



2005 Minerals Yearbook

EGYPT

THE MINERAL INDUSTRY OF EGYPT

By Harold R. Newman

Petroleum and petroleum products were the top export commodities in 2005 as the mineral fuels sector continued to be a vital segment of, and a major contributor to, the economy of Egypt. Government efforts were focused mainly on the further development of the country's mineral resources.

Geologic studies had pointed out that Egypt has reserves of different minerals, such as black sand, gold, granite, marble, and phosphate rock. A national plan was being prepared to develop investment opportunities in mineral resources. Also, the Government was engaged in efforts to partially privatize mining and metal assets (Arabic News, 2005§¹).

Egypt was one of the world's leading energy producers, and this sector, which was the single largest industrial activity in the country, accounted for 12% of the gross domestic product (GDP). Exports of petroleum and related products were valued at more than \$2.7 billion in fiscal year 2005. Egypt was encouraging the production of natural gas. Natural gas accounted for almost 50% of all hydrocarbon use in Egypt (U.S. Department of State, 2005§).

Egypt's estimated GDP based on purchasing power parity was about \$305 billion. The estimated GDP per capita based on purchasing power parity was \$4,317. The estimated annual inflation rate was 11%, and the estimated growth rate was 4.8% (International Monetary Fund, 2006§). The country had a land area of 1,001,450 square kilometers (km²) and an estimated population of 79 million (U.S. Central Intelligence Agency, 2006§).

Economic development was placing stress on Egypt's environment. Population density combined with postponed infrastructure investment had overwhelmed water service, and wastewater service was creating environmental hazards. The main environmental issues Egypt faced were air pollution, carbon dioxide emissions, and preservation of coastal areas. Also, the Nile River and its tributaries were being contaminated with chemicals, heavy metals, and other pollutants (U.S. Energy Information Administration, 2005§).

The Ministry of Industry and Mineral Resources, through the Egyptian Geological Survey and Mining Authority (EGSMA), was the Government agency responsible for regulating the exploitation, exploration, and prospecting of all mineral deposits in Egypt. The law that regulated the mining sector was the Mining and Petroleum Code law No. 66 of 1953. The Electricity and Energy Ministries were the main Government agencies responsible for the energy sector.

The Organization for Energy Planning was the Government office responsible for analyzing energy policies and energy supply and demand, evaluating energy resources, and developing technical expertise in the field. Government-owned Egyptian Electric Holding Company was responsible for the country's power generation and owned electrical distribution companies.

Besides mineral fuels, Egypt also produced aluminum, ferroalloys, iron ore, secondary copper, and steel. Industrial minerals produced included construction materials, gypsum, and raw materials for glass.

Commodity Review

Metals

Aluminum.—State-owned Holding Company for Metallurgical Industries (HCMI) announced a public offering of 17% of its shares in Aluminium Company of Egypt (Egyptalum). Egyptalum was 92.2% owned by HCMI, whose shares would be reduced to 75.2%. Egyptalum was the only aluminum producer in Egypt and produced from six lines at its Nag Hammadi plant. In 2005, the plant was being expanded from its capacity of 190,000 metric tons per year (t/yr) to 230,000 t/yr during a 2-year period. Egyptalum recorded sales of \$531 million in 2005 (Middle East Economic Digest, 2006).

Gold.—Centamin Egypt Ltd. of Australia was continuing its geologic mapping, prospecting, and sampling programs in 2005. Centamin had a 160-km² exploitation lease for the Sukari Hill gold project and was continuing with a feasibility study to upgrade the project. In 2005, the resource at Sukari was estimated to be 6.79 billion kilograms of gold, which was an increase of 131% in slightly more than 1 year. Extraction was expected to be by open pit mining (Centamin Egypt Ltd., 2006§).

Gippsland Ltd. of Australia announced results from trenching at its Wasi Allaqi gold project in southeastern Egypt. Within the 12,000-km² Wadi Allaqi area, about 19 historical gold deposits were known. Gippsland's eight gold projects included Haimur, Nile Valley Block A, Nile Valley Block E, Seiga, Umm El Tuyer, Umm Garayat Koleit, Umm Urrayyat, and Umm Shashoba. Sixteen trenches with a combined length of 1,540 meters (m), were completed at the Haimur and the Umm Garayat Koleit sites; an additional six trenches totaling 303 m in length were completed at Seiga. The results of the projects included 15.5 m at a grade of 9.25 grams per metric ton (g/t) at Seiga and 5 m at a grade of 44.5 g/t at Haimur. The trenching program at Umm Garayat Koleit, Haimur, and Seiga determined that the gold mineralization extends for a length of 250 m and was open to the north and south and, in part, to the east and west (Mining Journal, 2005a).

Iron and Steel.—Ezz El-Dekheila Group (EZDK) was Egypt's leading steel producer with a 5.4-million-metric-ton-per-year (Mt/yr) production capacity. EZDK operated some of the most modern steel plants in the world. These included Alexander National Iron and Steel Co., which was the leading integrated steel plant in Egypt with 2.8 Mt/yr of capacity, and which produced 1.8 Mt/yr of rebars and coil rods and 1 Mt/yr of hot-rolled coils; Al Ezz Flat Steel Co., which produced 1.2 Mt/yr of rolled flat sheets; Al Ezz Steel Rebars Co., which produced 1.4 Mt/yr of rebars (EZDK Group, 2005§). EZDK

¹References that include a section mark (§) are found in the Internet References Cited section.

reported that its total exports were valued at \$625 million in 2004 and that the value of the group's total exports were expected to reach \$900 million in 2005 (News Flash, 2005§).

