

THE MINERAL INDUSTRY OF GUYANA

By Alfredo Gurmendi

Guyana's principal mineral commodities, namely bauxite and gold, continued to contribute to its favorable trade balance of \$120 million in 1995. Bauxite and gold accounted for almost 42% of its exports. In 1995, bauxite production amounted to an estimated 2.1 million metric tons (Mt), or about 2% of the world's bauxite production. Gold output amounted to 11.8 metric tons (t). However, the Omai gold mine, owned by a joint venture between the Canadian firms Cambior Inc. (65%), Golden Star Resources (30%), and the Guyana Government (5%), was forced to close in August when a tailings pond dam burst, spilling cyanide-bearing effluent into the nearby Essequibo River. The Omai Mine was scheduled to return to production by the second quarter of 1996. The completion of its mill expansion, also planned for the second quarter, will increase milling capacity from 12,000 metric tons per day (t/d) to 18,000 t/d. International attention to the Guiana Shield and investment in exploration for gold proceeded steadily, along with increasing exploration interest in diamond. In 1995, Guyana's gross domestic product (GDP) was \$1.5 billion,¹ which represented an annual growth of 8.3% with an inflation rate of 7%.

All mineral rights are vested within the State; mining concessions are negotiated with Government agencies. They are the Bauxite Industry Development Co. Ltd. (BIDCO) for bauxite, the Guyana Geology and Mines Commission for gold and diamonds, and the Guyana Natural Resources Agency for oil. The Guyana Gold Board (GGB), established in 1982, has been the sole official buyer of unprocessed gold.

The Government continued to seek private investment for exploitation of mineral deposits. The Mining Act of 1989 limited small- and medium-scale mining to Guyanese citizens only, which led immediately to problems of definition of size. Foreigners were restricted to large-scale mining, except in the case where a claim operator specifically requested foreign technical assistance and the Guyana Geology and Mines Commission supported the work permit application. Foreigners caught illegally mining in the interior were subject to charges and forfeiture of all equipment. Although joint ventures between local and foreign companies were encouraged, 100% foreign ownership of Guyanese operations was allowed.

Environmental review of new projects was the responsibility of the Guyana Agency for Health Sciences Education, Environment, and Food Policy. Emerging

environmental problems included mercury contamination of soils and waters resulting from gold recovery by individuals as well as dredges. Microbial contamination of rivers near mining camps has been detected, but is considered easily remedied or prevented.

Guyana was the fourth largest bauxite producer in Latin America after Brazil, Jamaica, and Suriname (*See table 1.*) Declared gold production (the amount sold to the GGB) remained at the same level of the previous year. Traditionally, miners had smuggled much of their recovered gold into Brazil or Venezuela. Since 1990, however, the GGB has paid miners for gold using the current exchange rate rather than the unrealistic old official rate (G\$50=US\$1 in 1990), thus reducing the attractiveness of smuggling. A small amount of silver, equivalent to approximately 5% of gold output, was recovered during refining of the gold.

The entire bauxite industry was overseen by BIDCO. Bauxite mining and processing were done by BIDCO's subsidiary, Guyana Mining Enterprise Ltd. (Guymine), or under contract to Guymine; however, Minproc Engineering of Australia (MINPROC) assumed management of the bauxite industry from Guymine in 1993. Guymine's operations were split into Linden Mining Enterprise (LINMINE) and Berbice Mining Co. The Government was planning to privatize its bauxite industry in late 1995 or early 1996. A management team of MINPROC will assist LINMINE to improve its standing and determine its salability. Several international companies were actively involved in the bauxite industry (*See table 2.*) The domestic private sector dominated the production of gold and diamonds. Five companies held large-scale mining licenses. There were also about 20 prospecting licenses for gold and precious stones and a number of license applications on file. Local subsidiaries of private foreign firms carried out petroleum exploration, with little discernible success.

Besides its minority interest in Omai, Golden Star was pressing the exploration of its placer deposit concession near Mahdia. South American Goldfields, which had owned the Peter's Mine, Akaiwong, Aurora, Five Star, and Quartz Hill properties, merged with Golden Star to form Golden Star Resources Ltd. Sutton Resources Ltd. of Vancouver, British Columbia, pressed its drill work on the Marudi Hill prospect in southern Guyana.

