

Mineral Industry Surveys

For information, contact:

James F. Carlin, Jr., Bismuth 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

Lisa Mersdorf (Data)
Telephone: (703) 648-7941
Fax: (703) 648-7975
E-mail: lmersdorf@usgs.gov

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

BISMUTH IN THE FOURTH QUARTER 2009

Bismuth consumption in the United States for the fourth quarter of 2009 was estimated to be 329 metric tons (t), which was 4% higher than that in the third quarter of 2009, and 26% lower than that in the fourth quarter of 2008. Preliminary totals for bismuth imports in 2009 were 1,250 t compared to 1,930 t in 2008. Preliminary data for 2009 indicated that China, Belgium, the Republic of Korea, and the United Kingdom, in descending order, were the leading suppliers of bismuth to the United States.

The New York dealer price for bismuth, as published in Platts Metals Week, started October 2009 at \$8.75 to \$9.25 per pound and decreased through the fourth quarter to finish at \$7.35 to \$8.00 per pound at the end of December. The average price for 2009 was \$7.84 per pound.

Fortune Minerals Ltd. (London, Ontario, Canada) reportedly signed a letter of intent with minor metals processor and distributor MCP Group SA (Tilly, Belgium) for the sale of bismuth from its in-development polymetallic NICO deposit in the Northwest Territories, Canada. Officials stated that the NICO deposit was expected to come onstream in late 2012. The project was originally expected to start in early- to mid-2012, but that timeline was pushed back because of some minor permitting slowdowns. NICO was expected to produce about 1,900 metric tons per year (4.2 million pounds per year) of bismuth, in addition to substantial amounts of cobalt, copper, and gold. NICO's anticipated output would expand world

bismuth production by about 30%. Fortune also announced that it had engaged French investment bank BNP Paribas to arrange a letter of intent with Glencore International AG (Baar, Switzerland) for a credit line that could be used as working capital to restart its La Oroya polymetallics smelter, which has been idle since June 2009. The funds also could be partially used to finance part of its environmental clean-up program at La Oroya which was estimated to cost \$156 million. La Oroya refined bismuth as well as several other metals (American Metal Market, 2010).

Doe Run Peru SRL (Lima, Peru) announced that it signed a letter of intent with Glencore International AG (Baar, Switzerland) for a credit line that could be used as working capital to restart its La Oroya polymetallics smelter, which has been idle since June 2009. The funds also could be partially used to finance part of its environmental clean-up program at La Oroya which was estimated to cost \$156 million. La Oroya refined bismuth as well as several other metals (American Metal Market, 2010).

Update

On March 18, 2010, the Platts Metals Week price for bismuth was \$7.80 to \$8.10 per pound.

References Cited

- American Metal Market, 2010, News briefs: American Metal Market, v. 118, no. 9-4, March 4, p. 9.
Riley, Anne, 2010, Fortune, MCP close to bismuth pact: American Metal Market, v. 118, no. 8-2, February 23, p. 9.

TABLE 1
SALIENT BISMUTH STATISTICS¹

(Kilograms unless otherwise specified)

	2008	2009				
		First quarter	Second quarter	Third quarter	Fourth quarter	Year to date
Consumption ²	1,090,000 ^r	291,000 ^r	347,000 ^r	317,000 ^r	329,000	1,280,000
Exports ³	375,000	110,000	60,200	90,800	136,000	397,000
Imports for consumption	1,930,000	186,000	238,000	372,000	455,000	1,250,000
Price per pound, dealer, average of period	\$12.11	\$8.31	\$7.43	\$7.08	\$8.53	\$7.84
Stocks, end of period, consumer	228,000	232,000	227,000	220,000 ^r	219,000	XX

^rRevised. XX Not applicable.

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

²Estimated, based on net imports.

³Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

TABLE 2
ESTIMATED BISMUTH METAL CONSUMED
IN THE UNITED STATES, BY USE¹

(Kilograms)

Use	2008 ^r	2009				
		First quarter ^r	Second quarter ^r	Third quarter	Fourth quarter	Year to date
Chemicals ²	597,000	164,000	183,000	216,000	227,000	791,000
Bismuth alloys	75,000	18,700	17,900	24,200 ^r	19,100	79,900
Metallurgical additives	375,000	103,000	141,000	71,200 ^r	77,500	392,000
Other	37,700	5,010	5,110	5,280	5,330	20,700
Total	1,090,000	291,000	347,000	317,000 ^r	329,000	1,280,000

^rRevised.

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

²Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

TABLE 3
U.S. EXPORTS FOR CONSUMPTION OF BISMUTH METAL, BY COUNTRY¹

(Kilograms)

Country	2008	2009						
		First quarter	Second quarter	Third quarter	October	November	December	January-December
Argentina	8,340	22	21	177	--	--	--	220
Belgium	--	10,600	8,340	19,300	--	18,300	--	56,600
Brazil	28,400	7,270	--	--	--	6,090	--	13,400
Canada	55,100	3,900	5,330	9,940	1,500	4,760	7,520	32,900
China	3,210	1,540	8,250	286	2,680	16,000	--	28,800
Colombia	3,120	1,230	--	--	--	--	--	1,230
Costa Rica	2,130	--	--	--	--	--	--	--
Czech Republic	3,400	99	--	--	--	--	--	99
Dominican Republic	8,950	665	762	5,120	--	--	--	6,550
France	13,600	35,200	8,950	35,700	1,230	--	40,300	121,000
Germany	3,380	163	--	695	1,560	--	--	2,420
Hong Kong	1,730	1,610	--	681 ^r	120	--	--	2,410
Israel	3,490	--	--	-- ^r	--	--	--	--
Japan	4,460	--	1,600	6,650	--	2,760	--	11,000
Mexico	76,400	25,900	12,900	7,540	3,370	5,670	3,920	59,300
Saudi Arabia	1,470	--	27	--	--	--	--	27
Singapore	8,680	100	150	195	--	--	--	445
Thailand	25,500	3,110	1,110	1,100	1,150	1,280	838	8,590
United Kingdom	101,000	--	685	--	1,110	581	2,330	4,710
Vietnam	18,400	18,800	11,500	3,120	--	5,060	6,790	45,200
Other	3,580	191	614	243	719	19	--	1,790
Total	375,000	110,000	60,200	90,800	13,400	60,500	61,700	397,000

^rRevised. -- Zero.

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

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL, BY COUNTRY¹

(Kilograms)

Country	2008	2009						
		First quarter	Second quarter	Third quarter	October	November	December	January-December
Belgium	509,000	50,700	141,000	101,000	52,800	42,400	62,500	450,000
Canada	18,500	2,250	995	1,900	119	473	--	5,740
China	998,000	96,700	63,900	163,000	112,000	31,800	86,900	554,000
France	23,100	--	--	--	--	--	--	--
Germany	696	45	250	1	--	--	1,300	1,600
Hong Kong	93,500	--	--	--	--	--	--	--
Kazakhstan	--	9,850	--	--	--	--	--	9,850
Korea, Republic of	--	--	--	57,100	--	--	18,000	75,100
Mexico	40,000	--	--	39,400	20,000	--	--	59,400
Peru	55,700	--	23,100	6,280	--	--	--	29,400
Russia	--	3,200	--	120	--	--	--	3,320
United Kingdom	186,000	22,800	9,020	4,250	8,330	18,000	--	62,400
Other	1,480	165	5	--	4	--	--	174
Total	1,930,000	186,000	238,000	372,000	194,000	92,600	169,000	1,250,000

-- Zero.

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

Source: U.S. Census Bureau.