewell-----	0	659	135	794
Wise-----	1,140	490	0	1,631
Total ^c -----	1,738	3,499	1,264	6,501
West Virginia:				
Barbour-----	449	54	0	502
Boone-----	2,124	106	0	2,229
Clay-----	40	0	0	40
Fayette-----	279	53	99	431
Greenbrier-----	0	47	61	108
Kanawha-----	4,302	0	0	4,302
Logan-----	2,466	0	0	2,466
Mercer-----	0	0	125	125
McDowell-----	229	207	5,011	5,447
Marion-----	786	0	0	786
Mingo-----	133	0	0	133
Nicholas-----	707	152	0	859
Preston-----	0	402	0	402
Raleigh-----	1,433	42	1,257	2,732
Wayne-----	28	0	0	28
Wyoming-----	127	414	3,291	3,833
Total ^c -----	13,102	1,476	9,845	24,423
Unknown-----	139	238	451	828
United States, Total ^c -----	49,873	10,287	17,326	77,486
Australia-----	0	0	110	110
South America-----	0	0	13	13
Foreign, Total-----	0	0	123	123
Grand Total ^c -----	49,873	10,287	17,448	77,608

^aPercent by weight of volatile matter in coal on moisture-free (dry) basis; high volatile-over 31%, medium volatile - 22%-31% and low volatile - 14%-22%.

^bLow volatile also includes 307 thousand short tons of Pennsylvania anthracite.

^cData may not add to totals shown due to independent rounding.

^dLess than 500 tons.

Source: Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 10. Coal Received at United States Coke Plants by Producing and Consuming State-1979
(Thousands of Short Tons)

Consuming State	Producing State									
	Alabama	Arkansas	Colorado	Georgia	Illinois	Kentucky	Maryland	New Mexico	Ohio	Oklahoma
Alabama-----	5,087	0	0	49	0	235	0	0	0	0
California, Colorado, Utah-----	0	72	2,379	0	0	0	0	677	0	125
Illinois-----	0	0	0	0	434	986	0	0	0	10
Indiana-----	0	32	0	0	2,470	3,571	0	0	0	0
Kentucky, Missouri, Tennessee, Texas---	76	0	0	0	0	0	0	0	0	615
Maryland, New York-----	0	0	0	0	0	1,388	0	0	0	0
Michigan, Minnesota, Wisconsin-----	0	0	0	0	0	1,719	0	0	0	0
Ohio-----	0	0	0	0	6	581	1	0	61	3
Pennsylvania-----	0	0	0	0	0	814	0	0	0	0
Virginia, West Virginia-----	0	18	0	0	0	640	0	0	0	0
Total, Merchant Plants-----	763	0	0	0	6	377	1	0	61	3
Total, Furnace Plants-----	4,400	122	2,379	49	2,904	9,556	0	677	0	751
U.S. Total ^a , 1979-----	5,163	122	2,379	49	2,910	9,933	1	677	61	754
U.S. Total, 1978-----	3,758	157	2,155	18	2,100	8,139	8	544	2	537

Consuming State	Producing State								Total ^a
	Pennsylvania	Tennessee	Utah	Virginia	West Virginia	Australia	South America	Unknown	
Alabama-----	104	0	0	358	705	0	0	8	6,545
California, Colorado, Utah-----	0	0	938	0	0	0	0	0	4,192
Illinois-----	100	0	0	55	569	0	0	0	2,154
Indiana-----	1,568	0	0	2,085	3,150	0	0	0	12,877
Kentucky, Missouri, Tennessee, Texas---	58	0	0	185	1,153	0	13	0	2,099
Maryland, New York-----	3,621	0	0	576	1,124	0	0	0	6,708
Michigan, Minnesota, Wisconsin-----	579	0	46	293	2,209	0	0	0	4,847
Ohio-----	2,391	2	0	1,204	6,568	0	0	820	11,637
Pennsylvania-----	11,961	4	0	1,037	7,356	110	0	0	21,281
Virginia, West Virginia-----	2,313	0	0	709	1,589	0	0	0	5,269
Total, Merchant Plants-----	846	2	0	2,177	3,093	0	13	828	8,169
Total, Furnace Plants-----	21,849	4	984	4,324	21,330	110	0	0	69,439
U.S. Total ^a , 1979-----	22,694	6	984	6,501	24,423	110	13	828	77,608
U.S. Total, 1978-----	19,250	105	945	7,746	19,553	131	45	771	66,338

^aData may not add to totals shown due to independent rounding.

Source: Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 11. Coal Chemical Materials Produced at United States Coke Plants-1979

Coal Chemical Materials	Unit of Measure for Quantity	Quantity Produced	Sold		Stocks On Hand December 31	
			Quantity	Value (thousand dollars)		Average Price per Unit (dollars)
Tar, crude-----	thousand gallons-----	591,475	358,388	\$174,528	\$0.487	47,110
Tar Derivatives:						
Sodium phenolate or carbolate-----	thousand gallons-----	1,269	1,034	112	0.108	82
Crude chemical oil (tar acid oil)---	thousand gallons-----	19,018	3,598	1,405	0.390	282
Pitch of Tar (all grades)-----	thousand short tons---	507	314	43,112	137.299	7
Other tar derivatives ^a -----	thousand short tons---	225,120	50,944	11,357	0.223	16,005
Ammonia Products:						
Sulfate ^b -----	thousand short tons---	470	490	28,064	57.27	67
Liquor (NH ₃ Content)-----	thousand short tons---	8	7	674	96.28	1
Gas:						
Distributed through city mains-----	million cubic feet----		6,966	6,114	0.878	--
Sold for industrial use-----	million cubic feet----		4,834	3,255	0.673	--
Total ^d Gas-----	million cubic feet----	834,303 ^c	11,800	9,369	0.794	--
Crude light oil ^e -----	thousand gallons-----	175,226	110,517	87,751	0.794	8,877
Intermediate light oil-----	thousand gallons-----	11,044	2,810	2,920	1.039	1,284
Light Oil Derivatives:						
Benzene (all grades)-----	thousand gallons-----	59,851	58,936	69,083	1.172	2,437
Toluene (all grades)-----	thousand gallons-----	9,238	8,360	9,057	1.083	721
Xylene (all grades)-----	thousand gallons-----	1,364	1,288	1,321	1.026	157
Solvent Naphtha (all grades)-----	thousand gallons-----	1,351	1,369	934	0.682	128
Other light oil derivatives-----	thousand gallons-----	3,466	2,224	1,387	0.624	246
Total Light Oil Derivatives ^d -----	thousand gallons-----	75,270	72,177	\$81,783	1.133	3,689
Grand Total-Coal Chemical Materials-----				\$441,074		

^aIncludes creosote oil, naphthalene, and phenols.

