Mineral Industry Surveys

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POTASH IN CROP YEAR 2004

U.S. potash production and sales were about 1.2 million metric tons (Mt), K_2O equivalent,[1] in crop year 2004, according to the U.S. Geological Survey (USGS). Exports decreased by about 20% to 269,000 metric tons (t) and imports declined by about 6% to about 4.3 Mt. Apparent consumption increased by about 2% to about 5.3 Mt.

The USGS developed domestic potash data from voluntary semiannual canvasses of U.S. operations. Of the seven survey requests sent to operations for the first half of the crop year (July through December 2003), six responded and one was estimated. For the first reporting period, the respondents were estimated to represent more than 95% of the total. For the second reporting period of the crop year (January through June 2004), all responded.

About 73% of this crop year's exports went to Latin America, 17% to Asia and Oceania, and the rest to Europe, Africa, and other areas. Exports to Latin America decreased to about 87% of last year's total, and exports to Asia and Oceania declined to about 50%. Muriate of potash (MOP) exports were about 45% of the total exports; sulfate of potash magnesia (SOPM) were about 32%; sulfate of potash (SOP) were about 22%; and potassium nitrate were about 1% of total exports. Compared with last year, exports of MOP fell by about 35%, (SOPM) fell by about 2%, and SOP fell by about 30%.

Imports declined about 6% to 4.31 Mt for the report period compared with crop year 2003. About 98% of all imports were MOP. Canadian MOP was about 89% of total imports. Prices for standard MOP declined slightly from first half to second half, and granular MOP prices increased significantly (table 3). Compared to the last crop year, weighted total prices moved up only slightly (table 1).

In the second half of the crop year 2004, Intrepid Mining, LLC purchased Mississippi Potash Inc. from Mississippi Chemicals, Inc. including a pair of operating underground mines and an idle mine in Carlsbad, NM, and the Wendover near-surface brine operation in UT. At the end of the year there were only three potash producers operating in the United States. Intrepid Mining, LLC, through Intrepid Carlsbad, operated two mines in Carlsbad, NM; through Intrepid Moab, operated a deep solution mine near Moab, UT, and through Intrepid Wendover, a near-surface brine near Wendover, UT. IMC Global Inc. operated a mine in New Mexico and a deep-solution mine in Michigan. In Utah, Compass Minerals Group, Inc. operated the only SOP production site, known as the Great Salt Lake Minerals surface brine production site west of Ogden, UT. Intrepid Mining, LLC became the largest potash producer in the United States.

[1] All tonnages are reported in metric tons, K_2O equivalent, unless otherwise noted.

TABLE 1
SALIENT POTASH STATISTICS[1, 2]

(Thousand metric tons and thousand dollars, unless otherwise specified)

		Year ending June 30	
		2003	2004
United States:			
Production:			
Gross weight		2,500	2,500
K_2O equivalent		1,200	1,200
Sales by producers:			
Gross weight		2,500	2,600
K_2O equivalent		1,200	1,200
Value[3]		$270,000	$300,000
Average value:			
Gross weight	dollars per metric ton	$110	$120
K_2O equivalent	do.	$230	$260
Exports:[4]			
Gross weight		816 r	697
K_2O equivalent		336 r	269
Imports for consumption:[4, 5]			
Gross weight		7,560 r	7,140
K_2O equivalent		4,560 r	4,310
Customs value		$650,000	$544,000
Consumption, apparent:[6]			
Gross weight[7]		9,100	9,100
K_2O equivalent[7]		5,500	5,300

rRevised.

[1]Includes muriate and sulfate of potash, potassium magnesium sulfate, and parent salts. Excludes other chemical compounds and mixtures that contain potassium.

[2]Data are rounded to no more than two significant digits to avoid disclosing proprietary data. Trade data rounded to no more than three significant digits.

[3]Free on board (f.o.b.) mine.

[4]Excludes potassium chemicals and mixed fertilizers.

[5]Includes nitrate of potash and mixed sodium-potassium nitrate.

[6]Measured by sales plus imports minus exports.

[7]Data are rounded to within 200,000 tons to avoid disclosing proprietary data.

TABLE 2
PRODUCTION OF CRUDE ORE IN NEW MEXICO

(Thousand metric tons)

	Crude salts[1] (mine production)	
Period	Gross weight	K_2O equivalent
Crop year 2003:		
July-December 2002[2]	6,000	700
January-June 2003[2]	6,000	700
Total	12,000	1,400
Crop year 2004:		
July-December 2003[2]	5,000	500
January-June 2004[2]	6,000	700
Total	11,000	1,200

[1]Sylvinite and langbeinite.

[2]Data are rounded to the nearest thousand tons to avoid disclosing proprietary data.

TABLE 3
PRICES OF U.S. POTASH, BY TYPE AND GRADE[1, 2]

(Dollars per metric ton of K_2O equivalent)

Type and grade	2002 January-June	2002 July-December	2003 January-June	2003 July-December	2004 January-June
Muriate, 60% K_2O minimum:					
Standard	155	150	165	175	170
Granular	150	155	155	155	195

[1]Average prices, f.o.b. mine, based on sales.
[2]Data are rounded to the nearest $5 to avoid disclosing proprietary data..

TABLE 4
SALES OF NORTH AMERICAN POTASH TO U.S. CUSTOMERS, BY GRADE[1]

(Thousand metric tons of K_2O equivalent)

Grade	2002 January-June	2002 July-December	2003 January-June	2003 July-December	2004 January-June	July 2002 to June 2003	July 2003 to June 2004
Agricultural:							
Muriate of potash:							
Standard	94	66	79	65	97	145	162
Coarse	1,030	1,110	1,080	1,150	1,370	2,190	2,520
Granular	976	654	899	686	998	1,550	1,680
Soluble	211	185	238	170	282	423	453
Total	2,320	2,020	2,290	2,070	2,750	4,310	4,820
Nonagricultural:							
Standard muriate	255	286	273	330	318	559	648
Soluble muriate	74	84	74	77	83	158	160
Total	328	370	347	407	401	717	809

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

Source: Potash & Phosphate Institute.

