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Mineral Industry Surveys

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FLUORSPAR IN THE THIRD QUARTER 2010

Reported fluorspar consumption in the third quarter was 112,000 metric tons (t), unchanged from the revised figure for the previous quarter and only slightly lower than that consumed in the third quarter of 2009. Third quarter stocks decreased by 12% compared with those of the previous quarter and were 5% lower than those of the third quarter of 2009. As an indicator of the improving economy, imports of hydrofluoric acid (HF) have increased in recent months and during the past two quarters have returned to prerecession levels. Average quarterly HF imports for 2010 were 17% higher than those of 2009.

Prices

End-of-third-quarter-2010 import prices for Chinese acidspar were unchanged from those of the previous quarter at $350 to $380 per metric ton (dry basis, cost, insurance, freight, U.S. Gulf of Mexico port). The price range for Mexican low-arsenic acidspar [free on board (f.o.b.) Tampico] decreased to $280 to $320 per ton from $300 to $360 per ton in the previous quarter. The price range for regular acidspar from Mexico, f.o.b. Tampico, was essentially unchanged at $260 to $290 per ton. The price range for South African acidspar, f.o.b. Durban, increased slightly to $260 to $290 per ton (Industrial Minerals, 2010b).

Industry News

Hastie Mining & Trucking Co. encountered additional delays on opening its Klondike II fluorspar mine in Kentucky. Development work continued but was slowed while the company waits for a road construction permit. The company installed a heavy media plant, but renovation work will be required on the flotation mill in Salem, KY, which was vandalized a few years ago while it sat idle. Production startup is now expected in spring 2011 (Don Hastie, Hastie Mining & Trucking Co., oral commun., December 16, 2010).

After failing to find a buyer or investors, the United Kingdom’s sole fluorspar producer, Glebe Mines Ltd. (Derbyshire, United Kingdom) reportedly was shutting down at the end of December 2010. Glebe Mines was not included in the sale (finalized in March 2010) of its parent, INEOS Fluor, to Mexico’s Mexichem Fluor S.A. de C.V. (Industrial Minerals, 2010a). The sale combined Mexichem, the world’s leading fluorspar supplier, with INEOS Fluor, a worldwide fluorochemicals company. The combination created the world’s leading vertically integrated fluorochemicals company. Glebe Mining’s primary customer was INEOS Fluor’s HF plant at Runcorn in Cheshire, which was part of the sale to Mexichem. Glebe Mines’ supply contracts with the Runcorn plant apparently expire at the end of the year. Glebe Mines remained a part of the INEOS Group (Lyndhurst, United Kingdom), but with the sale of the fluorochemicals business it was a poor fit with the INEOS Group’s remaining businesses.

Fluorochemical News

The Chinese Government issued a new policy concerning hydrogen fluoride called Industrial Admittance Conditions for Hydrogen Fluoride, which is designed to protect fluorspar resources. The policy focuses on controlling HF capacity through tougher licensing requirements that encourage mergers or acquisitions. HF plants will be required to have a minimum capacity of 50,000 metric tons per year. The policy encourages existing fluoride companies to acquire fluorspar mine resources and would limit or bar companies without dedicated fluorspar resources from entering or further expanding into the fluoride industry. HF producers would be prohibited from purchasing fluorspar from unlicensed fluorspar companies. The policy is intended to improve integration of the fluoride industry by establishing larger vertically integrated companies producing higher value downstream products. This policy is an adjunct to the previously issued Government policies that limited the total volume of fluorspar produced in the first half of 2010. This has reportedly resulted in a dramatic increase in the domestic market price for fluorspar products (China Shen Zhou Mining & Resources, Inc., 2010).

Solvay S.A. (Brussels, Belgium) announced plans to build a new electronic-grade HF production facility in Quzhou, China, for Lansol Fluorchem Co., Ltd., Solvay’s joint venture with Zhejiang Lantian Environmental Protection Co., Ltd. Commercial products from the new facility were expected to be available by yearend 2010. In addition, Solvay has agreed to transfer to Lansol the production technology needed to produce the high-value electronic-grade HF, which is used in the electronics industry, particularly for the production of photovoltaic cells. Electronic-grade HF is considered a high-end product for which China's requirements are met largely by imports (Solvay, S.A., 2010).

References Cited

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TABLE 1
SALIENT FLUORSPAR STATISTICS[1]

(Metric tons, unless otherwise specified)

	2009		2010			
	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Total or average
Imports for consumption:						
Quantity	96,000	154,000	131,000	131,000	146,000	408,000
Average value per ton, c.i.f. U.S. port, metallurgical grade	$98	$97	$98	$103	$100	$100
Exports	4,850	4,720	5,290	4,740	3,430	13,500
End of quarter stocks, consumer	99,500	103,000	107,000	108,000	94,400	XX
Imports for consumption of hydrofluoric acid	32,200	28,900	29,100	34,300	36,500	99,900
Imports for consumption of cryolite	797	1,250	1,520	960	1,650	4,130
Quarterly reported fluorspar consumption	114,000	98,500	116,000	112,000 [r]	112,000	340,000

[r]Revised. XX Not applicable.

