

Mineral Industry Surveys

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SULFUR IN APRIL 2020

During April 2020, production of recovered elemental sulfur was 602,000 metric tons (t), which was 10% lower than that of March 2020 and 8% lower than that of April 2019. Total production for January through April was 2.65 million metric tons (Mt), which was slightly lower than that in the same period of 2019. Shipments were 593,000 t, which was 14% lower than those of March 2020. Total shipments for January through April were 2.67 Mt, which was slightly lower than those in the same period of 2019. Producers' ending stocks for April 2020 were estimated at 120,000 t (table 1).

Imports of recovered sulfur for March 2020 were estimated to be 213,000 t; exports were 87,000 t. Total imports of recovered sulfur for January through April were 668,000 t, which was 6% lower than those in the same period of 2019. Total exports for January through April of recovered sulfur were 585,000 t, which was 23% lower than those in the same period of 2019 (tables 2, 4).

Imports of sulfuric acid for April 2020 were 284,000 t; exports were 31,000 t. Total imports for January through April

were 1.21 Mt, which was 18% higher than those in the same period of 2019. Total exports for January through April of sulfuric acid were 75,000 t, which was 10% higher than those in the same period of 2019 (tables 3, 4).

U.S. sulfur consumption, calculated as shipments minus exports plus imports, was 719,000 t in April 2020. This was 9% higher than that of March 2020 and slightly lower than that of April 2019. Total consumption for January through April was 2.75 Mt, which was 4% higher than that in the same period of 2019 (table 5).

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

(Thousand metric tons)

		Production	Shipments,	Stocks,	
Period	Petroleum ²	Natural gas	Total	all sources	end of period ³
2019:					-
January-December	7,790	322	8,110	8,100	124
January–April	2,570	110 ^r	2,680 r	2,690 ^r	124 ^r
April	625	27	652	666	107
May	621	21	642	640	107
June	624	28	652	647	113
July	690	30	720	725	107
August	677	25	703	699	111
September	620	25	644	641	114
October	611	28	639	643	109
November	658	27	685	676	119
December	721	29	749	744	124
2020:					
January	701	28	729	742	111
February	628	25	653	645	120
March	642	27	669	688	120
April ^p	578	24	602	593	120 e
January–April	2,550	105	2,650	2,670	120 e

^eEstimated. ^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.

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

(Thousand metric tons and thousand dollars)

·	Cana	da	Total, all countries ²		
Period	Quantity	Value ³	Quantity	Value ³	
2019:					
January-December	1,450	65,900	1,850	137,000	
January–April	516 ^r	32,100	708 ^r	65,400	
April	137	7,370	182	14,200	
May	119	6,180	120	7,060	
June	108	4,970 ^r	207	16,200	
July	126	6,730	132	13,000	
August	109	4,000	152	9,380	
September	97	3,470 ^r	99	4,460 ^r	
October	124	3,360	178	14,500	
November	119	2,790	121	3,860 ^r	
December	127	2,230	129	3,270	
2020:					
January	127	2,970	129	4,190	
February	104	3,200	143	7,580	
March	131	4,710	183	9,320	
April	120 e	5,150	213 ^e	13,700	
January–April	482 e	16,000	668 ^e	34,800	

^rRevised. ^eEstimated.

Sources: U.S. Census Bureau as adjusted by U.S. Geological Survey and Acuity Commodities.

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.

TABLE 3 U.S. IMPORTS OF SULFURIC ACID¹

(Thousand metric tons and thousand dollars)

		Canada			Mexico		Tot	al, all countr	ies ²
		Sulfur			Sulfur			Sulfur	
Period	Quantity	content	Value ³	Quantity	content	Value ³	Quantity	content	Value ³
2019:									
January-December	1,920	628	149,000	485	159	29,700	2,970	971	240,000
January-April	597	195	39,100	207	68	12,200	1,020	334	75,100
April	157	51	16,300	65	21	4,320	250	82	24,700
May	175	57	19,100	23	8	2,310	233	76	25,700
June	151	49	15,600	24	8	1,810	237	77	23,300
July	178	58	14,200	34	11	2,140	251	82	21,700
August	190	62	13,300	29	9	1,800	262	86	20,500
September	156	51	11,000	38	12	2,290	198	65	15,200
October	185	60	14,400	37	12	1,990	320	105	24,300
November	109	36	8,110	34	11	1,900	166	54	13,200
December	180	59	13,700 ^r	59	19	3,320	281	92	21,200
2020:									
January	150	49	11,200	58	19	4,670	306	100	23,400
February	147	48	10,500	51	17	4,350	311	102	21,600
March	178	58	12,700	51	17	4,390	310	101	22,500
April	154	50	11,300	50	16	4,980	284	93	22,100
January-April	628	205	45,700	209	69	18,400	1,210	396	89,600

^rRevised

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.

