THE MINERAL INDUSTRY OF

THE DOMINICAN REPUBLIC

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The Dominican Republic remained a regional producer of cement, ferronickel, gold, gypsum, salt, silver, and steel in 1999. The country also produced other commodities, such as gravel, marble, and sand, solely for domestic consumption (table 1). Production of petroleum refinery products was not enough to meet the requirements for domestic consumption. The Dominican Republic's gross domestic product for 1999 increased by 8.3%, which was one of the highest growth indices in the Caribbean; mining, however, represented only 1.8% of this increase (Banco Central de la República Dominicana, 1999, p. 1).

Throughout 1999, overall mining activity in the Dominican Republic slowed owing to the fall in production of most of its components. Total production decreased by 16.1% from January through September 1999 (Ultima Hora Interactiva, December 4, 1999, Buscan consenso para reforma del sector minero, accessed July 11, 2000, at URL http://ultimahora.com.do/041299/din2.htm). According to an economic review of the Dominican Republic performed by the Banco Central de la República Dominicana in 2000, production of sand and gravel, however, increased by 19% as a consequence of active construction during the year (Mercedes Carrasco de Garrido, Economic Advisor and Acting Director, Department of National Accounts and Economic Statistics, written commun. June 15, 2000).

The downturn in the production of nickel in 1999 was attributed to a temporary plant shutdown by Falconbridge Dominicana C. por A. (Falcondo), which was a subsidiary of Falconbridge Ltd. of Canada and the only nickel producer in the country, as a consequence of the malfunctioning of two electric furnaces and unscheduled repairs at its powerplant (Falconbridge Dominicana C. por A., 2000, p. 3). The shutdown of the Rosario Dominicana S.A. operations in June accounted for the decrease in gold and silver production; the company was 100% owned by the Government. Extended equipment downtime and high precipitation in May and June were among the factors cited for the output decrease of gypsum, marble, and salt (Ultima Hora Interactiva, December 4, 1999, Buscan consenso para reforma del sector minero, accessed July 11, 2000, at URL http://www.ultimahora.com.do/041299/din2. htm). Gypsum and sand and gravel were among the few mineral commodities that showed a marked increase in production in 1999 (table 1).

Mining in the Dominican Republic is regulated by mining law 146, which was promulgated and published in the Official Gazette No. 9231 in June 1971. The Dirección General de Minería, which is part of the Secretaría de Estado y Comercio, is the Government agency responsible for administering the mining law.

In 1995, revision of the foreign investment law was promulgated as law 16-95, which gave foreign investors rights

similar to those of domestic investors. Under the law, foreign investment must be registered with the Central Bank within 90 days of the date of investment. Foreign investment is prohibited in the disposal of dangerous or radioactive and toxic waste that is not produced in the country, areas that affect public health and the balance of the environment, and manufacturing of equipment and materials directly related to national defense and security. Regulation No. 360 provides definitions and details to administer law 16-95.

Mineral production in the Dominican Republic was undertaken by the Government and the private sector (table 2). Gold was produced exclusively by the Government through Rosario Dominicana S.A., which was owned by the Banco Central. The Corporación Dominicana de Empresas Estatales, which was a Government corporation, held minority interest in the production of gypsum, marble, nickel, and salt; in May 1999, first steps toward the privatization of the gypsum and marble mines began. The Government also held 50% interest in Refinería Dominicana de Petróleo S.A., which was the only petroleum refinery. In 1999, the Governments of the Dominican Republic and Mexico signed a trade agreement through Banco Nacional de Comercio Exterior and the Centro Dominicano de Exportaciones to increase bilateral trade and to promote direct and joint investments between both nations (United Nations, 1999, p. 5).

Nickel, which remained the most significant mineral commodity to the country's economy, accounted for 3.6% of total world nickel mine production in 1999. The Dominican Republic was the eighth leading nickel mine producer in the world during 1999 (Kuck, 2000). Falcondo had planned to produce approximately 28,000 metric tons (t) of nickel in ferronickel for 1999; only 24,449 t, however, was produced, which represented 12.6% less than that planned for the year. This was the result of an unexpected 2-month production shutdown followed by a 3-month scheduled shutdown that began in November 1998 and ended in January 1999. Falconbridge purchased and marketed all ferronickel produced by Falcondo. During the year, the amount of nickel contained in ferronickel exported from the Dominican Republic was 24,012 t, which represented a decrease of 9.5% compared with that of 1998 (Falconbridge Dominicana C. por A., 2000, p. 3).