TABLE 5
U.S. EXPORTS OF POTASH[1]

(Metric tons, unless otherwise specified)

Type	Approximate average K_2O content (percent)	July-December 2003 Product	July-December 2003 K_2O equivalent[e]	January-June 2004 Product	January-June 2004 K_2O equivalent[e]	Year ending June 30, 2004 Product	Year ending June 30, 2004 K_2O equivalent[e]
Potassium chloride, all grades	61	95,100	58,000	119,000	72,400	214,000	130,000
Potassium nitrate	45	4,460	2,010	3,080	1,390	7,540	3,390
Potassium sulfate	51	76,900	39,200	30,000	15,300	107,000	54,500
Potassium magnesium sulfate[2]	22	167,000	36,800	201,000	44,300	369,000	81,100
Total	XX	344,000	136,000	353,000	133,000	697,000	269,000

[e]Estimated. XX Not applicable.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Contains exports listed under Harmonized Code Category 3104.10.0000.

Source: U.S. Census Bureau.

TABLE 6

U.S. IMPORTS FOR CONSUMPTION OF POTASH[1]

(Metric tons, unless otherwise specified)

Type	Approximate average K_2O content (percent)	July-December 2003			January-June 2004			Year ending June 30, 2004		
		Product	K_2O equivalent[e]	Customs value (thousands)	Product	K_2O equivalent[e]	Customs value (thousands)	Product	K_2O equivalent[e]	Customs value (thousands)
Potassium chloride[2, 3]	61	3,300,000	2,010,000	$220,000	3,600,000	2,200,000	$268,000	6,900,000	4,210,000	$488,000
Potassium sulfate	51	53,900	27,500	10,000	58,800	30,000	11,600	113,000	57,500	21,600
Potassium nitrate	45	66,300	29,900	14,800	21,100	9,510	5,590	87,500	39,400	20,400
Potassium nitrate mixtures	14	15,200	2,130	6,410	25,500	3,570	7,980	40,700	5,700	14,400
Total	XX	3,430,000	2,070,000	251,000	3,710,000	2,240,000	293,000	7,140,000	4,310,000	544,000

[e]Estimated. XX Not applicable.

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

[2]Purchases of muriate by U.S. companies were subtracted from imports to prevent double counting due to conversion to sulfate of potash.

[3]Contains imports listed under Harmonized Code Category 3104.10.0000.

Source: U.S. Census Bureau, as adjusted by the U.S. Geological Survey.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF POTASH, BY COUNTRY[1, 2]

(Metric tons, unless otherwise specified)

Country	Potassium chloride		Potassium sulfate		Potassium nitrate		Potassium sodium nitrate		Total		Total value (thousands) Customs		Total value (thousands) C.i.f.[3]	
	2003	2004	2003	2004	2003	2004	2003	2004	2002	2004	2003	2004	2003	2004
Belarus	340,000	497,000	--	--	--	--	--	--	340,000	497,000	$27,800	$44,600	$31,000	$53,500
Belgium	--	--	10,300	8,620	13	--	--	--	10,300	8,620	1,270	2,120	1,690	2,370
Canada	6,710,000	6,270,000	24,000	22,200	20	--	810	1,210	6,740,000	6,300,000	547,000	437,000	570,000	426,000
Chile	--	50	9,240	14,900	77,500	79,000	30,600	6,980	117,000	101,000	26,300	20,600	29,400	22,800
China	20	20	--	--	334	91	--	--	354	111	166	56	186	67
Denmark	--	--	25	--	7,200	4,630	--	38	7,220	4,660	2,160	1,400	2,980	2,030
France	--	--	106	130	158	36	--	--	264	166	210	161	240	177
Germany	860	843	70,300	66,600	1,660	1,650	-- [r]	--	72,800	69,100	3,970 [r]	12,200	3,790 [r]	14,500
India	--	--	237	3	6	21	--	--	243	24	31	49	34	54
Israel	628	176	--	--	16,400	1,090	13,200 [r]	32,500	30,200	33,700	20,900 [r]	13,800	24,300 [r]	17,100
Japan	242	--	182	139	853	827	--	--	1,280	966	475	393	522	448
Mexico	--	--	3	--	7	63	--	--	10	63	23	29	25	33
Netherlands	--	130	--	--	23	10	17	2	40	142	21	14	26	14
Norway	--	10	--	--	--	--	--	--	--	10	--	2	--	3
Poland	--	--	--	--	104	20	--	--	104	20	41	9	50	11
Russia	247,000	130,000	--	--	--	--	--	--	247,000	130,000	19,600	11,600	22,800	14,500
Sweden		--	18	37	--	--	--	--	18	37	5	2	8	4
United Kingdom	91	103	--	--	--	--	--	--	91	103	109	143	120	214
Total	7,300,000	6,900,000	114,000	113,000	104,000	87,500	44,700	40,700	7,560,000	7,140,000	650,000	544,000	687,000	554,000

[r]Revised. -- Zero.

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

[2]Crop year 2003 contains data from July 1, 2002, to June 30, 2003, and crop year 2004 contains data from July 1, 2003, to June 30, 2004.

[3]Cost, insurance, and freight.

Source: U.S. Census Bureau, as adjusted by the U.S. Geological Survey.