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

(Thousand metric tons and thousand dollars)

		·		Sulfuric acid		
	Sul	fur	Sulfur			
Period	Quantity	Value ²	Quantity	content	Value ²	
2019:						
January-December	2,200 ^r	172,000 ^r	220	72	31,200	
January–April	761 ^r	77,900 ^r	68	22	12,800	
April	116	14,000	21	7	4,240	
May	184 ^r	19,400 ^r	21	7	2,910	
June	156 ^r	13,900 ^r	18	6	1,920	
July	121 ^r	12,500 ^r	15	5	2,890	
August	296	13,100	17	6	2,630	
September	148 ^r	10,800 r	18	6	2,520	
October	321 ^r	8,860	28	9	2,310	
November	53	4,750	11	4	1,530	
December	157	11,200	25	8	1,650	
2020:						
January	97	4,720	16	5	2,650	
February	190	10,100	10	3	2,240	
March	210	14,100	18	6	3,420	
April	87	7,520	31	10	2,350	
January–April	585	36,400	75	24	10,700	

^rRevised.

Source: U.S. Census Bureau.

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

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	Consumption	
2019:				
January-December	5,900 ^r	1,850	7,750 ^r	
January–April	1,930 ^r	708 ^r	2,630 ^r	
April	550	182	732	
May	456 ^r	120	576 ^r	
June	491 ^r	207	698 ^r	
July	604 ^r	132	736 ^r	
August	403	152	555	
September	493 ^r	99	592 ^r	
October	322 ^r	178	500 ^r	
November	623	121	744	
December	587	129	716	
2020:				
January	645	129	774	
February	455	143	598	
March	478 ^r	183	661	
April ^p	506	213	719	
January-April	2,080	668	2,750	

^pPrelimanary. ^rRevised.

 $^{^{1}\}mbox{Data}$ 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) DISTRICT 1

(Thousand metric tons)

	January–A	pril 2019 ²	March	2020	April 2	2020 ^p	January–April 2020 ^{p, 2}	
District and source	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	51	52	18	19	13	14	71	71
Natural gas	4	4	1	1	1	1	4	4
Total	56	57	19	20	14	15	75	75
PAD 2:								
Petroleum and coke	428	428	118	122	100	99	463	465
Natural gas		1		1		1		1
Total	430	429	118	122	100	99	463	465
PAD 3:								
Petroleum and coke	1,600	1,600	384	394	368	356	1,550	1,550
Natural gas	41	40	10	9	9	10	37	38
Total	1,640	1,640	393	403	377	366	1,590	1,590
PAD 4 and 5:								
Petroleum and coke	491	495	121	126	97	99	467	477
Natural gas	62	64	17	17	14	14	63	63
Total	554	559	138	142	111	113	531	540
Grand total	2,680	2,690	669	688	602	593	2,650	2,670

^pPreliminary. -- Zero.

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

²May include revisions to previously published data.

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

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

		2020			
	_			January-	
	2019	March	April	April	
Production	8.11	7.90	7.34 ^p	8.03	
Shipments	8.10	8.12	7.23 ^p	8.07	
Exports of sulfur	2.20 ^r	2.48	1.06	1.77	
Imports of sulfur:					
Canada	1.45	1.55	1.46	1.46	
Total ²	1.85	2.16	2.60	2.02	
Exports of H ₂ SO ₄	0.22	0.21	0.38	0.23	
Imports of H ₂ SO ₄ :					
Canada	1.92	2.10	1.88	1.90	
Mexico	0.49	0.60	0.61	0.63	
Total ²	2.97	3.66	3.46	3.66	
Consumption:					
Domestic sources	5.90 ^r	5.64 ^r	6.17	6.30	
Imports	1.85	2.16	2.60	2.02	
Total	7.75 ^r	7.80	8.77	8.32	
Sulfur export values ³	78	67	86	62	
Sulfur import values: ³					
Canada	46 ^r	36	43	33	
Average ³		51	64	52	
H ₂ SO ₄ export values ³	142	190	76	142	
H ₂ SO ₄ import values: ³					
Canada	77 ^r	71	73	73	
Mexico	61	86	100	88	
Average ²	81	73	78	74	

Preliminary. Revised

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.