According to Falcondo (Falconbridge Dominicana C. por A., 2000, p. 3), the major importing region of ferronickel produced by the Dominican Republic was Europe, which received 47% of the shipments, followed by the United States (32%), the Republic of Korea (17%), and Japan (4%).

After several years of effort, Falcondo received the International Organization of Standardization's (ISO) Environmental Management System ISO 14001 certification in 1999 and was the first nickel production facility in the world to do so (Falconbridge Ltd., 2000); ISO 14001 is an

environmental management system specification document that outlines the international standards for environmental protection and pollution prevention balanced with socioeconomic needs and the requirements that an organization must meet to achieve these goals (Cascio, 1999, p. 7-9).

Preliminary figures provided by the Banco Central showed a decline in gold production for 1999 (table 1); this downward trend had begun in 1997. By 1999, approximately 155,000 kilograms (kg) of the 777,000 kg in reserve had been mined from Rosario Dominicana's Pueblo Viejo gold-silver mine, which was the only gold producing mine in the Dominican Republic in 1999 (Energold Mining Limited, 2000, p. 8). Rosario Dominicana exports of gold had been reduced by more than 85% between 1980 and 1998 and continued to decrease during 1999 (Batista, 1999). The Rosario Dominicana ore reserves were estimated to be profitable for another 30 years if new technologies are implemented. The levels of production of the plant had been declining significantly partly as a result of the very low gold recovery levels (25% of the gold contained in the mineral) (Feliz, 1999). The low mining activity at Rosario Dominicana had obliged Banco Central to subsidize it on a monthly basis at a cost of \$1.2 million¹ for the year. The situation at Rosario Dominicana brought up issues regarding the possibility of injecting private capital in the company by associating with private investors that could provide the technology needed to make the remaining estimated mineral deposits profitable (Batista, 1999). By June, Rosario Dominicana had temporarily closed its mine owing to the deterioration of the plant, the lack of adequate and efficient technology, and the low prices of gold in the world markets (Javier, 1999). The mine remained closed for the rest of the

According to preliminary data provided by Banco Central de la República Dominicana, the total silver production in 1999 was 3,140 kg, or approximately 42% of that in 1998 (Mercedes Carrasco de Garrido, Economic Advisor and Acting Director, Department of National Accounts and Economic Statistics, written commun., June 15, 2000). Much exploration took place during 1999. Energold Mining Limited, which was a Canadian mining company, has been exploring in the Dominican Republic since 1995. During 1999, however, the interest of the Government in attracting foreign mining investments to the country encouraged Energold to acquire optional back-in rights for the land that surrounds the Pueblo Viejo mine and other properties that extend east to west through the middle of the Dominican Republic. In early 1999, exploration of Los Pedregones I concession, which was 100% owned by Energold, led to the discovery of a new zone of high-grade gold-silver-zinc mineralization (Energold Mining Limited, 2000, p. 6, 8). Energold believed that the zone had the potential to host a "multi-million ounce" gold-silver deposit.

Activity in the construction sector grew by 27% during the first quarter of 1999 owing to the injection of funds received from international organizations as a consequence of the damage caused by Hurricane Georges, which struck the island on September 22, 1998 (DR One, May 6, 1999, DR grew 5.5% in

first quarter 1999, Dominican Republic, accessed July 5, 2000, URL http://www.dr1.com/daily/ news050699.shtml; U.S. Agency for International Development Bureau for Humanitarian Response, Office of U.S. Foreign Disaster Assistance, September 26, 1998, Caribbean, Dominican Republic, Haiti—Hurricane Georges, Fact Sheet #3, accessed July 5, 2000, at URL http://www.usaid.gov/hum_response/ofda/geo03fs.htm). Other factors that contributed to this performance were the favorable weather conditions that prevailed during most of the year, growth in private sector credit driven by lower interest rates, the expansion of public investment, and higher imports of raw materials, machinery, and equipment for construction (Banco Central de la República Dominicana, 1999, p. 1). By yearend, the construction sector output had increased by 18.3%.

