

# Mineral Industry Surveys

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## ANTIMONY IN THE SECOND QUARTER 2009

Consumption of primary antimony in the second quarter of 2009 was estimated by the U.S. Geological Survey to be 9% higher than that in the first quarter of 2009 and 30% lower than that in the second quarter of 2008. During the first 5 months of 2009, antimony imports totaled 8,260 metric tons (t), compared with a total of 12,600 t for the comparable period of 2008. During the first 5 months of 2009, China was the leading supplier of antimony metal and antimony oxide to the United States.

Antimony prices remained in a narrow range during the second quarter of 2009. The Platts Metals Week New York dealer price for antimony metal started the second quarter in the range of \$2.00 to \$2.05 per pound, and ended the second quarter in the range of \$2.20 to \$2.25 per pound.

U.S. Antimony Corp. (Thompson Falls, MT) announced in April that its new Mexican smelter was in the process of ramping up production and expected to begin shipments of crude antimony oxide to the company's processing facility in Montana by yearend, where it will be further refined and sold as either oxide or metal. The company planned to begin production in the summer of 2009 at its new Mexican antimony-silver mine, located in Queretaro State. This mine was expected to supply antimony ore to both of the firm's smelters (American Metal Market, 2009).

Chenzhou Mining Group Co. Ltd. (Guanzhuang, Yuanling Province, China) announced the acquisition of the Zhazixi Antimony Mine (Anhua, Hunan Province, China). Zhazixi had a production capacity of 150,000 metric tons per year (t/yr) of

antimony ore, and also had a capacity to produce 3,000 t/yr of refined antimony (China Metal Market—Precious & Minor Metals, 2009).

Silverado Gold Mines, Ltd. (Vancouver, British Columbia, Canada) announced the results of a preliminary feasibility study on its Workman's Bench antimony and gold lode deposit at its Nolan Creek property in Alaska. The company planned to operate the mine for 5 months during the winter followed by 3 months of mill processing. At full production, the mill would process 12,500 t/yr of ore, which would yield 5,000 t of stibnite (antimony ore mineral) concentrate and up to 4,590 troy ounces of gold (Silverado Gold Mines Ltd., 2009).

### Update

On October 8, 2009, the Platts Metals Week dealer price for antimony was \$2.70 to \$2.85 per pound.

### References Cited

- American Metal Market, 2009, U.S. Antimony ramping up new Mexican smelter: American Metal Market, v. 117, no. 14-3, p. 1, 6.
- China Metal Market—Precious & Minor Metals, 2009, Chenzhou Mining to acquire Zhazixi antimony deposit in Hunan: China Metal Market—Precious & Minor Metals, no. 111, June, p. 8.
- Silverado Gold Mines, Ltd., 2009, Silverado announces results of preliminary feasibility study on Workman's Bench gold and antimony deposit at Nolan Creek: Vancouver, British Columbia, Canada, Silverado Gold Mines Ltd. press release, January 5, 1 p.

TABLE 1  
SALIENT ANTIMONY STATISTICS<sup>1</sup>

(Metric tons, antimony content, unless otherwise specified)

	2008 <sup>p</sup>	2009	
		First quarter	Second quarter
Production:			
Primary smelter	--	--	--
Secondary	W	W	W
Imports for consumption:	29,000	4,750 <sup>r</sup>	2,630 <sup>2</sup>
Ore and concentrate	164 <sup>r</sup>	29 <sup>r</sup>	11 <sup>2</sup>
Metal	7,050	733 <sup>r</sup>	587 <sup>2</sup>
Oxide <sup>3</sup>	21,800	3,990 <sup>r</sup>	2,030 <sup>2</sup>
Exports:	4,850	491 <sup>r</sup>	560 <sup>2</sup>
Metal, alloys, and scrap (gross weight)	1,290	93 <sup>r</sup>	34 <sup>2</sup>
Oxide <sup>3</sup>	3,560	398 <sup>r</sup>	526 <sup>2</sup>
Consumption of primary antimony	8,000 <sup>r</sup>	1,660 <sup>r</sup>	1,810
Price, average, cents per pound <sup>4</sup>	279.54	199.75	207.17
Stocks, end of period <sup>5</sup>	1,500	833 <sup>r</sup>	818

<sup>p</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices.

