

Mineral Industry Surveys

For information, contact:

James F. Carlin, Jr., Antimony Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192 Telephone: (703) 648-4985, Fax: (703) 648-7757 E-mail: jcarlin@usgs.gov Samir Hakim (Data) Telephone: (703) 648-7955 Fax: (703) 648-7975 E-mail: shakim@usgs.gov

Internet: http://minerals.usgs.gov/minerals

ANTIMONY IN THE FOURTH QUARTER 2007

Consumption of primary antimony in the fourth quarter of 2007 was estimated by the U.S. Geological Survey to be 9% lower than that in the third quarter of 2007 and 13% lower than that in the fourth quarter of 2006. During the first 11 months of 2007, antimony imports totaled 25,800 metric tons (t) compared with a total of 27,300 t for the comparable period of 2006. During the first 11 months of 2007, China remained the leading supplier of antimony metal and antimony oxide to the United States.

Antimony prices remained fairly steady during the fourth quarter of 2007. The Platts Metals Week New York dealer price for antimony metal started the fourth quarter in the range of \$2.60 to \$2.64 per pound and finished the fourth quarter at \$2.64 to \$2.69 per pound.

U.S. Antimony Corp. (Thompson Falls, MT) announced assay results conducted at its Mexican subsidiary, Antimonio de Mexico S.A. de C.V. in the State of Queretaro, Mexico. The Mexican operation has been producing antimony concentrates for several years. Part of the feed for Antimonio's flotation mill would come from dumps from previous mining operations. The dumps are estimated to contain more than 10,000 t of contained antimony. The assays from these pits range from 1.69% antimony to 4.74% antimony (AntimonyNet, 2007c).

Stockpile Reserves Inc. (Lovelock, NV) announced that its reactivated Fencemaker Mine, about 50 miles southeast of Lovelock, NV, produced 9 t of antimony-in-concentrate during 2007. No other domestic mines were reported to have produced antimony-in-concentrate in 2007. The firm is looking for funds to further develop the mine. The mine has a long history of intermittent antimony production dating back to the 1880s (Richard Brown, Stockpile Reserves, Inc., written commun., February 11, 2008).

According to statistics published by the Government Administration of Customs in China, antimony exports from China, the world's leading antimony producer, declined 61% in 2007 compared with exports in 2006. The main export destinations in 2007 were Japan, the Netherlands, the Republic of Korea, and the United States. Industry observers attributed the sharp decline to a shortage of antimony concentrate in China (Metal-Pages, 2008). Several antimony producers in China reported a marked reduction in the production of antimony concentrates. Hsikwangshan Twinkling Star Co., which has an antimony production capacity of 40,000 metric tons per year (t/yr) in Hunan, expected its antimony output in 2007 to reach only 27,000 t. Shenzhen JieFu Industry Development, which has a 20,000-t/yr antimony capacity facility in Guangdong Province, was only operating the plant at about 50% of its capacity. Statistics from the China Nonferrous Metals Industry Association show that China produced 123,000 t of refined antimony in the first 10 months of 2007, about the same as in the comparable period of 2006. Other industry observers in China noted that rampant smuggling had reduced business through legal channels during 2007 (Platts Metals Week, 2007).

Metorex Ltd. (Saxonwold, South Africa) announced that its Consolidated Murchison Mine was still paralyzed by a strike with its mineworkers over wage levels. Murchison employed about 1,000 mineworkers. The Murchison Mine produced 576,000 t of antimony ore in 2006 and accounted for about 8% of world antimony production. The mine is located in the Murchison Greenstone belt near Gravelotte (AntimonyNet, 2007a).

China Metallurgical Group [(MCC) (Beijing, China)] reported that it planned to invest \$20 million to explore its antimony and tungsten property in the middle of Hunan Province. Reportedly, the firm had purchased the Zhazixi Antimony Mine (AntimonyNet, 2007b). Zhazixi is a 100-year old mine, with a capacity of 3,000 t/yr of refined antimony. MCC has appointed Zhongye Hunan Tungsten and Antimony Co., Ltd. to operate the mine.

Update

On February 7, 2008, the Platts Metals Week price for antimony was \$2.60 to \$2.65 per pound.

References Cited

AntimonyNet, 2007a, Metorex-owned Antimony Mine was paralysed by strike: AntimonyNet, August 26. (Accessed December 27, 2007, via http://antimonynet.com.)

- AntimonyNet, 2007b, MMC will develop antimony & tungsten projects in Hunan Province: AntimonyNet, August 21. (Accessed December 27, 2007, via http://antimonynet.com.)
- AntimonyNet, 2007c, U.S. Antimony announces assays from antimony and silver property in Mexico: AntimonyNet, November 26. (Accessed December 27, 2007, via http://antimonynet.com.)