^bIncludes di- and mono-ammonium phosphate.

^cIncludes gas used for heating ovens and gas wasted.

^dData may not add to totals shown due to independent rounding.

^eIncludes 64,234 thousand gallons refined by coke plant operators to make derived products shown.

Source: Form EIA-5, Monthly survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 12. Production and Disposal of Coke-Oven Gas in the United States, by Producing State-1979

Producing State	Production		Used by Producers in Heating Ovens ^a (million cubic feet)	Other Use by Producers		Commercial Sales		Wasted (million cubic feet)
	Total (million cubic feet)	Gas Yield (thousand cubic feet per ton of coal)		Quantity (million cubic feet)	Value (thousand dollars)	Quantity (million cubic feet)	Value (thousand dollars)	
Alabama-----	67,676	10.27	33,062	28,890	\$30,173	3,120	\$1,484	2,603
California, Colorado, Utah-----	59,595	14.10	17,501	40,669	44,072	0	0	1,424
Illinois-----	21,211	9.60	10,312	9,517	12,261	(w)	(w)	(w)
Indiana-----	132,381	10.54	45,908	84,140	138,804	(w)	(w)	349
Kentucky, Missouri, Tennessee, Texas---	25,699	10.40	13,525	9,786	6,108	0	0	2,389
Maryland, New York-----	80,859	12.62	30,645	45,555	65,423	(w)	(w)	1,221
Michigan, Minnesota, Wisconsin-----	51,064	10.30	13,726	34,844	56,191	(w)	(w)	2,438
Ohio-----	130,291	10.70	54,309	70,762	87,455	2,115	1,688	3,106
Pennsylvania-----	212,860	10.39	91,476	117,703	150,547	(w)	(w)	2,897
West Virginia-----	52,666	11.44	12,497	40,119	48,282	0	0	(w)
Not Revealable-----	--	--	--	--	--	6,565	6,197	1,128
Total, Merchant Plants-----	53,729	9.03	27,958	15,641	12,661	6,010	4,242	4,120
Total, Furnace Plants-----	780,574	11.04	295,003	466,345	626,654	5,790	5,126	13,436
U.S. Total ^b , 1979-----	834,303	10.88	322,961	481,986	\$639,315	11,800	\$9,369	17,556
U.S. Total, 1978-----	782,160	11.08	305,324	453,834	487,534	13,338	9,878	9,664

^aIncludes 322,961 million cubic feet coke-oven gas, 84,954 million cubic feet blast furnace gas, and 27,256 million cubic feet natural gas, used in heating coke ovens. Corrected to 550 Btu per cubic foot.

^bData may not add to totals shown due to independent rounding.

^wWithheld to avoid disclosing individual company data.

Source: Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 13. Production and Disposal of Coke-Oven Ammonia in the United States,
by Producing State-1979
(Thousands of Short Tons, Thousand of Dollars)

Producing State	Produced		Sold				Stocks on Hand December 31	
	As Sulfate ^a	As Liquor (NH ₃ Content)	As Sulfate ^a		As Liquor (NH ₃ Content)		As Sulfate ^a	As Liquor (NH ₃ Content)
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama-----	68	0	64	\$2,592	0	0	9	0
California, Colorado, Utah-----	38	0	38	870	0	0	2	0
Illinois-----	8	0	9	429	0	0	(b)	0
Indiana-----	91	(w)	97	3,458	(w)	(w)	7	(w)
Kentucky, Missouri, Tennessee, Texas--	(w)	(w)	5	181	0	0	(w)	(w)
Maryland, New York-----	62	0	61	3,231	0	0	(w)	0
Michigan, Minnesota, Wisconsin-----	27	0	(w)	(w)	0	0	(w)	0
Ohio-----	57	(w)	60	2,701	(w)	(w)	16	(w)
Pennsylvania-----	88	0	96	4,016	0	0	13	0
West Virginia-----	(w)	0	(w)	(w)	0	0	(w)	0
Not Revealable-----	33	8	60	10,585	7	\$674	19	1
Total, Merchant Plants-----	19	(w)	19	852	(w)	(w)	2	(w)
Total, Furnace Plants-----	451	(w)	471	27,212	(w)	(w)	64	(w)
U.S. Total ^c , 1979-----	470	8	490	\$28,064	7	\$674	67	1
U.S. Total, 1978-----	484	8	479	30,756	7	720	57	2

^aIncludes di- and mono-ammonium phosphate.

^bLess than 500 tons.

^cData may not add to totals shown due to independent rounding.

^wWithheld to avoid disclosing individual company data.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials--Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 14. Production and Disposal of Coke-Oven Tar in the United States, by Producing State-1979
(Thousands of Gallons)

Producing State	Quantity Produced (thousands of gallons)	Yield (gallons per ton of coal)	Used by Producers ^a (thousands of gallons)	Sold for Refining into Tar Products			Stocks On Hand Dec. 31 (thousands of gallons)
				Quantity ^b (thousands of gallons)	Value (thousand dollars)	Average Price per Gallon (dollars)	
Alabama-----	41,910	6.36	(w)	32,109	\$12,696	\$0.395	3,128
California, Colorado, Utah-----	34,977	8.28	0	35,364	26,718	0.756	2,958
Illinois-----	13,852	6.27	0	14,002	5,914	0.422	1,344
Indiana-----	96,705	7.70	(w)	39,744	19,791	0.498	5,206
Kentucky, Missouri, Tennessee, Texas---	16,259	6.58	(w)	16,562	6,125	0.370	460
Maryland, New York-----	51,256	8.00	(w)	38,072	17,976	0.472	8,826
Michigan, Missouri, Wisconsin-----	33,563	6.77	0	(w)	(w)	(w)	(w)
Ohio-----	94,332	7.75	47,370	49,136	27,094	0.551	7,723
Pennsylvania-----	174,201	8.50	99,574	82,824	36,370	0.439	11,600
West Virginia-----	34,418	7.48	(w)	(w)	(w)	(w)	(w)
Not Revealeable-----	--	--	105,727	50,577	21,844	0.432	5,863
Total, Merchant Plants-----	35,377	5.94	(w)	35,138	15,390	0.438	1,411
Total, Furnace Plants-----	556,098	7.86	(w)	323,251	159,138	0.492	45,699
U.S. Total ^c , 1979-----	591,475	7.71	252,671	358,388	\$174,528	\$0.487	47,110
U.S. Total, 1978-----	540,628	7.63	234,877	319,380	120,036	0.376	46,929

^aIncludes 152,751 thousand gallons used for refining or topping, 96,568 thousand gallons used as fuel, and 3,352 thousand gallons used otherwise.

