

Mineral Industry Surveys

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SULFUR IN JULY 2011

During the month, production of recovered elemental sulfur was 727,000 metric tons (t), according to the U.S. Geological Survey. Production was 11% higher than that of June 2011 and 3% higher than that of July 2010. Shipments were 703,000 t, 7% higher than those of June 2011. Producers' ending stocks for July 2011 were 164,000 t.

Imports of recovered sulfur for July 2011 were estimated to be 260,000 t; exports were 61,000 t. Imports of sulfuric acid for July 2011 were 205,000 t; exports were 30,000 t.

U.S. sulfur consumption, calculated as shipments minus

exports plus imports, was 902,000 t in July 2011. This was 15% higher than that of June 2011 and about 4% higher than that of July 2010.

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.

TABLE 1
SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Stocks, end of period ³
	Petroleum ²	Natural gas	Total		
2010:					
January–December	7,120	1,160	8,270	8,340	165
January–July ^f	4,130	707	4,830	4,830	218
July	631	78	708	721	218
August	658	97	756	756	219
September	575	98	673	681	218
October	575	79	654	654	219
November	575	81	656	667	208
December	607	96	703	746	165
2011:					
January	624	104	728	732	146
February	469	93	563	580	127
March	566	95	661	649	150
April	547	98	645	653	141
May	593	95	688	688	141
June	583 ^r	74	657 ^r	659 ^r	139 ^r
July ^p	639	88	727	703	164
January–July	4,020	646	4,670	4,660	164

^pPreliminary. ^rRevised.

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.

TABLE 2
U.S. IMPORTS OF SULFUR¹

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Venezuela		Total, all countries ²	
	Quantity ^e	Value ³	Quantity	Value ³	Quantity ^e	Value ³	Quantity ^e	Value ³
2010:								
January–December	2,320	122,000	379	37,400	41	4,200	2,950	214,000
January–July	1,300	71,500	235	19,600	20	2,470	1,680	129,000
July	195	11,600	44	4,790	--	--	310	31,400
August	195	13,300	28	3,000	10	601	234	17,500
September	190	7,560	29	3,150	--	--	258	15,900
October	215	13,400	29	3,310	11	1,140	255	18,400
November	210	7,400	29	3,870	--	--	273	18,000
December	215	9,050	29	4,470	--	--	254	15,100
2011:								
January	220	10,000	29	3,620	13	1,600	272	17,600
February	200	10,700	14	2,750	--	--	252	21,400
March	220	25,100	44	5,940	--	--	275	33,500
April	220	13,800	29	4,940	18	3,430	268	22,700
May	230	14,700	29	6,190	--	--	260	21,600
June	220	14,400	14	2,760	15	2,750	315	37,300
July	230	18,100	29	5,910	--	--	260	24,500
January–July	1,540	107,000	188	32,100	46	7,780	1,900	179,000

^eEstimated. -- Zero.

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.

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

TABLE 3
U.S. IMPORTS OF SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Canada			Mexico			Total, all countries ²		
	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³	Quantity	Sulfur content	Value ³
2010:									
January–December	1,150	378	79,100	196	65	11,100	2,110	690	139,000
January–July	419 ^r	138	25,900	98 ^r	32	5,360	847 ^r	277 ^r	47,600
July	127	42	8,730	26	8	965	211	69	14,100
August	124	41	8,840	14	5	357	226	74	14,900
September	158	52	11,200	7	2	209	219	72	15,400
October	164	54	12,500	17	6	1,840	205	67	17,400
November	139	45	10,500	37	12	2,480	275	90	21,800
December	147	48	10,200	25	8	830	335	110	21,800
2011:									
January	150	49	11,500	27	9	1,620	206	67	17,500
February	152	50	11,400	14	5	989	234	76	19,800
March	146	48	11,700	58	19	3,310	254	83	22,200
April	145	47	8,780	47	15	3,400	229	75	18,100
May	135	44	7,460	40	13	2,950	229	75	17,000
June	116	38	7,670	39	13	2,750	221	72	18,100
July	157	52	16,000	23	8	1,570	205	68	23,800
January–July	1,000	328	74,500	248	82	16,600	1,580	516	137,000

^rRevised.

