

Mineral Industry Surveys

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ANTIMONY IN THE FOURTH QUARTER 2010

Consumption of primary antimony in the fourth quarter of 2010 was estimated by the U.S. Geological Survey to be 14% lower than that in the third quarter of 2010 and the same as that in the fourth quarter of 2009. During the first 11 months of 2010, antimony imports for consumption totaled 23,400 metric tons (t), an increase of 31% compared with those in the comparable period of 2009. During the first 11 months of 2010, China was the leading supplier of antimony metal and antimony oxide to the United States.

Antimony prices rose steadily during the fourth quarter of 2010. The Platts Metals Week New York dealer price for antimony metal started October at \$4.70 to \$4.75 per pound and increased throughout November and December to finish the year at \$5.50 to \$5.70 per pound.

United States Antimony Corp. (USAC) (Thompson Falls, MT) announced that the startup of its newly built mill in Queretaro, Mexico, had been delayed after the area was designated a United Nations World Heritage Site. USAC indicated that the Governor of Queretaro had offered his support to relocate the mill to a new site closer to both the Soyatal and Los Juarez antimony properties. USAC had signed an exclusive supply agreement with the owner of the Soyatal antimony property in November 2009 under which high-grade material would be mined and shipped to USAC's Coahuila smelter (Metal-Pages, 2010c).

The Chinese Government increased the export quotas for antimony and tungsten for 2011, according to the country's Ministry of Commerce. The quota for antimony was set at 60,300 t (metal content), an increase of 5% from the prior limit of 57,500 t (Metal-Pages, 2010a).

Mandalay Resources Corp. (Toronto, Ontario, Canada) announced that it had started stockpiling silver-gold-antimony-bearing ore from the Dagny vein at its Cerro Bayo Mine in Patagonia, Chile. The Dagny vein was being developed separately from the Fabiola vein, which had started producing ore in September 2010. The company also commenced drilling at the Yasna vein in November, with the goal of adding significantly to the 69,000 t of ore expected to be produced annually from the Dagny and Fabiola veins. A fourth vein, Delia NW, was being permitted, with initial development

scheduled for mid-2011. Mandalay's goals were to produce 1,870 kilograms (kg) of gold and 1,500 t of antimony annually from Cerro Bayo. The Cerro Bayo mining and concentrator complex, acquired while in a care-and-maintenance status from Coeur d'Alene Mines Corp. (Coeur d'Alene, ID) in August 2010, was in the process of a restart by Mandalay with plans to ramp up to its annual design production rate by the end of 2011. The concentrator was scheduled to commence operation in the first quarter of 2011 (Mandalay Resources Corp., 2010; Metal-Pages, 2010b).

Village Main Reef Gold Co. Ltd. (Bryanston, South Africa) announced that it was in the process of acquiring 74% of the Consolidated Murchison (CM) antimony-gold mine in South Africa. Village Main Reef agreed to pay \$4 million to The Point Growth Specialists Ltd. (TTP) (Benmore, South Africa) for the mine that TTP had acquired in September 2010 from Metorex Ltd. (Johannesburg, South Africa). The mine has a resource of 23,300 kg (750,000 troy ounces) of gold at an average grade of 2.45 grams per metric ton, and 201,000 t of antimony at an average grade of 21 kilograms per metric ton. Located near Gravelotte, Limpopo Province, CM was one of the world's leading producers of antimony and was situated on one of the world's largest known antimony ore bodies. Together with gold, the mine produced antimony from its three operating shafts—Athens, Beta, and Monarch ((Metal-Pages, 2010d; Village Main Reef Gold Co. Ltd., 2010).

Update

On March 10, 2011, the Platts Metals Week dealer price for antimony was \$6.50 to \$6.90 per pound.

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TABLE 1
SALIENT ANTIMONY STATISTICS¹

(Metric tons, antimony content, unless otherwise specified)

	2009 ^p	2010				
		First quarter	Second quarter	Third quarter	Fourth quarter	Year to date
Production:						
Primary smelter	W	W	W	W	W	W
Secondary	W	W	W	W	W	W
Imports for consumption:	20,200	5,720	7,390	5,890 ^r	4,370 ²	23,400
Ore and concentrate	167	24	57	42 ^r	26 ²	149
Metal	4,750	966	1,740	1,130 ^r	739 ²	4,570
Oxide ³	15,200	4,730	5,590	4,720 ^r	3,600 ²	18,600
Exports:	2,260	521	675	648 ^r	547 ²	2,390
Ore and concentrate	170	31	35	41 ^r	34 ²	141
Metal, alloys, waste and scrap	385	68	83	124 ^r	106 ²	381
Antimony oxide ³	1,710	422	557	483 ^r	405 ²	1,870
Consumption of primary antimony	7,230	1,970	1,680	1,900	1,640	7,190
Price, average, cents per pound ⁴	235.55	294.03	384.67	427.63	498.42	401.19
Stocks, end of period ⁵	1,480	1,500	1,550	1,220	1,630	XX

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

¹Data are rounded to no more than three significant digits, except prices.