During 1995, Golden Star also continued work on its alluvial diamond evaluation program at Red Hill Loop,

Eping, and Apaikwa. Baracara Quarries and Toolsie Persaud Ltd. produced gravel near Bartica. The Government's Teperu-Itabu Quarry was being reopened in response to overwhelming demand for construction materials, and consideration was given to using Omai gold mine waste rock for aggregate and boulders.

Guyana has diversified the formerly bauxite-oriented mineral industry by its 7-year gold and diamond promotion program. The intensive, internationally funded exploration activity has resulted in augmented gold production, which is expected to increase further. Large-scale gold operations, such as those of the Omai Mine, would significantly strengthen Guyana's economy.

¹Where necessary, values have been converted from Guyanese dollars (G\$) to U.S. dollars at an imputed average exchange rate of G\$130.7=US\$1.00.

Major Sources of Information

Bauxite Industry Development Co. Ltd. (BIDCO)

71 Main St.
Georgetown, Guyana
Telephone: (592) 2-57780

Guyana Geology and Mines Commission

P.O. Box 1028
68 Upper Brickdam
Georgetown, Guyana
Telephone: (592) 2-53148
Fax: (592) 2-53047

Guyana Gold Board

c/o Guyana Geology and Mines Commission Compound
68 Upper Brickdam
Georgetown, Guyana
Telephone: (592) 2-53173

Guyana Natural Resources Agency

41 Brickdam and Boyle Place
Stabroek
Georgetown, Guyana
Telephone: (592) 2-66549
Fax: (592) 2-71211

Major Publications

American Embassy, Georgetown: Minerals Questionnaire, annual.

Guyana Geology and Mines Commission: Mineral Resources of Guyana, 1985, 14 pp.

International Bauxite Association: IBA Quarterly Review, quarterly.

U.S. Department of Commerce, International Trade Administration: Foreign Economic Trends and Their Implications for the United States, Guyana, annual.

TABLE 1
GUYANA: PRODUCTION OF MINERAL COMMODITIES 1/

Commodity 2/		1991	1992	1993	1994	1995 e/
Aluminum: Bauxite, dry equivalent, gross weight	thousand metric tons	2,200	2,380	2,130	2,100 e/	2,100
Diamond	carats	21,900	44,800	50,000 e/	34,000 e/	34,000
Gold, mine output, Au content	kilograms	1,840	2,480	9,610	11,800	11,800
Stone, crushed e/	metric tons	55,000	72,500 3/	75,000 e/	136,000 e/	136,000

e/ Estimated.

1/ Includes data available through Apr. 1996.

2/ In addition to the commodities listed, a variety of crude construction materials (clays and sand) and semiprecious stones was also produced. Available information was inadequate to make an estimate of production.

3/ Reported figure.

TABLE 2
GUYANA: STRUCTURE OF THE MINERAL INDUSTRY FOR 1995

(Thousand metric tons, unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Bauxite	Guyana Mining Enterprise Ltd. (Guymine) (Government, 100%)	Kara Kara, Northeast Dorabece, and East Montgomery Mines, MacKenzie, Linden, West Demerara District	3,500
Do.	do.	Block 2 Manaka, North, South mines. Kwakwani, East Berbice District	1,500
Do.	do.	Processing plant at Linden	900
Do.	do.	Processing plant at Everton, East Berbice District	700
Do	C. A. Dayco (private, Venezuela, 100%) (Guymine contract)	Kwakwani area	500
Do.	Green Mining Inc. (Green Construction Co., United States, 100%) (Guymine contract)	Dacouria Mine, Linden	NA
Do.	Aroaima Mining Co. (Government, 50%; Reynolds International, United States, 50%)	Aroaima, East Berbice District	1,500
Alumina	Guymine	Alumina refinery at Linden (presently closed)	300
Gold	kilograms Omai Gold Mines Ltd. (Cambior Inc., Canada, 65%; Golden Star Resources, Canada, 30%; Government of Guyana, 5%)	Omai Mine, Mazaruni-Potaro District	300
Gravel	Baracara Quarries (private)	Quarry near Bartica, Mazaruni-Potaro District	100
Silica sand	Minerals and Technology Ltd. (Minerals and Chemicals of Texas, United States)	Sand Hills, Demerara River, West Demerara District	300

NA Not available.