Metal-Pages, 2008, Chinese antimony exports down 60.9% in 2008: Metal-

Pages, January 22. (Accessed January 23, 2008, via www.metal-pages.com.) Platts Metals Week, 2007, Minor Metals: Concentrate shortage limits Chinese

antimony output: Platts Metals Week, v. 78, no. 51, December 17, p. 13.

TABLE 1 SALIENT ANTIMONY STATISTICS $^{\rm 1}$

(Metric tons, antimony content, unless otherwise specified)

		2007						
	2006	First quarter	Second quarter	Third quarter	Fourth quarter	Total		
Production:								
Primary smelter								
Secondary	W	W	W	W	W	W		
Imports for consumption:	30,400	6,710	6,890	7,330 r	4,910 2	25,800		
Ore and concentrate	153	85	71	37 ^r	34 2	226		
Metal	7,260	1,380	1,740	1,520 ^r	1,020 2	5,660		
Oxide ⁴	23,000	5,250	5,070	5,780 ^r	3,860 2	20,000		
Exports:	4,470	878	981	1,120 ^r	620 ²	3,600		
Metal, alloys, and scrap (gross weight)	959	171	147	179 ^r	186 2	683		
Oxide ⁴	3,510	707	834	943 ^r	434 ²	2,920		
Consumption of primary antimony	10,400	2,430	2,350	2,280	2,080	9,140		
Price: Average cents per pound ⁵	238.01	256.28	252.17	256.92	263.67	257.26		
Stocks, end of period ⁶	2,110	2,260	2,210	2,190	2,080	XX		

Revised. W Withheld to avoid disclosing company proprietary data. XX Not applicable. -- Zero.

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.

³Data for January - November only; December data were not available at time of publication.

⁴Antimony content is calculated by the U.S. Geological Survey.

⁵Source: Platts Metals Week. New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

⁶Producer and consumer stocks.

TABLE 2 INDUSTRY STOCKS OF PRIMARY ANTIMONY IN THE UNITED STATES¹

(Metric tons, antimony content)

	2007 ²							
Class of material	First quarter	Second quarter	Third quarter	Fourth quarter				
Oxide	1,680	1,760	1,740	1,630				
Other ³	582	455	453	454				
Total	2,260	2,210	2,190	2,080				

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 held 52% of the

total stocks of antimony at the end of 2006.

³Includes ore and concentrate, sulfide, and residues.

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

(Metric tons, antimony content)

		2007					
Class of material consumed	2006	First quarter	Second quarter	Third quarter	Fourth quarter	Total	
Oxide	8,710	1,950	1,970	2,000	1,880	7,800	
Other ³	1,710	476	383	280	203	1,340	
Total	10,400	2,430	2,350	2,280	2,080	9,140	

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

²Estimated 100% coverage based quarterly respondents and respondents who consumed 72% of the total antimony in 2006.

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

TABLE 4 CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED 1

		2007								
Product	2006	First quarter	Second quarter	Third quarter	Fourth quarter	Total				
Metal ²	3,000	W	W	W	W	W				
Nonmetal ³	3,600	W	W	W	W	W				
Flame-retar dants:										
Plastics	2,810	96	215	90	91	492				
Other ⁴	1,000	122	25	137	104	388				
Total	3,810	218	240	227	195	880				
Reported consumption	10,400	710	666	622	554	2,550				
Total consumption ⁵	XX	2,430	2,350	2,280	2,080	9,140				

(Metric tons, antimony content)

W Withheld to avoid disclosing company proprietary data; included with "Reported consumption." XX Not applicable.

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

²Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.

³Includes adhesives, pigments, rubber, and textiles.

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

⁵Estimated 100% coverage based on quarterly respondents and respondents who consumed 72% of the total antimony in 2006.

TABLE 5

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

(Metric tons, antimony content)

				200	7		
	-	Januar y-		Third			January-
Class and country	2006	June	September	quarter ²	October	November	November ²
Ore and concentrate:				•			
Bolivia	130	93	11	23	11	11	139
Other	24	63	14	14		11	87
Total	153	156	25	37	11	22	226
Metal:							
China	5,070	1,730	39	986	344	474	3,530
Mexico	800	457	22	136	29	17	638
Peru	846	274	19	37	72	18	401
Other	543	665	220	356	62		1,080
Total	7,260	3,130	300	1,520	507	508	5,660
Oxide: ³							
Belgium	1,680	853	169	451	103	160	1,570
China	10,600	5,170	1,170	3,160	996	1,250	10,600
Mexico	8,780	4,130	728	2,070	657	636	7,490
Other	1,910	172	20	101	24	36	333
Total	23,000	10,300	2,090	5,780	1,780	2,080	20,000
Grand total	30,400	13,600	2,410	7,330	2,300	2,610	25,800
Other antimony compounds (gross weight)	47	19		5			24

-- Ze ro.

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.