²Data for October and November only; December data were not available at time of publication.

³Antimony content is calculated by the U.S. Geological Survey.

⁴Source: Platts Metals Week. New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

⁵Producer and consumer stocks.

TABLE 2
INDUSTRY STOCKS OF PRIMARY ANTIMONY
IN THE UNITED STATES^{1,2}

(Metric tons, antimony content)

Class of material	2010			
	First quarter	Second quarter	Third quarter	Fourth quarter
Oxide	937	992	669	1,060
Other ³	564	557	552	565
Total	1,500	1,550	1,220	1,630

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

²Estimated 100% coverage based on quarterly respondents that consumed 42% of the total stocks of antimony at the end of the 2008.

³Includes ore and concentrate, sulfide, and residues.

TABLE 3
CONSUMPTION OF PRIMARY ANTIMONY^{1,2}

(Metric tons, antimony content)

Class of material consumed	2009 ^p	2010				
		First quarter	Second quarter	Third quarter	Fourth quarter	Year to date
Oxide	4,510	1,420	1,160	1,450	1,210	5,240
Other ³	2,730	552	525	449	421	1,950
Total	7,230	1,970	1,680	1,900	1,640	7,190

^pPreliminary.

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

²Estimated 100% coverage based on quarterly respondents and respondents who consumed 29% of the total antimony in 2008.

³Includes ores and concentrates, metal, sulfide, and residues.

TABLE 4
CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED¹

(Metric tons, antimony content)

Product	2009 ^p	2010				
		First quarter	Second quarter	Third quarter	Fourth quarter	Year to date
Metal ²	W	W	W	W	W	W
Nonmetal ³	W	W	W	W	W	W
Flame-retardants:						
Plastics	164	104	46	97	85	332
Other ⁴	69	25	21	20	19	85
Total	233	129	67	117	103	416
Reported consumption	1,930	600	485	551	444	2,080
Total consumption ⁵	7,230	1,970	1,680	1,900	1,640	7,190

^pPreliminary. W Withheld to avoid disclosing company proprietary data; included with "Reported consumption."

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

²Includes adhesives, pigments, rubber, and textiles.

³Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.

⁴Includes ammunition primers, pigments, ceramics and glass, and plastics.

⁵Estimated 100% coverage based on quarterly respondents and respondents who consumed 29% of the total antimony in 2008.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY CLASS AND COUNTRY¹

(Metric tons, antimony content)

Class and country	2010							
	2009	First quarter ²	Second quarter ²	Third quarter ²	September	October	November	January- November ²
Ore and concentrate:								
Bolivia	83	24	24	--	--	--	--	48
Other	84	--	33	42	7	19	7	101
Total	167	24	57	42	7	19	7	149
Metal:								
Australia	95	77	--	118	--	--	--	195
Bolivia	58	18	--	--	--	--	--	18
China	3,040	672	1,550	954	363	413	240	3,830
Mexico	1,170	192	119	11	6	17	11	350
Peru	212	--	--	--	--	--	--	--
Vietnam	119	--	40	19	19	20	--	79
Other	54	7	31	25	6	10	29	102
Total	4,750	966	1,740	1,130	395	459	280	4,570
Oxide:³								
Belgium	1,540	576	480	371	106	178	163	1,770
Bolivia	1,610	166	114	67	--	67	--	414
China	9,310	3,250	4,270	3,810	1,410	1,620	1,330	14,300
France	378	129	--	--	--	1	--	130
Japan	151	94	71	79	19	2	3	249
Mexico	2,020	339	608	332	148	125	83	1,490
Netherlands	128	111	--	--	--	--	--	111
Taiwan	95	46	39	63	16	16	16	180
Other	1	17	5	--	--	--	--	22
Total	15,200	4,730	5,590	4,720	1,690	2,010	1,600	18,600
Grand total	20,200	5,720	7,390	5,890	2,100	2,490	1,880	23,400
Other antimony compounds (gross weight)	11	9	4	12	4	5	4	33

-- Zero.

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

²May include revisions to prior months data.

³Antimony content is calculated by the U.S. Geological Survey.

Source: U.S. Census Bureau.