

Mineral Industry Surveys

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SULFUR IN AUGUST 2012

During August 2012, production of recovered elemental sulfur was 734,000 metric tons (t), which was 4% less than that of July 2012 and slightly more than that of August 2011. Shipments were 733,000 t, which was 5% less than those of July 2012. Producers' ending stocks for August 2012 were 150,000 t. Imports of recovered sulfur for August 2012 were estimated to be 271,000 t; exports were 141,000 t. Imports of sulfuric acid

for August 2012 were 228,000 t; exports were 11,000 t.

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 863,000 t in August 2012. This was about 6% less than that of July 2012 and about 7% less than that of August 2011.

Significant adjustments have been made to the sulfur import data. The U.S. Census Bureau appears to underreport sulfur imports, especially material from Canada. The revised figures are based on Census information and data from personal communications with industry experts.

 $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT SULFUR STATISTICS}^1$

(Thousand metric tons)

		Production	Shipments,	Stocks,	
Period	Petroleum ²	Natural gas	Total	all sources	end of period ³
2011:					•
January-December	7,080	1,130	8,210	8,190	176
January-August ^r	4,650	753	5,400	5,400	159
August	623	98	720	731	159
September	586	93	678	676	156
October	602	86	688	687	161
November	590	94	684	689	157
December	656	101	756	738	176
2012:					
January	584	98	682	696	161
February	564	97	661	661	162
March	585 ^r	96	681 ^r	693 ^r	151
April	573	96	668 ^r	683 ^r	137
May	636 ^r	87	724 ^r	720 ^r	143
June ^r	616	76	692	678	158
July ^r	671	95	766	771	152
August ^p	635	98	734	733	150
January-August	4,860	744	5,610	5,640	150

^pPreliminary. ^rRevised.

TABLE 2 U.S. IMPORTS OF SULFUR¹

(Thousand metric tons and thousand dollars)

	Cana	ada	Mex	ico	Venezuela		Total, all countries ²	
Period	Quantity ^e	Value ³	Quantity	Value ³	Quantity ^e	Value ³	Quantity ^e	Value ³
2011:					_			
January-December	2,700	188,000	303	54,500	99	16,400	3,270	301,000
January-August	1,790 ^r	125,000	202	35,400	61	10,500	2,220 ^r	212,000
August	240	17,800	14	3,330	15	2,720	308	33,500
September	230	15,600	29	5,400	8	1,510	267	22,900
October	230	16,300	14	3,240			245	19,800
November	220	13,700	29	5,420	10	1,370	259	20,800
December	230	17,600	29	5,010	20	2,970	279	25,800
2012:								
January	240	13,700	29	5,230			269	19,200
February	220	12,800	29	3,930	13	1,820	263	18,900
March	240	15,400	29	3,410	12	1,610	281	20,700
April	210	12,300	49	7,990	13	1,790	272 ^r	22,300
May	220	13,100	43	6,260	10	1,360	273 ^r	21,000
June	210	15,800	35	5,980			246 ^r	22,200
July	220	13,400	16	4,350	20	839	256	18,800
August	220	13,800	30	4,590	20	3,310	271	22,100
January-August	1,780	110,000	260	41,700	88	10,700	2,130	165,000

^eEstimated. ^rRevised. -- Zero.

Sources: U.S. Census Bureau data as adjusted by U.S. Geological Survey and ICIS PentaSul North America Sulphur Service.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes a small quantity from coking operations.

³Subject to inventory adjustments.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include other countries not listed.

³Declared customs valuation.

 $\label{eq:table 3} \text{U.S. IMPORTS OF SULFURIC ACID}^1$

(Thousand metric tons and thousand dollars)

-		Canada			Mexico		To	otal, all countri	es ²
		Sulfur			Sulfur			Sulfur	
Period	Quantity	content	Value ³	Quantity	content	Value ³	Quantity	content	Value ³
2011:									
January-December	1,820	596	158,000	433	142	29,400	2,670	871	244,000
January-August	1,170	382 ^r	93,000	294	96 ^r	19,800	1,820	593 ^r	162,000
August	169	55	18,500	46	15	3,250	237	78	25,600
September	141	46	15,600	30	10	2,130	175	57	19,600
October	179	59	17,600	35	11	2,440	230	75	21,600
November	155	51	14,600	31	10	2,180	188	61	17,100
December	178	58	16,900	43	14	2,860	257	84	23,200
2012:									,
January	192	63	16,600	32	10	2,320	291	95	26,500
February	146	48	12,300	39	13	2,870	203	66	17,800
March	167	55	14,000	47	15	3,540	272	89	22,400
April	169	55	13,400	37	12	2,670	225	74	19,600
May	156	51	11,500	37	12	2,740	203	66	16,800
June	162	53	11,800	37	12	2,660	239	78	19,500
July	179	59	13,300	45	15	3,090	241	79	19,900
August	166	54	12,500	34	11	2,350	228	75	17,900
January-August	1,340	437	105,000	308	101	22,200	1,900	622	160,000

rRevised.

