

Mineral Industry Surveys

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BISMUTH IN THE SECOND QUARTER 2007

Bismuth consumption in the United States for the second quarter of 2007 was estimated to be 459 metric tons (t), which was 4% below that of the first quarter 2007 and 23% below that of the second quarter 2006. The estimated consumption breakdown for bismuth in the second quarter was 46% for metallurgical additives; 34% for fusible alloys; 18% for chemicals; and 2% for other (table 2).

The New York dealer price for bismuth, as published in Platts Metals Week, started the month of April at \$10.50 to \$11.00 per pound and rose steadily through the second quarter, ending June at \$18.00 to \$18.50 per pound.

Hunan Shizhuyuan Nonferrous Metals Co., one of China's leading bismuth producers, started trial runs at its new concentrator, which was due to be commissioned in the summer of 2007. As a result of this addition, Hunan's bismuth production was expected to rise by 17% in 2007 to 700 t. Hunan produced 600 t of bismuth in 2006, about 50 t lower than that in 2005, as falling grades and a tropical storm affected output. The operation is now producing bismuth at a rate of about 70 metric tons per month (t/mo), up from 40 t/mo in the first quarter of the year. Production was down during the first quarter as a result of winter-related mining difficulties (Mining Journal, 2007).

The Government of China announced that it would eliminate, effective July 1, the 5% rebate on the value-added tax (VAT) on exports of antimony trioxide, tellurium, and selenium and would

reduce the VAT rebate from 15% to 5% for bismuth with a purity above 99.99% and bismuth rolled products (Ryan's Notes, 2007).

Fortune Minerals Ltd. (London, Ontario, Canada) issued an update on its NICO cobalt-gold-bismuth deposit in the Northwest Territories, Canada. The company was conducting a second \$10 million phase of a test mining program to deepen the underground workings following its 2006 bulk sampling program. The 2007 program began in February. Additional environmental surveys were also being conducted to support the environmental assessment and permitting of the NICO mine. Fortune had already purchased the Golden Giant mill and surface facilities at Hemlo, Ontario, Canada, for dismantling and relocation to NICO. Upon completion of the 2007 test mining program, most of the underground development will have been completed to support future underground mining operations after receipt of the requisite permits (Fortune Minerals, Ltd., 2007).

References Cited

- Fortune Minerals, Ltd., 2007, Fortune Minerals provides NICO project update: London, Ontario, Canada, Fortune Minerals, Ltd. news release, June 21, 2 p.
Mining Journal, 2007, Minor metals settle in May: Mining Journal, June 1, p. 8.
Ryan's Notes, 2007, China changes VAT rebates: Ryan's Notes, v. 13, no. 26, June 25, p. 6.

TABLE 1
SALIENT BISMUTH STATISTICS¹

(Kilograms unless otherwise specified)

| | 2006 | 2007 | |
|--|-----------|------------------------|------------------------|
| | | First quarter | Second quarter |
| Consumption | 1,970,000 | 476,000 ^r | 459,000 |
| Exports ² | 311,000 | 180,000 ^{r,3} | 97,700 ^{3,4} |
| Imports for consumption | 2,300,000 | 738,000 ^{r,3} | 413,000 ^{3,4} |
| Price per pound, dealer, average of period | \$5.03 | \$9.35 | \$16.73 |
| Stocks, end of period, consumer | 156,000 | 134,000 ^r | 140,000 |

^rRevised.

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

²Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Import and export data for June 2007 were not available at time of publication.

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

(Kilograms)

| Use | 2006 | 2007 | |
|-------------------------|-----------|----------------------------|----------------|
| | | First quarter ^r | Second quarter |
| Chemicals ² | 360,000 | 83,500 | 83,500 |
| Bismuth alloys | 662,000 | 157,000 | 157,000 |
| Metallurgical additives | 925,000 | 232,000 | 213,000 |
| Other | 23,300 | 3,840 | 6,310 |
| Total | 1,970,000 | 476,000 | 459,000 |