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

TABLE 2

CONSUMPTION OF FLUORSPAR BY END USE AND ASSAY RANGE[1]
(DOMESTIC AND FOREIGN IN THE UNITED STATES)

(Metric tons)

	Hydrofluoric acid and other uses[2]	Metallurgical	Total	Stocks, end of period[3]
2009:				
First quarter:				
More than 97% calcium fluoride	84,100	2,220	86,300	120,000
Not more than 97% calcium fluoride	--	3,440	3,440	18,100
Total	84,100	5,660	89,800	138,000
Second quarter:				
More than 97% calcium fluoride	91,500	2,220	93,700	81,100
Not more than 97% calcium fluoride	--	4,050	4,050	15,000
Total	91,500	6,270	97,700	96,100
Third quarter:				
More than 97% calcium fluoride	106,000	2,220	108,000	85,600
Not more than 97% calcium fluoride	--	6,530	6,530	13,800
Total	106,000	8,750	114,000	99,500
Fourth quarter:				
More than 97% calcium fluoride[r]	89,900	2,720	92,700	87,200
Not more than 97% calcium fluoride	2,030	3,850	5,870	15,600
Total[r]	92,000	6,570	98,500	103,000
Grand total	373,000	27,200	400,000	XX
2010:				
First quarter:				
More than 97% calcium fluoride	107,000	2,720	110,000	93,400
Not more than 97% calcium fluoride	--	6,010	6,010	13,400
Total	107,000	8,730	116,000	107,000
Second quarter:				
More than 97% calcium fluoride	102,000 r	2,720	105,000 r	95,200
Not more than 97% calcium fluoride	--	7,120 r	7,120 r	12,400 r
Total	102,000 r	9,840 r	112,000 r	108,000 r
Third quarter:				
More than 97% calcium fluoride	102,000	2,720	105,000	82,300
Not more than 97% calcium fluoride	--	7,120	7,120	12,100
Total	102,000	9,840	112,000	94,400
Grand total	312,000	28,400	340,000	XX

[r]Revised. XX Not applicable. -- Zero.

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

[2]May include cement, enamel, glass and fiberglass, steel castings, hydrofluoric acid, and welding rod coatings.

[3]Stocks include some distributor stocks and consumer stocks for hydrofluoric acid.

TABLE 3

U.S. IMPORTS FOR CONSUMPTION OF FLUORSPAR, BY COUNTRY AND VALUE[1, 2]

	2009				2010							
	Third quarter		Fourth quarter		First quarter		Second quarter		Third quarter		Total	
	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Containing more than 97% calcium fluoride:												
China	11,700	$3,690	13,600	$3,190	40,100	$10,100	28,000	$8,160	10,400	$3,230	78,500	$21,500
Mexico	51,100	8,520	94,300	15,400	51,200	8,850	66,600	11,500	90,100	15,700	208,000	36,100
Mongolia	9,510	3,380	19,100	5,210	--	--	11,900	3,400	--	--	11,900	3,400
South Africa	9,900	3,520	7,660	2,000	13,500	3,410	9,900	2,510	9,900	2,380	33,300	8,300
United Kingdom	484	57	2	5	1	5	1	5	554	66	556	76
Other	--	--	--	--	--	--	--	--	118	15	118	15
Total	82,700	19,200	135,000	25,800	105,000	22,400	116,000	25,600	111,000	21,400	332,000	69,300
Containing not more than 97% calcium fluoride:												
Mexico	13,100	1,280	19,300	1,880	25,700	2,520	14,400	1,480	35,400	3,540	75,400	7,530
Namibia	203	24	--	--	--	--	--	--	--	--	--	--
Other	1	5	--	--	--	--	--	--	1	3	1	3
Total	13,300	1,310	19,300	1,880	25,700	2,520	14,400	1,480	35,400	3,540	75,400	7,540
Grand total	96,000	20,500	154,000	27,700	131,000	24,900	131,000	27,100	146,000	24,900	408,000	76,900

-- Zero.

[1]Imports for consumption include imports of immediate entry and warehouse withdrawals.

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

Source: U.S. Census Bureau.

TABLE 4

IMPORTS FOR CONSUMPTION OF HYDROFLUORIC ACID[1]

	2009				2010							
	Third quarter		Fourth quarter		First quarter		Second quarter		Third quarter		Total	
	Quantity (metric tons)	Value[2] (thousands)	Quantity (metric tons)	Value[2] (thousands)	Quantity (metric tons)	Value[2] (thousands)	Quantity (metric tons)	Value[2] (thousands)	Quantity (metric tons)	Value[2] (thousands)	Quantity (metric tons)	Value[2] (thousands)
Canada	2,480	$9,350	2,330	$9,030	2,300	$7,810	2,630	$10,100	4,080	$13,500	9,010	$31,500
China	1,580	1,540	1,210	1,110	1,270	1,260	1,770	2,100	1,790	2,230	4,830	5,600
Germany	96	272	101	304	127	281	92	308	76	255	295	844
Japan	169	309	185	427	206	490	172	413	228	545	606	1,450
Mexico	27,800	33,000	25,000	31,300	25,200	31,600	29,600	38,000	30,200	38,000	84,900	107,000
Other	73	131	97	262	46	105	109	245	143	331	298	681
Total	32,200	44,600	28,900	42,500	29,100	41,500	34,300	51,100	36,500	54,800	99,900	147,000

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

[2]Cost, insurance, and freight at U.S. ports.

Source: U.S. Census Bureau.