^bIncludes 37,192 thousand gallons transferred to affiliated companies. The value of this is included with the value of tar sold.

^cData may not add to totals shown due to independent rounding.

^wWithheld to avoid disclosing individual company data.

Source: Form EIA-5, Monthly survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 15. Production and Disposal of Crude Light-Oil in the United States, by Producing State-1979

Producing State	Quantity Produced (thousands of gallons)	Yield (gallons per ton of coal)	Refined on Premises (thousands of gallons)	Sold		Stocks On Hand Dec. 31 (thousands of gallons)
				Quantity (thousands of gallons)	Value (thousand dollars)	
Alabama-----	11,570	1.76	(w)	11,569	\$6,045	1,368
California, Colorado, Utah-----	(w)	(w)	(w)	(w)	(w)	(w)
Illinois-----	5,435	2.46	0	5,332	3,923	181
Indiana-----	23,927	2.34	(w)	(w)	(w)	1,134
Kentucky, Missouri, Tennessee, Texas---	(w)	(w)	(w)	(w)	(w)	165
Maryland, New York-----	18,569	2.90	(w)	8,587	7,809	1,594
Michigan, Minnesota, Wisconsin-----	(w)	(w)	0	(w)	(w)	(w)
Ohio-----	24,859	2.07	0	24,878	21,764	775
Pennsylvania-----	58,472	2.94	(w)	8,900	8,115	2,783
West Virginia-----	(w)	(w)	0	(w)	(w)	(w)
Not Revealable-----	32,394	1.92	64,234	51,251	40,095	876
Total, Merchant Plants-----	7,023	1.82	(w)	6,805	5,458	804
Total, Furnace Plants-----	168,203	2.51	(w)	103,712	82,294	8,073
U.S. Total ^a , 1979-----	175,226	2.48	64,234	110,517	\$87,751	8,877
U.S. Total, 1978-----	161,792	2.64	62,837	92,613	43,324	9,177

^aData may not add to totals shown due to independent rounding.

^wWithheld to avoid disclosing individual company data.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, and Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 16. Number of Active United States Coke Plants, Production and Percent Production by Type of Plant: 1975-1979

Year	Number of Active Plants ^a		Coke Produced (Thousands of Short Tons)		Percent of Production	
	Merchant Plants	Furnace Plants	Merchant Plants	Furnace Plants	Merchant Plants	Furnace Plants
1975-----	18	48	5,429	51,778	9.5	90.5
1976-----	16	48	4,968	53,365	8.5	91.5
1977-----	16	49	4,119	49,389	7.7	92.3
1978-----	19	45	3,753	45,256	7.7	92.3
1979-----	19	45	4,950	47,993	9.4	90.6

^aIncludes plants operating any part of the year.

Source: For 1978-1979, Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, Energy Information Administration, U.S. Department of Energy. Data for 1975-1977, Form BOM 6-1370-M, Coke and Coal Chemical Materials-Monthly Survey, Bureau of Mines, U.S. Department of the Interior.

Table 17. Coke Sales in the United States by End Use: 1975-1979 (Dollars)

Year	Average Price of Coke Sold			Total
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants ^a	
1975-----	\$71.89	\$106.52	\$77.02	\$85.20
1976-----	78.84	114.45	79.46	94.36
1977-----	83.75	123.12	79.71	101.56
1978-----	80.60	133.13	86.55	107.06
1979-----	82.37	141.92	97.65	106.63

^aIncludes coke sold for residential and commercial heating.

Source: 1978-1979: Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy. 1975-1977: Form BOM 6-1370-A, Coke and Coal Chemical Materials-Annual Survey, Bureau of Mines, U.S. Department of the Interior.

Table 18. Disposition of Coke Breeze Produced
in the United States, by End Use: 1975-1979
(Thousands of Short Tons)

Year	Used by Producers			Sold	Average Price per Ton of Coke Sold
	In Steam Plants	In Agglomerating Plants	For Other Industrial Use		
1975-----	257	1,202	715	1,953	\$32.21
1976-----	197	1,363	838	1,846	32.56
1977-----	187	1,398	590	1,690	31.21
1978-----	167	1,550	805	1,736	30.19
1979-----	200	1,453	745	2,240	26.86

Source: 1978-1979: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, and EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy. 1975-1977: Form BOM 6-1370-M, Coke and Coal Chemical Materials-Monthly Survey and Form BOM 6-1370-A, Coke and Coal Chemical Materials-Annual Survey, Bureau of Mines, U.S. Department of the Interior.

Table 19. Coke and Coking Coal Consumed per Short Ton of
Pig Iron Produced in the United States: 1975-1979

Year	Coke per Short Ton of Pig Iron ^a (Pounds)	Coke Yield ^b	Coking Coal per Short Ton of Pig Iron ^c (Pounds)
1975-----	1,221.6	68.4	1,786.0
1976-----	1,187.0	68.9	1,722.8
1977-----	1,192.8	68.9	1,731.2
1978-----	1,438.8 ^r	68.6	1,667.3 ^r
1979-----	1,150.0	68.4	1,681.2

^aCalculated by dividing coke consumption in iron furnaces (see Table 1) by pig iron production. Pig iron production for 1979 equaled 86,973 thousand short tons.

^bCoke yield is calculated as percent by weight of coke per short ton of coal carbonized.

^cCalculated by dividing column 1 by column 2 and multiplying by 100.

^rRevised.

Source: Data on pig iron production from Pig Iron and Raw Steel Production (report AIS07), The American Iron and Steel Institute. Yield of coke from coal from Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, Energy Information Administration, U.S. Department of Energy.

Table 20. Bituminous Coal Carbonized at Coke Plants in the United States by Volatile Content^a: 1975-1979
(Thousands of Short Tons)

Year	Volatile Content			Total
	High	Medium	Low	
1975-----	57,488	9,619	15,040	82,147
1976-----	56,847	9,982	16,554	83,383
1977-----	51,734	9,191	15,752	76,677
1978-----	47,664	9,928	13,486	71,078
1979-----	49,979	9,780	17,250	77,010

^aPercent by weight of volatile matter in coal on a moisture-free (dry) basis; high volatile-over 31%; medium volatile - 22% to 31%; and low volatile - 14% to 22%.

