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Mineral Industry Surveys

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FLUORSPAR IN THE SECOND QUARTER 1999

Reported consumption of fluorspar was 104,000 metric tons, 27% lower than in the previous quarter and 24% lower than in the second quarter of 1998. Consumption of fluorspar for hydrofluoric acid and aluminum fluoride production was 95,000 tons, 30% lower than in the previous quarter and 25% lower than in the second quarter of 1998. Imports of fluorspar were 106,000 tons, 29% lower than in the previous quarter but 51% higher than in the second quarter of 1998.

National Defense Stockpile

Under the Fiscal Year 2000 Annual Materials Plan the Defense National Stockpile Center is offering about 54,400 metric tons (60,000 short dry tons) of metallurgical-grade fluorspar for sale. Initial offerings will be accepted on December 21, 1999. If all material is not sold, subsequent offerings will be made on the third Tuesday of each month until all material is sold. The material is located at Warren, OH; Marietta, PA; and Clearfield, UT; and is of domestic and foreign origin (Defense Logistics Agency, 1999).

Industry News

Minerales y Productos Derivados SA (Minersa) of Spain has purchased a 30% stake in the South African Vergenoeg Fluorspar Mine, which was acquired in the spring by the Canadian junior mining company Metorex from Bayer (Pty.) Ltd. Minersa provides additional technical and marketing expertise, which will help improve product quality, marketing, and profitability. Minersa has been involved with Metorex since the acquisition in evaluating current operations with the aim of improving the quality and recovery of fluorspar from the mine. Implementation of resulting recommendations is expected to improve profitability in the near term, and increased marketing efforts are expected to lead to significant long-term growth in production levels and sales volumes (African Mining, 1999).

Following the loss of a major customer contract for fluorspar, on July 28, the United Kingdom-based chemicals company Laporte plc announced its intention to close its minerals operation Laporte Minerals located in Derbyshire, England. Laporte Minerals is a trading unit of Laporte Industries Ltd—a wholly owned subsidiary of Laporte plc. Despite efforts made to secure an ongoing supply contract through competitive pricing and a radical restructuring of the operation, the customer has decided to secure alternative supplies from China. Since the problems at Laporte Minerals were commercial rather than technical, there is optimism that a buyer can be found that will be able to maintain the fluorspar producer as a going concern (Laporte Minerals, July 28, 1999, press release, accessed October 1, 1999, at URL http://www.laporte-minerals.co.uk/).

On August 12th, Burin Fluorspar Ltd. and Blue Desert Mining Inc. announced the proposed merger of the two companies. Burin Fluorspar holds 100% interest in the St. Lawrence Fluorspar Mine in Newfoundland, Canada. Blue Desert Mining owns 100% interest in several gold projects in Alaska and other exploration projects in Nevada and Chile. The new company is expected to be called Canadian Fluorspar Inc. The merger will help Burin obtain market liquidity for existing shareholders and obtain access to public equity markets for financing additional development work on the St. Lawrence fluorspar project (Blue Desert Mining Co., 1999)

Fluorochemical News

Imperial Chemical Industries plc (ICI) is raising its annual production capacity for HFC-134a at its three plants in England, Japan, and the United States by a combined 10,000 tons. The expansion, scheduled for completion by 2001, will bring ICI's total annual HFC-134a capacity to 65,000 tons. The company is also preparing preliminary plans for an additional 20,000-ton-per-year expansion at its U.S. plant in St. Gabriel, LA. A decision on that project may be made next year (Chemical Market Reporter, 1999a).

AlliedSignal Inc. has begun work on doubling production capacity for fluorocarbons at its plant in Geismar, LA. The first

phase of the expansion, which will boost output by 25%, was scheduled for completion in the third quarter of 1999. Phase II of the expansion is scheduled for completion by the end of 2000. AlliedSignal's expansion plans were supported by the growing demand for its Genetron AZ-20 (R-410A), which is an azeotropic mixture of HFC-32 and HFC-125, in the residential air conditioning market and for its Genetron AZ-50 (R-507), which is an azeotropic mixture of HFC-125 and HFC-143a, that has been developed by AlliedSignal to serve as a long-term substitute for the refrigerants R-502 and HCFC-22 (Industrial Minerals, 1999).

In an attempt to meet global demand for fluorine chemistry-based technology AlliedSignal announced the creation of a strategic business division called FluorSolutions. The new business division will provide high-value advanced fluorochemical products and solutions in such areas as pharmaceuticals, polymers, and chemical markets (North American Mineral News, 1999).

Alichem Ltd. has completed a feasibility study and has received all necessary environmental approvals for construction of its proposed $60 million, 40,000-ton-per-year aluminum fluoride plant at Kwinana, Western Australia (Prospect, 1999).

In complying with a 1997 amendment to the Montreal Protocol, an international agreement designed to curtail illegal trade in chlorofluorocarbons, hydrochlorofluorocarbons, and other ozone-depleting chemicals will go into effect on November 10, 1999. The agreement will require countries to establish licensing systems for international sales of ozone-depleting substances (Chemical Market Reporter, 1999b).

References Cited

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Industrial Minerals, 1999, AlliedSignal boosts fluorocarbons: Industrial Minerals, no. 383, August, p. 19.

