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MINERAL INDUSTRY SURVEYS

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MAGNESIUM IN THE SECOND QUARTER 1997

Domestic primary magnesium production in the second quarter of 1997 was 30,000 metric tons, virtually the same as production in the first quarter, according to the U.S. Geological Survey. Producers' shipments in the second quarter of 1997 were 32,500 tons, and inventories decreased to 13,600 tons.

Magnesium exports through May 1997 were slightly lower than those in the same period of 1996. Imports of magnesium

were 40% higher than those in the first 5 months of 1996. Imports of magnesium alloys in 1997, primarily from Canada, were more than double the imports in the same period of 1996; all other categories of imports were less than the 1996 level.

Primary magnesium prices began a slow increase in mid-May, reversing the downward trend that began in 1995. Quoted magnesium prices are shown in the following table.

| | Units | Beginning of quarter | End of quarter |
|-------------------------------------|------------------------|----------------------|----------------|
| Metals Week U.S. spot Western | Dollars per pound | \$1.51-\$1.63 | \$1.62-\$1.68 |
| Metals Week U.S. spot dealer import | do. | 1.26-1.37 | 1.42-1.49 |
| Metals Week European free market | Dollars per metric ton | 2,450-2,500 | 2,550-2,675 |
| Metal Bulletin free market | do. | 2,300-2,500 | 2,475-2,550 |

Congo Minerals Inc. and Ashurst Technologies Inc. announced plans to produce magnesium in Congo (Brazzaville) by 2002. The two Canada-based firms acquired two exploration permits in the Kouili region for areas that contain substantial quantities of magnesium and potassium salts, mainly in the form of carnallite ($KCl \cdot MgCl_2 \cdot 6H_2O$). Carnallite reserves are estimated to be 8 billion tons, containing about 8% magnesium. Congo Minerals is beginning to drill for bulk samples, and plans to spend about \$10 million to bring the project to a feasibility stage in about 18 months. At that point, the company will look for additional financing. Initial plans call for a 100,000-ton-per-year magnesium plant to be built near the mine, with a first-phase production capacity of 50,000 tons per year. Ashurst is negotiating with Ukraine for electrolytic technology to be used in the proposed plant. Energy for the new plant will be supplied by existing onshore and offshore natural gas and potential hydroelectric power. Magnesium produced at the new plant is expected to be marketed to the automotive industry (Metal Bulletin, 1997).

In Kazakstan, the Ust-Kamenogorsk Titanium-Magnesium Works plans to resume magnesium production by the end of 1997. Ust-Kamenogorsk plans to complete construction of a carnallite processing facility by the third quarter and start magnesium production at a level of 5,000 to 10,000 tons per year in the fourth quarter. The magnesium plant has been idle since 1994, although the company has been producing titanium by recycling magnesium chloride (Platt's Metals Week, 1997b).

Norsk Hydro A/S announced that it would double the annual capacity of its Becancour, Canada, primary magnesium plant to 86,000 tons. Construction of the first phase of 25,000-tons-per-year capacity is scheduled to begin in 1998, with completion expected in 2000. Construction of the second phase will start after the first phase is operational. A projected increase in magnesium demand by the automotive industry was cited as the reason for the expansion (Platt's Metals Week, 1997a).

In the final results of an administrative review of antidumping duties assessed on magnesium imports from Canada, the International Trade Administration (ITA) determined that the

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duty rate for Norsk Hydro Canada Inc. was 0% for the period August 1, 1995, through July 31, 1996. This rate was effective for all U.S. imports for consumption of primary magnesium after publication of the results in the Federal Register (U.S. Department of Commerce, 1997b). The ITA also published a notice of an opportunity to request administrative reviews of the antidumping duties for pure magnesium and the countervailing duties for pure and alloy magnesium from Canada. The period covered under the antidumping duty request was August 1, 1996, to July 31, 1997, and the period for the countervailing duty request was January 1, 1996, through December 31, 1996 (U.S. Department of Commerce, 1997a).

Israel's Ortal Diecasting Ltd. received an initial order from General Motors Corp. for V-8 engine parts in some pickup trucks and for parts in gear boxes. This order is estimated to be worth about \$1 million over a 5-year period (Platt's Metals Week, 1997c).

The International Magnesium Association (IMA) held its 54th annual conference in Toronto, Ontario, Canada, on June 8-10, 1997. Attendees represented 18 countries, with a total attendance of 353. Topics covered by papers presented at the conference included supply and demand analysis, future magnesium prospects, automotive industry applications, and a

life-cycle analysis. Proceedings from the conference are available for a fee from the IMA (703-442-8888); the 55th annual conference will be held in San Diego, CA, on May 17-19, 1998.

The IMA also has established a site on the World Wide Web. The address is <http://www.intlmag.org/>. In addition to information about the IMA, the Internet site has links to some of IMA's member companies.

References Cited

- Metal Bulletin, 1997, Congo could see new mining project: Metal Bulletin, no. 8186, June 12, p. 7.
- Platt's Metals Week, 1997a, Automotive demand spurs Hydro magnesium expansion: Platt's Metals Week, v. 68, no. 24, June 16, p. 1, 10.
- 1997b, Kazak producer to resume Mg...: Platt's Metals Week, v. 68, no. 24, June 16, p. 13.
- 1997c, Ortal, GM in Mg parts deal: Platt's Metals Week, v. 68, no. 27, July 7, p. 14.
- U.S. Department of Commerce, International Trade Administration, 1997a, Antidumping or countervailing duty order, finding, or suspended investigation—Opportunity to request administrative review: Federal Register, v. 62, no. 149, August 4, p. 41925-41926.
- 1997b, Pure magnesium from Canada; final results of antidumping duty administrative review: Federal Register, v. 62, no. 157, August 14, p. 43513-43514.

TABLE 1
U.S. IMPORTS FOR CONSUMPTION AND EXPORTS OF MAGNESIUM 1/

(Metric tons)

| | 1996 | 1997 | | | | |
|---|---------------|--------------|--------------|--------------|--------------|---------------|
| | | Jan.-Feb. | Mar. | Apr. | May | Jan.-May |
| Imports: | | | | | | |
| Metal | 17,300 | 2,190 | 757 | 1,250 | 1,540 | 5,730 |
| Waste and scrap | 3,340 | 672 | 164 | 263 | 217 | 1,320 |
| Alloys (magnesium content) | 24,600 | 7,000 | 2,930 | 2,950 | 3,130 | 16,000 |
| Sheet, tubing, ribbons, wire, powder, and other (magnesium content) | 1,280 | 72 | 37 | 97 | 34 | 240 |
| Total | 46,600 | 9,930 | 3,890 | 4,560 | 4,920 | 23,300 |
| Exports: | | | | | | |
| Metal | 17,000 | 2,720 | 1,310 | 1,450 | 1,270 | 6,750 |
| Waste and scrap | 8,500 | 1,970 | 906 | 1,010 | 752 | 4,640 |
| Alloys (gross weight) | 6,970 | 1,280 | 612 | 663 | 777 | 3,330 |
| Sheet, tubing, ribbons, wire, powder, and other (gross weight) | 7,970 | 701 | 355 | 204 | 314 | 1,570 |
| Total | 40,500 | 6,660 | 3,180 | 3,330 | 3,120 | 16,300 |

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