Source: 1975-1977, Form BOM 6-1370-A, Coke and Coal Chemical Materials-Annual Survey, Bureau of Mines, U.S. Department of the Interior. 1978-1979, Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 21. Quantity and Percentage of Captive Coal Received
at United States Coke Plants: 1975-1979
(Thousands of Short Tons)

Year	At Merchant Plants			At Furnace Plants			Total ^a		
	Total Coal Received	Quantity	Percent of Receipts	Total Coal Received	Quantity	Percent of Receipts	Total Coal Received	Quantity	Percent of Receipts
1975-----	6,487	1,202	18.5	78,399	44,303	56.5	84,886	45,505	53.6
1976-----	5,898	2,291	38.8	79,000	42,840	54.2	84,899	45,132	53.2
1977-----	4,940	818	16.6	75,757	39,335	51.9	80,697	40,153	49.8
1978-----	7,253	1,141	15.7	59,085	33,473	56.6	66,338	34,614	52.2
1979-----	8,169	1,590	19.5	69,439	45,838	66.0	77,608	47,428	61.1

^aData may not add to totals shown due to independent rounding.

Source: Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy - 1978-1979; Form BOM 1730-A, Coke and Coal Chemical Materials, Annual Survey, Bureau of Mines, U.S. Department of the Interior, 1975-1977.

Table 22. Btu Value and Coal Equivalent of Materials Produced at
Coke Plants in the United States: 1975-1979

Year	Materials Produced				Estimated Equivalent Heating Value ^a (billion Btu)					Coal Equivalent ^b (thousand short tons)
	Breeze	Surplus Gas	Tar	Light Oil	Breeze	Surplus Gas	Tar	Light Oil	Total	
	(thousand short tons)	(billion cubic feet)	(thousand gallons)	(thousand gallons)						
1975-----	4,281	527	645,537	194,814	85,620	289,850	96,831	25,326	497,627	19,140
1976-----	4,342	538	636,382	198,056	86,840	295,900	95,457	25,747 ^r	503,944	19,382
1977-----	4,556	502	592,363	178,420	91,120	276,100	88,854	23,195	479,269	18,433
1978-----	3,990	467	540,628	161,792	79,800	256,850	81,094	21,033	438,777	16,876
1979-----	3,693	494	591,475	175,226	73,860	271,700	88,721	22,779	457,060	17,579

^aBreeze at 10,000 Btu per pound; gas at 550 Btu per cubic feet; tar at 150,000 Btu per gallon; and light oil at 130,000 Btu per gallon.

^bAt 26,000,000 Btu per short ton of coal.

^rRevised.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials and Form EIA-5A, Coke and Coal Chemical Materials-Annual Survey, Energy Information Administration, U.S. Department of Energy - 1978-1979. Form BOM 6-1370-M, Coke and Coal Chemical Materials-Monthly Survey, and Form BOM 6-1370-A, Coke and Coal Chemical Materials-Annual Survey, Bureau of Mines, U.S. Department of the Interior - 1975-1977.

Table 23. Distribution of Coke Produced in the United States by Destination and End Use-1979
(Thousands of Short Tons)

Destination	End Use			Total ^a
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants	
Alabama-----	2,622	273	45	2,939
Arizona-----	0	0	2	2
Arkansas-----	0	4	0	4
California-----	1,183	20	18	1,221
Colorado-----	695	0	14	709
Connecticut-----	0	10	(b)	11
Delaware-----	0	0	(b)	(b)
Florida-----	0	2	5	7
Georgia-----	0	7	9	16
Idaho-----	0	1	46	47
Illinois-----	3,636	139	21	3,797
Indiana-----	9,313	110	37	9,461
Iowa-----	0	61	(b)	61
Kansas-----	0	15	(b)	15
Kentucky-----	1,263	65	67	1,395
Louisiana-----	0	3	12	15
Maryland-----	2,116	4	(b)	2,120
Massachusetts-----	0	13	(b)	13
Michigan-----	3,712	614	182	4,508
Minnesota-----	7	15	36	58
Mississippi-----	0	2	2	4
Missouri-----	0	12	114	126
Montana-----	0	0	15	15
Nebraska-----	0	4	10	13
New Jersey-----	0	48	37	84
New Mexico-----	0	2	2	3
New York-----	2,113	140	12	2,264
North Carolina-----	0	12	20	33
North Dakota-----	0	0	19	19
Ohio-----	8,190	252	128	8,570
Oklahoma-----	0	1	0	1
Oregon-----	0	(b)	6	6
Pennsylvania-----	10,555	156	190	10,902
Rhode Island-----	0	4	(b)	4
South Carolina-----	0	6	36	42
Tennessee-----	131	88	53	271
Texas-----	921	66	22	1,009
Utah-----	990	14	41	1,044
Vermont-----	0	(b)	0	(b)
Virginia-----	0	57	2	59
Washington-----	0	1	0	1
West Virginia-----	2,670	1	11	2,682
Wisconsin-----	0	138	7	145
Wyoming-----	0	0	1	1
Puerto Rico-----	0	(b)	0	(b)
Unknown-----	435	154	68	658
U.S., Total ^a -----	50,552	2,517	1,290	54,359
Canada-----	(b)	176	63	240
Mexico-----	(b)	26	16	42
Unknown-----	0	3	1	4
Foreign, Total ^a -----	(b)	205	81	286
Grand Total ^a -----	50,553	2,722	1,370	54,645

^aData may not add to totals shown due to independent rounding.

^bLess than 500 tons

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, Energy Information Administration, U.S. Department of Energy.

Table 24. Distribution of Breeze Produced in the United States by Destination and End Use-1979
(Thousands of Short Tons)