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TABLE 1
SALIENT FLUORSPAR STATISTICS 1/

(Metric tons, unless otherwise specified)

	1998			1999		
	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Year to date
Imports for consumption	70,200	131,000	129,000	150,000	106,000	255,000
Value per ton, c.i.f U.S. port, acid grade	$128	$135	$123	$120	$117	$119 2/
Value per ton, c.i.f. U.S. port, metallurgical	$78	$86	$89	$86	$91	$89 2/
Exports	13,700	11,900	8,260	20,800	14,000	34,700
End of quarter stocks: consumer 3/	153,000	131,000	134,000	136,000	117,000	117,000
Fluorspar equivalent of imported hydrofluoric acid 4/	42,800	46,100	44,000	47,000 r/	50,400	97,400
Fluorspar equivalent of imported cryolite	6,600	3,720	4,880	3,680	3,100	6,780
Quarterly reported fluorspar consumption	136,000	144,000	141,000	143,000	104,000	248,000

r/ Revised.
1/ Data are rounded to three significant digits.
2/ Average value for year to date 1999.
3/ Does not include material purchased from the National Defense Stockpile by traders or indirect consumers.
4/ Does not include hydrofluoric acid from foreign trade zone.

TABLE 2
CONSUMPTION OF FLUORSPAR BY END USE AND ASSAY RANGE 1/
(DOMESTIC AND FOREIGN IN THE UNITED STATES)

(Metric tons)

	First quarter 1999			Second quarter 1999			
End use or product	More than 97% calcium fluoride	Not more than 97% calcium fluoride	Total	More than 97% calcium fluoride	Not more than 97% calcium fluoride	Total	1999 Year to date
Hydrofluoric acid and aluminum fluoride	135,000	W	135,000	95,000	W	95,000	230,000
Basic oxygen furnaces	--	2,030 r/	2,030 r/	--	2,750	2,750	4,780
Electric furnaces	W	3,060	3,060	351	2,280	2,630	5,690
Other uses or products 2/	771 r/	2,980 r/	3,760 r/	518	3,450	3,970	7,720
Total	135,000	8,080 r/	143,000	95,900	8,470	104,000	248,000
Stocks, end of quarter	113,000	22,300	136,000	93,900	23,000	117,000	117,000

r/ Revised. W Withheld to avoid disclosing company proprietary data: included in "Other uses or products."
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Includes acid grade used in enamel, glass and fiberglass, steel castings, welding rod coatings and data represented by symbol "W."

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FLUORSPAR, BY COUNTRY 1/ AND VALUE 2/ 3/

(Metric tons, unless otherwise specified)

	1998						1999					
	Second quarter		Third quarter		Fourth quarter		First quarter		Second quarter		Year to date	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Containing more than 97% calcium fluoride:												
Austria	5	$15	--	--	--	--	106	$56	1	$7	107	$63
China 4/	40,400	5,070	70,300	$9,650	96,000	$11,800	104,000	12,300	48,000	5,460	152,000	17,700
France	140	50	210	77	70	28	70	28	18	8	88	36
Germany	4	4	--	--	--	--	41	19	--	--	41	19
Mexico	556	75	1,200	173	515	75	2,170	258	3,340	421	5,520	679
Morocco	--	--	4,730	693	--	--	--	--	--	--	--	--
South Africa	27,500	3,510	45,500	5,860	19,700	2,390	31,400	3,810	28,500	3,410	59,900	7,220
United Kingdom	4	8	--	--	--	--	4	4	2	4	6	8
Total	68,600	8,730	122,000	16,500	116,000	14,300	137,000 r/	16,500	79,900	9,310	217,000	25,800
Containing not more than 97% calcium fluoride:												
Canada	63	18	21	6	55	15	21	6	39	12	60	18
China	--	--	--	--	--	--	--	--	16,700	1,500	16,700	1,500
Mexico	1,570	109	9,070	776	12,400	1,100	12,200	1,040	8,900	809	21,100	1,850
Total	1,630	127	9,090	782	12,500	1,120	12,200	1,050	25,700	2,330	37,900	3,380

r/ Revised.
1/ Imports for consumption include imports of immediate entry, and warehouse withdrawals.
2/ C.i.f. at U.S. ports.
3/ Data are rounded to three significant digits; may not add to totals shown.
4/ Data do not agree with published Bureau of the Census data due to adjustments made by the U.S. Geological Survey.

Source: Bureau of the Census.

TABLE 4
IMPORTS FOR CONSUMPTION OF HYDROFLUORIC ACID 1/

(Metric tons, unless otherwise specified)

	1998						1999					
	Second quarter		Third quarter		Fourth quarter		First quarter		Second quarter		Year to date	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Canada	8,600	$9,910	9,300	$7,720	5,970	$6,810	7,000	$8,090	6,600	$7,860	13,600	$15,900
France	53	62	94	103	37	42	92	106	56	57	148	163
Germany	37	85	34	65	30	62	48	100	17	35	65	135
Japan	352	1,070	245	714	336	965	391	1,230	355	1,050	746	2,280
Mexico	19,500	18,200	21,000	13,500	22,900	14,600	23,800	22,000	26,500	24,300	50,300	46,300
United Kingdom	59	60	39	42	19	22	19	20	19	20	38	40
Total	28,600	29,400	30,800	22,100	29,300	22,500	31,300	31,500	33,600	33,300	64,900	64,800

1/ Data are rounded to three significant digits; may not add to totals shown.
2/ C.i.f. at U.S. ports.

Source: Bureau of the Census.