Source: U.S. Census Bureau.

 $\label{eq:table 4} \textbf{U.S. EXPORTS OF SULFUR AND SULFURIC ACID}^1$

(Thousand metric tons and thousand dollars)

				Sulfuric acid	
	Su	lfur			
Period	Quantity	Value ²	Quantity	content	Value ²
2011:					
January-December	1,310	266,000	332	109	41,500
January-August	863	168,000	261	85	28,300
August	116	24,900	68	22	5,100
September	160	30,100	24	8	3,740
October	 79	17,900	11	4	1,830
November	117	26,500	23	8	5,510
December	90	23,400	13	4	2,080
2012:	<u> </u>				
January	155	32,900	15	5	2,760
February	66	11,000	10	3	2,030
March	216	60,200	10	3	1,950
April	89	17,800	11	4	2,410
May	178	33,800	15	5	2,850
June	190	33,700	11	4	2,530
July	111	20,900	24	8	4,810
August	141	26,000	11	4	2,480
January–August	1,150	236,000	107	35	21,800

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²May include other countries not listed.

³Declared customs valuation.

²Declared f.a.s. (free alongside ship) valuation.

 $\label{eq:table 5} \text{U.S. CONSUMPTION OF SULFUR}^1$

(Thousand metric tons)

	Domestic		
Period	sources ²	Imports ^e	Consumption
2011:		-	
January-December	6,880	3,270	10,100
January–August ^r	4,540	2,220	6,760
August	615	308	923
September	516	267	783
October	608	245	853
November	572	259	831
December	648	279	927
2012:			
January	541	269	810
February	595	263	858
March	477 ^r	281	758 ^r
April	594 ^r	272	866 ^r
May	542 ^r	273	815 ^r
June	488 ^r	246	734 ^r
July	660 r	256	916 ^r
August	592 ^p	271	863
January–August	4,490	2,130	6,620

^eEstimated. ^pPreliminary. ^rRevised.

TABLE 6 RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES, BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT $^{\rm l}$

(Thousand metric tons)

	January–Au	igust 2011 ²	July 2	012	August	2012 ^p	January–August 2012 ^{p, 2}	
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	47	43	10	9	16	17	73	76
Natural gas	9	9	1	1	1	1	9	9
Total	56	51	11	10	17	18	82	85
PAD 2:	<u> </u>							
Petroleum and coke	660	674	98	97 ^r	89	91	723	723
Natural gas	14	14	1	1	1	1	12	12
Total	674	689	99	98	90	92	735	735
PAD 3: ³								
Petroleum and coke	3,100	3,090	435 ^r	439 ^r	415	411	3,190	3,220
Natural gas	312	310	38	36	39	36	305	296
Total	3,410	3,400	473 ^r	475 ^r	454	446	3,500	3,510
PAD 4 and 5:								
Petroleum and coke	841	840	128 ^r	129 ^r	116	118	876	882
Natural gas	419	420	55 ^r	57 ^r	57	58	418	421
Total	1,260	1,260	183 ^r	187 ^r	173	176	1,300	1,300
Grand total	5,400	5,400	766 ^r	771 ^r	734	733	5,610	5,640

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Calculated as shipments minus exports.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to previously published data.

³Includes the U.S. Virgin Islands.

 ${\bf TABLE~7} \\ {\bf COMPARATIVE~SULFUR~AND~SULFURIC~ACID~STATISTICS}^1 \\$

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

		2012					
	2011	July	August	Total			
Production	8.21	9.02 ^r	8.64 ^p	8.39			
Shipments	8.19	9.08 r	8.63 p	8.43			
Exports of sulfur	1.31	1.31	1.66	1.71			
Imports of sulfur:							
Canada ^e	2.70	2.59	2.59	2.66			
Mexico	0.30	0.19	0.35	0.39			
Venezuela ^e	0.10	0.24	0.24	0.13			
Total ^{e, 2}	3.27	3.01	3.19	3.19			
Exports of H ₂ SO ₄	0.33	0.28	0.13	0.16			
Imports of H ₂ SO ₄ :							
Canada	1.82	2.11	1.95	2.00			
Mexico	0.43	0.53	0.40	0.46			
Total ²	2.67	2.84	2.68	2.85			
Consumption:							
Domestic sources	6.88	7.77 ^r	6.97	6.72			
Imports ^e	3.27	3.01	3.19	3.19			
Total	10.20	10.80 ^r	10.20	9.90			
Sulfur export values ³	203	188	185	206			
Sulfur import values: ³							
Canada	70	61	63	62			
Mexico	180	272	153	161			
Venezuela	165	42	165	122			
Average ²	92	74	82	78			
H ₂ SO ₄ export values ³	125	200	226	204			
H ₂ SO ₄ import values: ³							
Canada	86	75	75	79			
Mexico	68	69	69	72			
Average ²	91	82	78	84			

^eEstimated. ^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes other countries not listed.

³Average value per ton.