Destination	End Use			Total ^b
	To Steam Plants	To Agglomerating Plants	To Other Industrial Plants	
Alabama-----	0	186	207	393
Arkansas-----	0	0	(c)	(c)
California-----	0	56	12	67
Colorado-----	0	66	19	85
Connecticut-----	0	0	(c)	(c)
Delaware-----	0	0	(c)	(c)
Florida-----	0	0	22	22
Georgia-----	0	0	1	1
Idaho-----	0	0	12	12
Illinois-----	8	45	300	354
Indiana-----	0	363	469	832
Iowa-----	0	0	(c)	(c)
Kentucky-----	35	0	60	95
Louisiana-----	0	0	9	9
Maryland-----	0	208	21	228
Michigan-----	64	4	142	209
Minnesota-----	3	0	2	5
Missouri-----	0	0	1	1
Montana-----	0	0	47	47
New Jersey-----	0	0	25	25
New Mexico-----	0	0	3	3
New York-----	48	0	121	169
North Carolina-----	0	0	9	9
Ohio-----	0	37	444	481
Oregon-----	0	0	12	12
Pennsylvania-----	8	269	589	866
South Carolina-----	0	0	(c)	(c)
Tennessee-----	0	0	75	75
Texas-----	0	36	33	69
Utah-----	0	65	7	72
Virginia-----	0	0	14	14
Washington-----	0	0	3	3
West Virginia-----	4	119	157	281
Wisconsin-----	0	0	21	21
Unknown-----	30	0	29	59
U.S., Total ^b -----	200	1,453	2,868	4,521
Canada-----	0	0	(c)	(c)
Mexico-----	0	0	10	10
Netherlands-----	0	0	36	36
Nicaragua-----	0	0	14	14
Unknown-----	0	0	56	56
Foreign, Total ^b -----	0	0	116	116
Grand Total ^b -----	200	1,453	2,984	4,638

^aExcludes breeze resulting from coke screened at blast furnaces.

^bData may not add to totals shown due to independent rounding.

^cLess than 500 tons.

Source: Form EIA-5, Monthly Survey of Coke and Coal Chemical Materials, Energy Information Administration, U.S. Department of Energy.

Table 25. United States Coke and Breeze Distribution
by Producing State(s) and Destination-1979 (Continued)
(Thousands of Short Tons)

Producing State(s) Destination	Coke			Total ^a	Breeze
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants		
Alabama-----	2,598	266	30	2,895	374
Arkansas-----	0	3	0	3	(b)
Arizona-----	0	0	1	1	0
California-----	0	9	10	18	0
Colorado-----	29	0	5	34	0
Florida-----	0	2	5	7	21
Georgia-----	0	6	5	11	1
Idaho-----	0	0	2	2	0
Illinois-----	3	64	5	72	0
Indiana-----	0	13	0	13	0
Iowa-----	0	25	0	25	0
Kansas-----	0	6	0	6	0
Kentucky-----	0	18	5	22	0
Louisiana-----	0	3	8	11	(b)
Michigan-----	26	98	0	124	0
Minnesota-----	0	(b)	8	8	0
Mississippi-----	0	2	2	4	0
Missouri-----	0	1	40	40	0
Montana-----	0	0	9	9	0
Nebraska-----	0	(b)	8	8	0
New Jersey-----	0	6	0	6	0
New Mexico-----	0	2	2	3	0
North Carolina-----	0	11	1	12	6
North Dakota-----	0	0	9	9	0
Ohio-----	306	73	1	380	0
Oklahoma-----	0	1	0	1	0
Oregon-----	0	(b)	0	(b)	0
Pennsylvania-----	0	9	6	15	0
South Carolina-----	0	6	18	24	0
Tennessee-----	127	51	8	185	28
Texas-----	109	46	7	161	(b)
Utah-----	(b)	12	0	13	0
Virginia-----	0	16	(b)	16	0
Wisconsin-----	0	8	(b)	8	0
Exported-----	(b)	32	26	58	3
Total ^a -----	3,199	789	221	4,208	433

See footnotes at end of table.

Table 25. United States Coke and Breeze Distribution
by Producing State(s) and Destination-1979 (Continued)
(Thousands of Short Tons)

Producing State(s) Destination	Coke			Total ^a	Breeze
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants		
California, Colorado, Utah					
California-----	1,183	0	3	1,186	67
Colorado-----	665	0	6	670	82
Idaho-----	0	0	38	38	12
Montana-----	0	0	4	4	20
New Mexico-----	0	0	0	0	3
Oregon-----	0	0	0	0	12
Texas-----	0	0	2	2	0
Utah-----	990	0	41	1,030	72
Washington-----	0	0	0	0	3
Exported-----	0	0	9	9	21
Total ^a -----	2,838	0	102	2,940	294
Illinois					
Colorado-----	0	0	0	0	1
Illinois-----	2,263	0	3	2,266	137
Missouri-----	0	0	0	0	1
Exported-----	0	0	0	0	56
Total ^a -----	2,263	0	3	2,266	195
Indiana					
Alabama-----	0	0	0	0	(b)
Arizona-----	0	0	1	1	0
California-----	0	(b)	2	3	0
Colorado-----	0	0	1	1	0
Illinois-----	13	40	4	57	196
Indiana-----	8,385	79	28	8,492	828
Iowa-----	0	4	(b)	4	(b)
Kansas-----	0	0	(b)	(b)	0
Kentucky-----	0	4	4	8	0
Massachusetts-----	0	(b)	0	(b)	0
Michigan-----	0	69	1	70	0
Minnesota-----	0	(b)	6	6	0
Missouri-----	0	1	11	12	0
Montana-----	0	0	1	1	5
Nebraska-----	0	(b)	1	2	0
New Jersey-----	0	(b)	0	(b)	0
North Dakota-----	0	0	1	1	0
Ohio-----	0	31	5	36	0
Pennsylvania-----	0	2	0	2	0
Tennessee-----	4	0	0	4	0
Texas-----	0	(b)	0	(b)	0
Utah-----	0	1	0	1	0
Wisconsin-----	0	10	4	14	0
Wyoming-----	0	0	1	1	0
Exported-----	0	5	(b)	5	0
Total ^a -----	8,402	246	71	8,719	1,029

See footnotes at end of table.

Table 25. United States Coke and Breeze Distribution
by Producing State(s) and Destination-1979 (Continued)
(Thousands of Short Tons)

Producing State(s) Destination	Coke			Total ^a	Breeze
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants		
Kentucky, Missouri, Tennessee, Texas					
Alabama-----	0	1	1	2	4
Arkansas-----	0	1	0	1	0
California-----	0	8	0	8	0
Colorado-----	0	0	4	4	0
Georgia-----	0	(b)	0	(b)	(b)
Illinois-----	0	9	3	12	0
Indiana-----	0	(b)	2	2	2
Iowa-----	0	8	0	8	0
Kansas-----	0	8	0	8	0
Kentucky-----	663	43	28	734	60
Michigan-----	0	60	(b)	61	0
Missouri-----	0	11	59	70	0
Nebraska-----	0	3	0	3	0
North Carolina-----	0	1	0	1	0
Ohio-----	0	28	6	34	0
South Carolina-----	0	(b)	0	(b)	(b)
Texas-----	804	18	10	832	59
Tennessee-----	0	37	6	42	(b)
Virginia-----	0	14	0	14	0
Washington-----	0	1	0	1	0
Wisconsin-----	0	1	0	1	0
Exported-----	0	1	0	1	31
Total ^a -----	1,467	256	118	1,841	155
Maryland, New York					
California-----	0	2	0	2	0
Connecticut-----	0	(b)	0	(b)	0
Maryland-----	2,110	(b)	0	2,110	228
Massachusetts-----	0	1	0	1	0
Michigan-----	0	14	27	41	0
New York-----	1,930	114	9	2,053	161
Pennsylvania-----	0	4	3	8	0
Rhode Island-----	0	(b)	0	(b)	0
Tennessee-----	0	0	33	33	0
Vermont-----	0	(b)	0	(b)	0
Exported-----	0	69	15	84	0
Total ^a -----	4,040	206	87	4,333	389

See footnotes at end of table.