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.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF SULFUR AND SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric acid		
	Quantity	Value ²	Quantity	Sulfur content	Value ²
2010:					
January–December	1,450	171,000	215	70	26,400
January–July	697	96,400	139	46	16,300
July	165	19,500	19	6	1,920
August	119	8,360	13	4	2,220
September	182	14,100	18	6	1,940
October	194	18,600	18	6	1,810
November	159	19,000	12	4	2,030
December	94	15,000	16	5	2,090
2011:					
January	86	13,900	20	7	2,320
February	122	20,900	28	9	3,470
March	114	20,500	22	7	3,220
April	123	26,100	40	13	3,840
May	52	11,400	27	9	3,180
June	189	34,500	26	8	3,410
July	61	15,600	30	10	3,790
January–July	747	143,000	193	63	23,200

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

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

Source: U.S. Census Bureau.

TABLE 5
U.S. CONSUMPTION OF SULFUR¹

(Thousand metric tons)

Period	Domestic sources ²	Imports ^e	Consumption
2010:			
January–December	6,890	2,950	9,840 ^r
January–July	4,140	1,680	5,810
July	556	310	866
August	637	234	871
September	499	258	757
October	460	255	715
November	508	273	781
December	652	254	906
2011:			
January	646	272	918
February	458	252	710
March	535	275	810
April	530	268	798
May	636	260	896
June	470 ^r	315	785
July	642 ^p	260	902
January–July	3,920	1,900	5,820

^eEstimated. ^pPreliminary. ^rRevised.

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

²Calculated as shipments minus exports.

TABLE 6
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT¹

(Thousand metric tons)

District and source	January–July 2010		June 2011		July 2011 ^p		January–July 2011 ^{p, 2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	83	77	8	8	3	8	40	39
Natural gas	8	8	1	1	--	1	5	5
Total	91	85	9	9	3	9	44	44
PAD 2:								
Petroleum and coke	577 ^r	577 ^r	84	88	88	87	590	601
Natural gas	13	13	2	2	2	2	12	12
Total	591 ^r	590 ^r	86	90	90	89	602	614
PAD 3: ³								
Petroleum and coke	2,720 ^r	2,680 ^r	380 ^r	380 ^r	430	402	2,670	2,660
Natural gas	283 ^r	303 ^r	37	38 ^r	38	37	265	266
Total	3,000 ^r	2,980 ^r	417 ^r	418 ^r	468	439	2,930	2,920
PAD 4 and 5: ⁴								
Petroleum and coke	750 ^r	770 ^r	111 ^r	112 ^r	118	114	725	720
Natural gas	403 ^r	409 ^r	34	30	48	51	364	365
California	606 ^r	625 ^r	84 ^r	85	95	90	579	577
Total	1,150 ^r	1,180 ^r	145 ^r	142 ^r	167	166	1,090	1,080
Grand total	4,830 ^r	4,830 ^r	657 ^r	659 ^r	727	703	4,670	4,660

^pPreliminary. ^rRevised. -- Zero.

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.

⁴Quantities produced and shipped in California included in petroleum and coke. California total shown for information purpose only.

TABLE 7
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS¹

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

	2010	2011		
	total	June	July	Total
Production	8.27	7.99 ^r	8.56 ^p	8.04
Shipments	8.34	8.02 ^r	8.28 ^p	8.03
Exports of sulfur	1.45	2.30	0.72	1.29
Imports of sulfur:				
Canada ^e	2.32	2.68	2.71	2.65
Mexico	0.38	0.17	0.34	0.32
Venezuela ^e	0.04	0.18	--	0.09
Total ^{e, 2}	2.95	3.83	3.06	3.27
Exports of H ₂ SO ₄	0.22	0.32	0.35	0.33
Imports of H ₂ SO ₄ :				
Canada	1.15	1.41	1.85	1.72
Mexico	0.20	0.47	0.27	0.43
Total ²	2.11	2.69	2.41	2.72
Consumption:				
Domestic sources	6.89	5.72 ^r	7.56	6.74
Imports ^e	2.95	3.83	3.06	3.27
Total	9.84	9.55 ^r	10.60	10.00
Sulfur export values ³	119	183	256	191
Sulfur import values: ³				
Canada	53	65	79	69
Mexico	99	197	204	171
Venezuela	103	183	--	169
Average ²	73	118	94	94
H ₂ SO ₄ export values ³	123	131	126	120
H ₂ SO ₄ import values: ³				
Canada	69	66	102	74
Mexico	56	71	68	67
Average ²	66	82	116	87

^eEstimated. ^pPreliminary. ^rRevised. XX Not applicable. -- Zero.

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.