

Mineral Industry Surveys

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SULFUR IN OCTOBER 2012

During October 2012, production of recovered elemental sulfur was 687,000 metric tons (t), which was about the same as that of September 2012 and that of October 2011. Shipments were 697,000 t, which was about the same as those of September 2012. Producers' ending stocks for October 2012 were 129,000 t.

Imports of recovered sulfur for October 2012 were estimated to be 221,000 t; exports were 232,000 t. Imports of sulfuric acid for October 2012 were 279,000 t; exports were 15,000 t.

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 686,000 t in October 2012. This was about 7% less than that of September 2012 and about 20% less that of October 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-October	5,840	931	6,770	6,760	161
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	96	681	693	151
April	573	96	668	683	137
May	636	87	724	720	143
June	616	76	692	678	158
July	671	95	766	771	152
August	635	98	734	730	152
September	605 ^r	83	688 ^r	696 ^r	140 1
October ^p	611	77	687	697	129
January-October	6,080	904	6,980	7,030	129

^pPreliminary. ^rRevised.

 $\label{eq:table 2} \text{U.S. IMPORTS OF SULFUR}^1$

(Thousand metric tons and thousand dollars)

	Cana	ıda	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-October	2,250 ^r	157,000	245	44,100	69	12,000	2,730 °	255,000
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:	<u> </u>							
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	190	12,300	49	7,990	13	1,790	252	22,300
May	200	13,100	43	6,260	10	1,360	253	21,000
June	190	15,800	35	5,980			225	22,200
July	190	13,400	16	4,350	20	839	226	18,800
August	190	13,800	30	4,590	20	3,310	241	22,100
September	190	12,100	30	3,920	12	1,620	233	17,800
October	190	13,600	30	3,870			221	18,100
January-October	2,040	136,000	320	49,500	100	12,300	2,460	201,000

^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 countr	ies 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-October	1,490	488 ^r	126,000	359	117 ^r	24,400	2,220	726	203,000
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
September	151	49	12,000	31	10	2,130	232	76	19,000
October	169	55	13,200	49	16	3,400	279	91	23,200
January-October	1,660	542	130,000	388	126	27,800	2,410	789	202,000

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	Sulfur			
Period	Quantity	Value ²	Quantity	content	Value ²	
2011:						
January-December	1,310	266,000	332	109	41,500	
January-October	1,100	216,000	296	97	33,900	
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:						
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	
September	192	38,600	17	6	2,830	
October	232	41,100	15	5	3,060	
January-October	1,570	316,000	139	47	27,700	

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

Source: U.S. Census Bureau.

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.

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

TABLE 5 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-October	5,660	2,730 °	8,390	
October	608	245	853	
November	572	259	831	
December	648	279	927	
2012:		_		
January	541	269	810	
February	595	263	858	
March	477	281	758	
April	594	252	846	
May	542	253	795	
June	488	225	713	
July	660	226	886	
August	589	241	830	
September	504 ^r	233	737	
October	465 ^p	221	686	
January-October	5,460	2,460	7,920	

^eEstimated. ^pPreliminary. ^rRevised.

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

(Thousand metric tons)

	January-Oc	tober 2011 ²	Septembe	er 2012	October	· 2012 ^p	January-Octo	ober 2012 ^{p, 2}
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke		52	15 ^r	16 ^r	15	15	102	107
Natural gas	11	11	1	1	1	1	11	11
Total	67	63	16 ^r	17	16	16	113	118
PAD 2:								
Petroleum and coke	826	839	81	81	79	80	883	884
Natural gas	18	18	1	1	2	1	15	15
Total	844	857	82	83	81	81	898	899
PAD 3: ³								
Petroleum and coke	3,900	3,880	409	415	419	424	4,020	4,050
Natural gas	383	384	37	33	37	34	379	363
Total	4,280	4,260	446	448	456	457	4,400	4,420
PAD 4 and 5:								
Petroleum and coke	1,050	1,060	100	102	98	104	1,070	1,090
Natural gas	519	521	44	46	37	39	499	504
Total	1,570	15,180	144	148	135	142	1,570	1,590
Grand total	6,770	6,760	688 ^r	696 ^r	687	697	6,980	7,030

Preliminary. Revised.

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.

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

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

		2012		
	2011	September	October	Total
Production	8.21	8.39 ^r	8.11 ^p	8.38
Shipments	8.19	8.49 ^r	8.23 p	8.43
Exports of sulfur	1.31	2.34	2.74	1.88
Imports of sulfur:	<u> </u>			
Canada ^e	2.70	2.31	2.24	2.44
Mexico	0.30	0.37	0.35	0.38
Venezuela ^e	0.10	0.15		0.12
Total ^{e, 2}	3.27	2.84 ^r	2.61	2.96
Exports of H ₂ SO ₄	0.33	0.21	0.18	0.17
Imports of H ₂ SO ₄ :	<u> </u>			
Canada	1.82	1.84	2.00	1.99
Mexico	0.43	0.38	0.58	0.47
Total ²	2.67	2.83 ^r	3.29	2.90
Consumption:				
Domestic sources	6.88	6.15 ^r	5.49	6.55
Imports ^e	3.27	2.84 ^r	2.60	2.96
Total	10.20	8.99 ^r	8.10	9.50
Sulfur export values ³	203	201	177	201
Sulfur import values: ³				
Canada	70	64	71	67
Mexico	180	131	129	155
Venezuela	165	135	XX	123
Average ²	92	76	82	82
H ₂ SO ₄ export values ³	125	166	204	199
H ₂ SO ₄ import values: ³				
Canada	86	79	78	79
Mexico	68	69	69	72
Average ²	91	82	83	84

^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.