Table 25. United States Coke and Breeze Distribution
by Producing State(s) and Destination-1979
(Thousands of Short Tons)

Producing State(s) Destination	Coke			Total ^a	Breeze
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants		
Michigan, Minnesota, Wisconsin					
Arizona-----	0	0	(b)	(b)	0
California-----	0	0	3	3	0
Colorado-----	0	0	0	0	2
Idaho-----	0	0	4	4	0
Illinois-----	165	21	1	187	0
Indiana-----	0	1	(b)	1	0
Iowa-----	0	21	0	21	0
Kansas-----	0	0	(b)	(b)	0
Kentucky-----	0	0	1	1	0
Michigan-----	3,278	266	147	3,692	209
Minnesota-----	7	14	19	41	5
Missouri-----	0	(b)	0	(b)	(b)
Montana-----	0	0	2	2	22
Nebraska-----	0	(b)	0	(b)	0
North Dakota-----	0	0	8	8	0
Ohio-----	2	3	2	6	3
Oregon-----	0	0	1	1	0
Utah-----	0	0	(b)	(b)	0
Wisconsin-----	0	108	3	111	21
Wyoming-----	0	0	(b)	(b)	0
Exported-----	(b)	3	1	4	0
Total^a-----	3,452	439	191	4,082	262
Ohio					
Alabama-----	0	6	(b)	6	15
Florida-----	0	0	0	0	2
Georgia-----	0	0	5	5	0
Idaho-----	0	1	2	3	0
Illinois-----	72	3	0	75	20
Indiana-----	500	9	7	516	(b)
Iowa-----	0	3	0	3	0
Kentucky-----	600	0	22	622	30
Louisiana-----	0	0	0	0	6
Michigan-----	77	35	7	120	0
Minnesota-----	0	1	3	4	0
New Jersey-----	0	0	13	13	2
New York-----	3	0	0	3	8
North Carolina-----	0	0	0	0	3
North Dakota-----	0	0	1	1	(b)
Ohio-----	6,660	50	16	6,726	426
Oregon-----	0	0	5	5	0
Pennsylvania-----	7	4	(b)	12	97
Tennessee-----	0	0	6	6	23
Texas-----	9	0	3	12	5
Virginia-----	0	0	0	0	3
West Virginia-----	13	0	0	13	0
Wisconsin-----	0	10	(b)	10	0
Unknown-----	435	154	68	658	59
Exported-----	0	7	22	29	(b)
Total^a-----	8,378	284	180	8,842	699

See footnotes at end of table.

Table 25. United States Coke and Breeze Distribution
by Producing State(s) and Destination-1979 (Continued)
(Thousands of Short Tons)

Producing State(s) Destination	Coke			Total ^a	Breeze
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants		
Pennsylvania					
Alabama-----	23	(b)	14	37	0
Connecticut-----	0	10	(b)	10	(b)
Delaware-----	0	0	(b)	(b)	(b)
Illinois-----	1,104	(b)	5	1,110	0
Indiana-----	428	(b)	0	428	0
Kentucky-----	0	0	8	8	5
Louisiana-----	0	0	4	4	3
Maryland-----	6	3	(b)	9	0
Massachusetts-----	0	13	(b)	13	0
Michigan-----	5	67	(b)	72	0
New Jersey-----	0	41	24	65	23
New York-----	179	25	2	207	1
North Carolina-----	0	0	20	20	0
Ohio-----	1,164	68	90	1,322	11
Rhode Island-----	0	4	(b)	4	0
Pennsylvania-----	10,287	137	145	10,569	768
South Carolina-----	0	0	18	18	0
Virginia-----	0	27	2	28	0
West Virginia-----	(b)	1	7	8	0
Washington-----	0	(b)	0	(b)	0
Exported-----	0	88	8	96	5
Total^a-----	13,197	484	346	14,028	816
Virginia, West Virginia					
Illinois-----	15	2	0	17	1
Indiana-----	0	8	0	8	3
Kentucky-----	0	(b)	0	(b)	0
Maryland-----	0	1	0	1	0
Michigan-----	325	3	0	329	0
Missouri-----	0	0	4	4	0
New York-----	0	0	(b)	(b)	0
North Carolina-----	0	(b)	0	(b)	0
Ohio-----	58	0	7	65	40
Pennsylvania-----	261	(b)	35	296	(b)
Tennessee-----	0	0	0	0	24
Texas-----	0	3	0	3	5
Virginia-----	0	(b)	0	(b)	12
West Virginia-----	2,657	0	4	2,661	281
Total^a-----	3,316	18	50	3,384	365

^aData may not add to totals shown due to independent rounding.

^bLess than 500 tons.

Source: Form EIA-5A, Coke and Coal Chemical Materials, Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 26. United States Coke and Breeze Exported by Producer by End Use and Destination: 1977-1979
(Thousands of Short Tons)

	1977	1978	1979
<u>End Use</u>			
To Blast Furnace Plants-----	0	4	(b)
To Foundries-----	224	227	205
To Other Industrial Plants-----	25	38	81
Breeze-----	75	50	116
Total^a-----	324	319	402
<u>Destination</u>			
North America:			
Canada-----	223	250	240
Mexico-----	45	38	52
Puerto Rico-----	1	1	(b)
Central America-----	(b)	(b)	14
Europe-----	21	30	36
Asia-----	22	0	0
Unknown-----	13	0	60
Total^a-----	324	319	402

^aData may not add to totals shown due to independent rounding.

^bLess than 500 tons.

Source: Form EIA-5A, Coke and Coal Chemical Materials, Annual Survey, Energy Information Administration, U.S. Department of Energy.