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Major Sources of Information

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¹Values have been converted from Dominican Republic pesos to U.S. dollars at the rate of DR\$16.15=US\$1.00

TABLE 1
DOMINICAN REPUBLIC: PRODUCTION OF MINERAL COMMODITIES 1/

Commodity 2/		1995	1996	1997	1998	1999
Cement, hydraulic	thousand tons	1,453	1,642	1,835	1,885	2,000 e/
Coal, subbituminous	do.	r/	r/	r/	r/	
Ferroalloys, ferronickel	metric tons	80,711	78,488	84,897	69,419 r/	62,561
Gold	kilograms	3,281	3,659	2,349	1,421 r/	651 p/
Gypsum	thousand tons	95	86	115 r/	80 r/	86 p/
Iron and steel, steel, crude	metric tons		42,261 r/	82,479 r/	36,000 r/	31,000
Limestone	thousand tons	920	980	1,000 e/	1,000 e/	1,000 e/
Marble	cubic meters	1,333	2,117	2,126 r/	2,687 r/	2,521 p/
Nickel:						
Mine output, Ni content	metric tons	46,523	45,168	49,152	40,300 r/	36,800 e/
Metal:						
Smelter, Ni content of ferronickel	do.	30,897	30,376	32,558	25,220	24,449
Shipments, Ni content of ferronickel	do.	30,659	29,452	32,581	26,554	24,012
Petroleum refinery products:						
Liquefied petroleum gas	thousand 42-gallon barrels	350	300 e/	409 r/	480 r/	433
Gasoline, motor	do.	2,099	2,100 e/	1,925 r/	1,877 r/	1,906
Kerosene	do.	95 r/e/	95 e/	88 r/	84 r/	71
Jet fuel	do.	1,770 r/e/	1,805 e/	1,741 r/	1,763 r/	1,788
Distillate fuel oil	do.	2,682	2,700 e/	2,754 r/	2,888 r/	2,656
Residual fuel oil	do.	4,664	4,600 e/	4,359 r/	4,506 r/	4,408
Total	do.	11,660	11,600 e/	11,276 r/	11,598 r/	11,262
Salt:						
Marine	metric tons	41,822	49,719	50,000 e/	50,000 e/	50,000 e/
Rock	do.	10,806	11,330	10,479 r/	5,672 r/	5,436
Sand and gravel	thousand cubic meters	10,000 e/	9,602	10,894 r/	12,933 r/	15,398
Silver	kilograms	21,066	17,017	12,406	7,409	3,140

e/ Estimated. p/ Preliminary. r/ Revised. -- Zero.

 ${\bf TABLE~2} \\ {\bf DOMINICAN~REPUBLIC:~STRUCTURE~OF~THE~MINERAL~INDUSTRY~IN~1999}$

(Thousand metric tons unless otherwise specified)

				Annual
Commodity		Major operating companies and major equity owners	Location of main facilities	capacity
Cement		Fábrica Dominicana de Cemento C. por A.	Santo Domingo, Distrito Nacional	700
		(Government, 78%; private, 22%)		
Do.		Cementos Cibao C. por A. (private, 100%)	Palo Amarillo, Santiago Province	400
Do.		Cementos Nacionales S.A. (private, 100%)	San Pedro de Macorís, San Pedro	1,200
			de Macorís Province	
Doré (gold and silver)	kilograms	Rosario Dominicana S.A. (Government, 100%)	Pueblo Viejo Mine, Cotui, Sánchez	56,700
			Ramírez Province	
Gypsum		Loma de Sal y Yeso C. por A. (Government, 100%)	Barahona Province	200
Nickel		Falconbridge Dominicana C. por A. (Falconbridge Ltd.,	Mine and plant at Bonao, La Vega	35
		86%; Government, 10%; Redstone Resources, Ltd., 4%)	Province	
Petroleum products		Refinería Dominicana de Petróleo S.A.	Haina, Distrito Nacional	12,000 1/
		(Government, 50%; Shell Oil Co., 50%)		
Do.		Falconbridge Dominicana C. por A. (Falconbridge Ltd.,	La Peguera, La Vega Province	1,000 1/
		86%; Government, 10%; Redstone Resources, Ltd., 4%)		
Salt		Loma de Sal y Yeso C. por A. (Government, 100%)	Barahona Province	20
Steel		Complejo Metalúrgico Dominicano C. por A.	Santo Domingo, Distrito Nacional	100
		(private, 100%)		

^{1/} Thousand 42-gallon barrels.

^{1/} Table includes data available through July 17, 2000.

^{2/} In addition to commodities listed, other crude construction materials may also be produced, but data on such production are not available, and information is inadequate to make reliable estimates of output levels.