<sup>2</sup>Data for April and May only; June data were not available at time of publication.

<sup>3</sup>Antimony content is calculated by the U.S. Geological Survey.

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

<sup>5</sup>Producer and consumer stocks.

TABLE 2  
INDUSTRY STOCKS OF PRIMARY ANTIMONY  
IN THE UNITED STATES

(Metric tons, antimony content)

Class of material	2009 <sup>1</sup>	
	First quarter <sup>r</sup>	Second quarter
Oxide	440	431
Other <sup>2</sup>	393	387
Total	833	818

<sup>r</sup>Revised.

<sup>1</sup>Estimated 100% coverage based on quarterly respondents and respondents who held 52% of the total stocks of antimony at the end of 2007.

<sup>2</sup>Includes ore and concentrate, sulfide, and residues.

TABLE 3  
CONSUMPTION OF PRIMARY ANTIMONY<sup>1,2</sup>

(Metric tons, antimony content)

Class of material consumed	2008 <sup>r, p</sup>	2009	
		First quarter <sup>r</sup>	Second quarter
Oxide	7,060	1,420	1,430
Other <sup>3</sup>	935	246	381
Total	8,000	1,660	1,810

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>2</sup>Estimated 100% coverage based on quarterly respondents and respondents who consumed 27% of the total antimony in 2007.

<sup>3</sup>Includes ores and concentrates, metal, sulfide, and residues.

TABLE 4  
CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL  
PRODUCED<sup>1</sup>

(Metric tons, antimony content)

Product	2008 <sup>p</sup>	2009	
		First quarter	Second quarter
Metal <sup>2</sup>	W	W	W
Nonmetal <sup>3</sup>	W	W	W
Flame-retardants:			
Plastics	190	47	28
Other <sup>4</sup>	485	19	16
Total	675	66	44
Reported consumption	2,390	519 <sup>r</sup>	546
Total consumption <sup>5</sup>	8,000 <sup>r</sup>	1,660 <sup>r</sup>	1,810

<sup>p</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Reported consumption."

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

<sup>2</sup>Includes adhesives, pigments, rubber, and textiles.

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

<sup>4</sup>Includes ammunition primers, pigments, ceramics and glass, and plastics.

<sup>5</sup>Estimated 100% coverage based on quarterly respondents and respondents who consumed 74% of the total antimony in 2007.

TABLE 5  
U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY CLASS AND COUNTRY<sup>1</sup>

(Metric tons, antimony content)

Class and country	2009					January- May <sup>2</sup>
	2008 <sup>p</sup>	First quarter <sup>2</sup>	March	April	May	
<b>Ore and concentrate:</b>						
Bolivia	88	11	--	--	11	22
Other	76	19	6	--	--	19
<b>Total</b>	<b>164</b>	<b>29</b>	<b>6</b>	<b>--</b>	<b>11</b>	<b>41</b>
<b>Metal:</b>						
China	5,190	439	198	241	80	760
Mexico	865	114	--	91	37	242
Peru	433	110	18	15	36	161
Other	571	70	5	56	31	157
<b>Total</b>	<b>7,050</b>	<b>733</b>	<b>221</b>	<b>403</b>	<b>184</b>	<b>1,320</b>
<b>Oxide:<sup>3</sup></b>						
Belgium	1,590	166	56	189	88	580
China	12,100	2,370	363	476	612	4,200
Mexico	7,640	761	147	66	266	1,090
Other	462	696	609	173	156	1,030
<b>Total</b>	<b>21,800</b>	<b>3,990</b>	<b>1,180</b>	<b>904</b>	<b>1,120</b>	<b>6,900</b>
<b>Grand total</b>	<b>29,000</b>	<b>4,750</b>	<b>1,400</b>	<b>1,310</b>	<b>1,320</b>	<b>8,260</b>
Other antimony compounds (gross weight)	14	5	--	--	--	5

<sup>p</sup>Preliminary. -- Zero.

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

<sup>2</sup>May include revisions to prior months data.

<sup>3</sup>Antimony content is calculated by the U.S. Geological Survey.

Source: U.S. Census Bureau.