

Mineral Industry Surveys

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SULFUR IN MAY 2011

During the month, production of recovered elemental sulfur was 688,000 metric tons (t), according to the U.S. Geological Survey. Production was 6% higher than that of April 2011 and 9% lower than that of May 2010. Shipments were 689,000 t, 5% higher than that of April 2011. Producers' ending stocks for May 2011 were 141,000 t.

Imports of recovered sulfur for May 2011 were estimated to be 250,000 t; exports were 52,000 t. Imports of sulfuric acid for May 2011 were 229,000 t; exports were 27,000 t.

U.S. sulfur consumption, calculated as shipments minus

exports plus imports, was 887,000 t in May 2011. This was 11% higher than that of April 2011 and slightly lower than that of May 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.

SALIENT SULFUR STATISTICS¹

(Thousand metric tons)

Period	Production			Shipments, all sources	Stocks, end of period ³
	Petroleum ²	Natural gas	Total		
2010:					
January–December	7,080	1,170	8,250	8,310	165 ^r
January–May ^r	2,880	537	3,420	3,400	211
May	641	114	755	744	211
June	597	98	694	696	213
July	629	79	708	721	218
August	657	99	756	756	219
September	573	99	673	681	218
October	573	81	654	654	219
November	575	81	656	667	208
December	592	96	687	730	165 ^r
2011:					
January	624	104	728	732	146
February	469	93	563	580	127
March	566	95	661	650	150
April	552 ^r	98 ^r	650 ^r	657 ^r	142
May ^p	593	95	688	689	141
January–May	2,800	484	3,290	3,310	141

^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–May	920 ^r	50,000	162	11,100	--	--	1,090 ^r	64,100
May	185	9,740	43	4,630	--	--	229	14,800
June	180	9,960	29	3,710	20	2,470	273	33,400
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 ^r	10,000	29	3,620	13	1,600	272 ^r	17,600
February	200 ^r	10,700	14	2,750	--	--	252 ^r	21,400
March	220 ^r	25,100	44	5,940	--	--	275 ^r	33,500
April	215 ^r	13,800	29	4,940	18	3,430	263 ^r	22,700
May	220	14,700	29	6,190	--	--	250	21,600
January–May	1,080	74,300	145	23,400	31	5,030	1,310	117,000

^eEstimated. ^rRevised. -- 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–May	230 ^r	76	12,300	51 ^r	17	3,850	529 ^r	173 ^r	26,000
May	40	13	2,280	23	8	2,770	101	33	7,320
June	62	20	4,810	20	7	547	113	37	7,540
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
January–May	728	238	50,800	186	61	12,300	1,150	376	94,700

^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–May	451	58,800	101	33	12,400
May	83	17,500	31	10	3,630
June	81	18,000	19	6	2,010
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
January–May	497	92,800	137	45	16,000

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	6,860	2,950	9,810
January–May ^f	2,950	1,090	4,050
May	661	229	890
June	615	273	888
July	556	310	866
August	637	234	871
September	499	258	757
October	460	255	715
November	508 ^r	273	781 ^r
December	636	254	890
2011:			
January	646	272 ^r	918 ^r
February	458	252 ^r	710 ^r
March	535	275 ^r	810 ^r
April	534 ^r	263 ^r	797 ^r
May	637 ^p	250	887
January–May	2,810	1,310	4,120

^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–May 2010		April 2011		May 2011 ^p		January–May 2011 ^{p, 2}	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	60	55	3	7	8	3	29	24
Natural gas	5	6	1	1	1	1	4	3
Total	65	61	4	8	9	4	32	26
PAD 2:								
Petroleum and coke	410 ^r	407 ^r	84	87	83	84	422	431
Natural gas	10	10	2	2	2	1	8	8
Total	420 ^r	417	86	89	85	85	430	440
PAD 3: ³								
Petroleum and coke	1,920 ^r	1,880 ^r	368 ^r	371 ^r	401	405	1,860	1,880
Natural gas	204 ^r	212 ^r	38	37 ^r	38	39	190	190
Total	2,120 ^r	2,100 ^r	406 ^r	408 ^r	440	444	2,050	2,070
PAD 4 and 5: ⁴								
Petroleum and coke	494 ^r	509 ^r	97 ^r	94 ^r	101	102	495	493
Natural gas	316 ^r	321	58	57 ^r	54	54	282	284
California	414 ^r	428 ^r	80 ^r	78	84	85	400	401
Total	810 ^r	830 ^r	155 ^r	152 ^r	155	156	778	776
Grand total	3,420 ^r	3,400 ^r	650 ^r	657 ^r	688	689	3,290	3,310

^pPreliminary. ^rRevised.

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

²May include revisions.

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	April	May	Total
Production	8.25	7.91 ^r	8.10 ^p	7.95
Shipments	8.31	7.99 ^r	8.11 ^p	7.99
Exports of sulfur	1.45	1.50	0.61	1.20
Imports of sulfur:				
Canada ^e	2.32	2.62 ^r	2.59	2.60
Mexico	0.38	0.35	0.34	0.35
Venezuela ^e	0.04	0.22	--	0.07
Total ^{e, 2}	2.95	3.20 ^r	2.94	3.17
Exports of H ₂ SO ₄	0.22	0.49	0.32	0.33
Imports of H ₂ SO ₄ :				
Canada	1.15	1.76	1.59	1.76
Mexico	0.20	0.57	0.47	0.45
Total ²	2.11	2.79	2.70	2.78
Consumption:				
Domestic sources	6.86	6.50 ^r	7.50	6.79
Imports ^e	2.95	3.20 ^r	2.94	3.17
Total	9.81	9.70 ^r	10.40	9.96
Sulfur export values ³	119	212	219	187
Sulfur import values: ³				
Canada	53	64 ^r	67	69
Mexico	99	170	213	162
Venezuela	103	191	XX	162
Average ²	73	86 ^r	86	89
H ₂ SO ₄ export values ³	123	96	118	117
H ₂ SO ₄ import values: ³				
Canada	69	61	55	70
Mexico	56	72	74	66
Average ²	66	79	74	82

^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.