Table 27. United States Coke and Breeze Exported by Producer by Destination-1979
(Thousands of Short Tons)

Destination	Coke			Total ^a	Breeze
	To Blast Furnace Plants	To Foundries	To Other Industrial Plants		
North America:					
Canada-----	(b)	176	63	240	(b)
Mexico-----	(b)	26	16	42	10
Puerto Rico-----	0	(b)	0	(b)	0
Central America---	0	0	0	0	14
Europe-----	0	0	0	0	36
Unknown-----	0	3	1	4	56
Total ^a -----	(b)	205	81	286	116

^aData may not add to totals shown due to independent rounding.

^bLess than 500 tons.

Source: Form EIA-5A, Coke and Coal Chemical Materials, Annual Survey, Energy Information Administration, U.S. Department of Energy.

APPENDIX

COKE PRODUCERS IN THE UNITED STATES IN 1979

Name and Address of Company	Plant Name	Classification of Plant	Major Uses of Coke ^a		Coal-chemical Materials Produced ^c
			Captive ^b	Commercial Sales	
<u>Alabama</u>					
Alabama Byproduct Corp.----- P.O. Box 10246 Birmingham, Alabama 35202	Tarrant	Merchant		Blast Furnace, Foundry, Other Industrial	1,3,12
Empire Coke Co.----- P.O. Box 6088 Birmingham, Alabama 35259	Holt	Merchant		Foundry	1,3,11,12
Koppers Co., Inc.----- P.O. Box 752 Bessemer, Alabama 35020	Woodward	Merchant		Blast Furnace, Foundry	1,3,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Gadsden	Furnace	Blast Furnace		1,3,8,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Thomas	Furnace	Blast Furnace		1,3,8,12
Jim Walters Resources, Inc.----- P.O. Box 10406 Birmingham, Alabama 35202	Birmingham	Furnace	Blast Furnace	Blast Furnace	1,3,11,12
U.S. Steel Corp.----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Fairfield	Furnace	Blast Furnace		1,3,8,9,10,12
<u>California</u>					
Kaiser Steel Corp.----- P.O. Box 217 Fontana, California 92335	Fontana	Furnace	Blast Furnace		1,3,11,12
<u>Colorado</u>					
Colorado Fuel & Iron Steel Corp.-- P.O. Box 316 Pueblo, Colorado 81002	Pueblo	Furnace	Blast Furnace		1,3,11,13,14, 15,16
<u>Illinois</u>					
Interlake Steel Corp.----- 135th Street & Perry Avenue Riverdale, Illinois 60627	Chicago	Furnace	Blast Furnace		1,3,12
National Steel Corp.----- 20th and State Streets Granite City, Illinois 62040	Granite City	Furnace	Blast Furnace		1,3,11,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Chicago	Furnace	Blast Furnace		1,3,12
Envirodyne Industries----- Wisconsin Steel Div.d 2800 East 106th Street Chicago, Illinois 60617	Chicago	Furnace	Blast Furnace		1,3,12
<u>Indiana</u>					
Bethlehem Steel Corp.----- Bethlehem, Pennsylvania 18016	Burns Harbor	Furnace	Blast Furnace		1,3
Citizens Gas & Coke Utility----- 2020 North Meridian Street Indianapolis, Indiana 46202	Indianapolis	Merchant		Foundry	3
Indiana Gas & Chemical Corp.----- 13th & Hulman Streets Terre Haute, Indiana 47802	Terre Haute	Merchant		Foundry, Other Industrial	2,3,12,16

See footnotes at end of table.

COKE PRODUCERS IN THE UNITED STATES IN 1979

Name and Address of Company	Plant Name	Classification of Plant	Major Uses of Coke ^a		Coal-chemical Materials Produced ^c
			Captive ^b	Commercial Sales	
Indiana (Continued)					
Inland Steel Co.----- 3210 Watling Street East Chicago, Indiana 46312	Indiana Harbor	Furnace	Blast Furnace		1,3,12
U.S. Steel Corp.----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Gary	Furnace	Blast Furnace		1,3,8,9,10,12
Jones & Laughlin Steel Corp.----- 3001 Dickey Road East Chicago, Indiana 46312	Indiana Harbor	Furnace	Blast Furnace		2,3,11,12
Kentucky					
Allied Chemical Corp.----- P.O. Box 111 Ashland, Kentucky 41101	Ashland	Merchant		Blast Furnace	2,3,4,12
Maryland					
Bethlehem Steel Corp.----- Bethlehem, Pennsylvania 18016	Sparrows Point	Furnace	Blast Furnace		1,3,6,11,12, 13,14,15
Michigan					
Allied Chemical Corp. ^e ----- P.O. Box 1219R Morristown, New Jersey 07960	Detroit	Merchant		Foundry, Other Industrial	3
Ford Motor Co.----- The American Road Dearborn, Michigan 48121	Rouge	Furnace	Blast Furnace		1,3,12
National Steel Corp.----- P.O. Box 1 Ecorse, Michigan 48229	Great Lakes	Furnace	Blast Furnace		1,3,5,8,12
Minnesota					
Koppers Co., Inc. ^f ----- K-1224 Koppers Building Pittsburgh, Pennsylvania 15219	St. Paul	Merchant		Foundry	3
U.S. Steel Corp. ^f ----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Duluth	Furnace	Blast Furnace		1,3
Missouri					
Great Lakes Carbon Corp.----- 299 Park Avenue New York, New York 10017	St. Louis	Merchant		Foundry, Other Industrial	3
New York					
Bethlehem Steel Corp.----- Bethlehem, Pennsylvania 18016	Lackawanna	Furnace	Blast Furnace		1,3,5,11,12
Donner-Hanna Coke Corp.----- Abby & Mystic Streets Buffalo, New York 14220	Buffalo	Furnace	Blast Furnace		1,3,5,12
Tonawanda Coke Co.----- P.O. Box A-500 Tonawanda, New York 14150	Tonawanda	Merchant		Foundry, Other Industrial	3,12
Ohio					
Armco Steel Corp.----- 703 Curtis Street Middletown, Ohio 45042	Hamilton	Furnace	Blast Furnace		1,3,12
Armco Steel Corp.----- 703 Curtis Street Middletown, Ohio 45042	Middletown	Furnace	Blast Furnace		2,3,11,12

See footnotes at end of table.