^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 OF BISMUTH METAL, ALLOYS AND WASTE AND SCRAP, BY COUNTRY¹

(Kilograms, metal content)

| Country | 2006 | 2007 ² | | | | |
|----------------------|---------|-------------------|----------------------|--------|--------|-----------------|
| | | March | First quarter | April | May | January- May |
| Argentina | 9,400 | -- | -- | -- | 12 | 12 |
| Australia | 20 | -- | -- | 19 | -- | 19 |
| Belgium | -- | -- | 43,700 | 15,900 | -- | 59,700 |
| Brazil | 20 | -- | 3,630 | -- | -- | 3,630 |
| Canada | 72,100 | 6,940 | 25,200 ^r | 2,860 | 9,600 | 37,600 |
| Chile | 916 | -- | -- | -- | -- | -- |
| Czech Republic | -- | -- | -- | -- | 1,270 | 1,270 |
| Dominican Republic | 42,200 | 1,160 | 2,730 ^r | 1,160 | 355 | 4,240 |
| Egypt | -- | -- | 84 | -- | -- | 84 |
| France | 14,400 | -- | 41 | -- | -- | 41 |
| Germany | 210 | 117 | 117 ^r | -- | -- | 117 |
| Hong Kong | 5,740 | -- | -- | -- | 331 | 331 |
| India | 164 | -- | -- | -- | -- | -- |
| Ireland | 324 | -- | -- | -- | -- | -- |
| Israel | 2,000 | -- | 8,730 | -- | -- | 8,730 |
| Japan | 15,000 | 2,720 | 10,800 ^r | 1,510 | 1,700 | 14,000 |
| Korea, Republic of | 309 | -- | -- | -- | -- | -- |
| Malaysia | -- | -- | -- | -- | 100 | 100 |
| Mexico | 9,400 | 1,950 | 8,640 ^r | 1,240 | 1,230 | 11,100 |
| Morocco | 717 | -- | -- | -- | -- | -- |
| Saudi Arabia | 50 | -- | -- | -- | -- | -- |
| Singapore | 29,300 | 1,590 | 4,290 ^r | -- | -- | 4,290 |
| Spain | 115 | -- | -- | -- | -- | -- |
| Sweden | -- | -- | -- | 23 | -- | 23 |
| Taiwan | 2,030 | -- | -- | -- | -- | -- |
| Thailand | 2,690 | -- | 297 | -- | -- | 297 |
| United Arab Emirates | -- | -- | 12,400 | -- | -- | 12,400 |
| United Kingdom | 6,050 | -- | -- | 4,620 | 36,200 | 40,800 |
| Vietnam | 97,800 | 23,400 | 59,900 ^r | 12,000 | 7,420 | 79,300 |
| Total | 311,000 | 37,900 | 180,000 ^r | 39,400 | 58,300 | 278,000 |

^rRevised. -- Zero.

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

²All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

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

(Kilograms)

| Country | 2006 | 2007 ² | | | | |
|----------------|-----------|-------------------|----------------------|---------|---------|-----------------|
| | | March | First quarter | April | May | January- May |
| Bahamas, The | 1,080 | -- | -- | -- | -- | -- |
| Belgium | 876,000 | 89,900 | 318,000 ^r | 81,400 | 76,300 | 476,000 |
| Canada | 9,100 | 640 | 3,670 ^r | 1,590 | 1,690 | 6,940 |
| China | 356,000 | 63,400 | 189,000 ^r | 79,000 | 58,000 | 326,000 |
| France | 3 | -- | -- | 200 | -- | 200 |
| Germany | 295 | 17,200 | 172,000 ^r | -- | 17,300 | 35,000 |
| Hong Kong | 74,600 | -- | -- | -- | -- | -- |
| Italy | 380 | -- | 150 | -- | 127 | 277 |
| Mexico | 552,000 | 40,000 | 120,000 ^r | 18,000 | 40,900 | 179,000 |
| Netherlands | 1,080 | 26 | 71 ^r | 16 | -- | 87 |
| Peru | 17,600 | -- | -- | 1,490 | 222 | 1,720 |
| Spain | 1,920 | -- | -- | -- | -- | -- |
| United Kingdom | 406,000 | 60,900 | 89,200 ^r | 13,400 | 23,300 | 126,000 |
| Total | 2,300,000 | 272,000 | 738,000 ^r | 195,000 | 218,000 | 1,150,000 |

^rRevised. -- Zero.

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

²All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.