COKE PRODUCERS IN THE UNITED STATES IN 1979

Name and Address of Company	Plant Name	Classification of Plant	Major Uses of Coke ^a		Coal-chemical Materials Produced ^c
			Captive ^b	Commercial Sales	
<u>Ohio (Continued)</u>					
Cyclops Corp.----- Empire Detroit Steel Div. Portsmouth, Ohio 45662	Portsmouth	Furnace	Blast Furnace		3,12
Erie Coke and Chemicals Co.----- P.O. Box 509 Painesville, Ohio 44077	Painesville	Merchant		Foundry, Other Industrial	3
Koppers Co., Inc.----- P.O. Box 8207 Toledo, Ohio 43605	Toledo	Merchant		Blast Furnace, Foundry, Other Industrial	3,12
McLouth Steel Corp.----- 3329 So. 3rd. Street Ironton, Ohio 45368	Ironton	Furnace	Blast Furnace	Foundry	2,3,4,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Central-Alloy	Furnace	Blast Furnace		1,3,8,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Cleveland	Furnace	Blast Furnace		1,3,5,11,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Warren	Furnace	Blast Furnace		1,3,12
Republic Steel Corp.----- P.O. Box 6778 Cleveland, Ohio 44101	Youngstown	Furnace	Blast Furnace		1,3,8,12
U.S. Steel Corp.----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Lorain	Furnace	Blast Furnace		1,3,12
Jones & Laughlin Steel Corp.----- Youngstown, Ohio 44501	Campbell	Furnace	Blast Furnace		1,3,12
<u>Pennsylvania</u>					
Alabama Byproduct Corp.----- P.O. Box 10246 Birmingham, Alabama 35202	Keystone	Merchant		Foundry	3,12
Bethlehem Steel Corp.----- Bethlehem, Pennsylvania 18016	Bethlehem	Furnace	Blast Furnace		1,3,8,11,12
Bethlehem Steel Corp.----- Bethlehem, Pennsylvania 18016	Johnstown	Furnace	Blast Furnace		1,3,11,12,16
Crucible Steel Corp.----- P.O. Box 226 Midland, Pennsylvania 15059	Midland	Furnace	Blast Furnace		1,3,12
Eastern Gas & Fuel Associates Philadelphia Coke Div. 4501 Richmond Street Philadelphia, Pennsylvania 19137	Philadelphia	Merchant		Foundry, Other Industrial	3
Jones & Laughlin Steel Corp.----- Alliquippa, Pennsylvania 15001	Alliquippa	Furnace	Blast Furnace		1,3,12,13,14,15,16
Jones & Laughlin Steel Corp.----- 2709 East Carson Street Pittsburgh, Pennsylvania 15203	Pittsburgh	Furnace	Blast Furnace	Blast Furnace	1,3,5,12
Koppers Co., Inc.----- P.O. Box 739 Erie, Pennsylvania 16512	Erie	Merchant		Foundry, Other Industrial	3,5
Shenango Inc.----- Neville Island Pittsburgh, Pennsylvania 15225	Neville Island	Furnace	Blast Furnace	Blast Furnace	1,3,5,12

See footnotes at end of table.

COKE PRODUCERS IN THE UNITED STATES IN 1979

Name and Address of Company	Plant Name	Classifi- cation of Plant	Major Uses of Coke ^a		Coal-chemical Materials Produced ^c
			Captive ^b	Commercial Sales	
<u>Pennsylvania (Continued)</u>					
U.S. Steel Corp.----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Clairton	Furnace	Blast Furnace		3,4,8,9,10,12, 13,14,15,16
U.S. Steel Corp.----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Fairless	Furnace	Blast Furnace		1,3,5,8,12
Wheeling-Pittsburgh Steel Corp.--- 1134-40 Market Street Wheeling, West Virginia 26003	Monessen	Furnace	Blast Furnace		1,3,5,6,12
<u>Tennessee</u>					
Chattanooga Coke & Chemical Company, Inc.----- 4800 Central Avenue Chattanooga, Tennessee 37410	Alton Park	Merchant		Foundry, Other Industrial	1,3,8,12,13
<u>Texas</u>					
Armco Steel Corp.----- P.O. Box 96120 Houston, Texas 77015	Houston	Furnace	Blast Furnace		1,3,11
Lone Star Steel Co.----- P.O. Box 35888 Dallas, Texas 75235	Daingerfield	Furnace	Blast Furnace		1,3,12
<u>Utah</u>					
U.S. Steel Corp.----- 600 Grant Street Pittsburgh, Pennsylvania 15230	Geneva	Furnace	Blast Furnace		1,3,8,12,13, 14,15,16
<u>Virginia</u>					
Jewell Resources Corp.----- Box 10388 Knoxville, Tennessee 37919	Vasant	Merchant		Blast Furnace	
<u>West Virginia</u>					
Mercury Coal & Coke ^g ----- P.O. Box 859 Morgantown, West Virginia 26505	Bretz	Merchant		Other Industrial	
National Steel Corp----- Weirton, West Virginia 26062	Weirton	Furnace	Blast Furnace		1,3,11,12
Sharon Steel Co. ^f ----- P.O. Box 291 Sharon, Pennsylvania 16146	Fairmont	Furnace	Blast Furnace		1,3,12
Wheeling-Pittsburgh Steel Corp.--- 1134-40 Market Street Wheeling, West Virginia 26003	East Steuben- ville	Furnace	Blast Furnace		1,3,4,10,12
<u>Wisconsin</u>					
Pickands Mather & Co.----- Milwaukee Solvay Coke Div. 311 East Greenfield Avenue Milwaukee, Wisconsin 53204	Milwaukee	Merchant		Foundry	3

See footnotes at end of table.

COKE PRODUCERS IN THE UNITED STATES IN 1979

Note: Residential and commercial heating included in Other Industrial.

^a An end use is considered a major use if it is at least 20% of the plant's total distribution of coke.

^b Captive uses of coke are transfers to integrated operations and to affiliated companies.

^c Coal-chemical materials produced at coke plants are designated as follows:

1. Ammonium sulfate
2. Ammonia Liquor (NH₃ content)
3. Crude Coal Tar
4. Crude Chemical Oil (Tar Acid Oil)
5. Sodium Phenolate or Carbolate
6. Phenol; All Grades
7. Cresols; All Grades
8. Naphthalene; All Grades
9. Creosote Oil, Distillate as such (100% creosote); Creosote Content of Solution (100% creosote basis)
10. Pitch of Tar; All Grades
11. Intermediate Light Oil
12. Crude Light Oil
13. Benzene; All Grades
14. Toluene; All Grades
15. Xylene; All Grades
16. Solvent Naphtha; All Grades

^d Plant closed in March 1980.

^e Plant was sold to the Detroit Coke Corp., in January, 1980.

^f Plant ceased production in May, 1979.

^g Plant ceased production in December, 1979.