Egyptian Ferroalloys Co. (Efaco) produced ferroalloys with silicon content percentages that ranged from 45% to 75%; the 75% concentration was mostly in the ferrosilicon product. Silica fumes were produced as a byproduct of ferroalloy production. Efaco's Aswan plant at Edfu was considered to be the leading integrated industrial center in the Middle East. The Government announced that Efaco was one of six state-run operations being considered for privatization in 2006. The Government had sold 190 state-run companies since the early 1990s (BBC News, 2005§).

Magnesium.—Magnesium International Ltd. (MIL) of Australia announced that development of its proposed 88,000-t/yr magnesium plant at Ain Sokhna had been delayed by a significant rise in the forecasted capital cost. The smelter would be owned and operated by Egyptian Magnesium Co. (EMAG). The EMAG project was a joint venture between MIL and Amiral Overseas Magnesium of Egypt (50% each) (Platts Metals Week, 2005§).

EMAG continued to work with the Government-owned company El Nasr Mining Co. to explore for magnesite deposits in Egypt. El Nasr Mining, EMAG, and MIL were developing an exploration program for magnesite at Sul Hamed in the far southeastern region of Egypt. Access to proven deposits would reduce the costs of ore supply to the smelter (Magnesium News, 2005§).

Tantalum and Tin.—Gippsland was continuing development of its Abu Dabbab tantalum and tin project as a joint-venture project with EGSMa. Tantalum Egypt LLC was the operating company in which Gippsland and EGSMa each had a 50% interest. Production was expected to begin in mid-year 2006. Abu Dabbab was expected to produce about 1,530 t/yr of tin as a byproduct alongside 260 t/yr of tantalum pentoxide. The Government abolished the 5% royalty tax on gross sales revenues that was to be levied on production. Tantalum Egypt also owned the mining license for the estimated 98-Mt Nuweibi tantalum deposit, which is located 17 kilometers from the Abu Dabbab project (Mining Journal, 2005b).

Industrial Minerals

Cement.—The Italcementi Group's Ciments Français S.A. successfully concluded the purchase of a 33.4% stake in Suez Cement Company. As a result of the purchase, Ciments Français became the majority shareholder (about 54.2%) in Suez Cement. Suez Cement, which had a market share of more than 22%, was the leading player in the Egyptian cement sector and one of the leading cement companies in the Mediterranean region. Suez Cement operated three production facilities—Suez, Qattamiah, and Tourah; all were equipped with rotary kilns capable of producing about 8 Mt/yr both for the domestic and export markets (Ciments Français S.A., 2005b§).

Ciments Français signed an agreement for the purchase of 68.7% stake in Arab Swiss Engineering Company (ASEC), which was the fifth ranked cement company listed on the Cairo and Alexandria Stock Exchange. The acquisition of ASEC

would be completed through Suez Cement, of which Ciments Français had acquired control earlier in 2005. The acquisition would allow Ciments Français to reinforce its role as an industry leader in Egypt, which was the fourth ranked market in the Mediterranean region in terms of cement consumption. Through the combination of the two companies, Ciments Français' production capacity in Egypt would increase to more than 12 Mt/yr of clinker with a domestic market share of more than 30% for grey cement and 50% for white cement (Ciments Français S.A., 2005a§).

FL Smith of Denmark was awarded a \$72 million contract to provide engineering services and equipment to Arabian Cement Company (ACC) for a new clinker production plant near the city of Suez. The new facility was scheduled to be completed by mid-2008. Production was expected to be 6,000 metric tons per day of clinker, all of which was destined for export. ACC was a subsidiary of Cementos La Union of Spain (Middle East Economic Digest, 2005c).

Nitrogen.—Financial closure was achieved for the debt and equity portions of the planned Egypt Basic Industries Company (EBIC) ammonia project with the raising of \$540 million. The 2,000-metric-ton-per-day-capacity ammonia plant would be the largest of its kind in Egypt, as measured by production quantities. EBIC was the project company comprised of state-owned Egyptian General Petroleum Corp (EGPC), Kellogg Brown & Root Inc. (KBR) of the United States, and PSK Holdings Pty. Ltd. and Orascom Construction Industries, both local companies. The industrial complex was to include a pipeline corridor that would connect the ammonia production plant to product storage tanks located in Sokhna Port. Transammonia Corp. of the United States, which was a specialized international trader, would be the sole buyer of the plant's output (Middle East Economic Digest, 2005a).

Phosphate Rock.—El Nasr Mining Company (NMC) was one of the leading mining companies in Egypt, with activities that extended from Alexandria in the north to Aswan in the south. NMC announced that it had agreed to set up a joint-venture project with the Indian Farmers Fertilizer Cooperative for the production of phosphoric acid in an investment valued at \$335 million. The project, which was to be built at Edfu, was expected to produce 500,000 metric tons (t) of phosphoric acid (P₂O₅) after startup in 2008. The project was given a Free Zone status. A large amount of the project's production was to be targeted for export to international markets (Fertilizer Week, 2005).

Mineral Fuels

Egypt was a transit corridor in the Persian Gulf and had strategic importance because of its operation of the Suez Canal by the Suez Canal Authority (SCA) and the Suez-Mediterranean (Sumed) Pipeline. The 3.1-million-barrel-per-day Sumed pipeline and the Suez Canal were two major routes for exports of oil from the Persian Gulf region to the Mediterranean. The SCA was offering a 35% discount on transit fees to liquid natural gas (LNG) tankers as well as other discounts for the largest-capacity LNG tankers as an incentive to use the Suez Canal. For 2005, the SCA reported that southbound crude

petroleum and petroleum products totals increased by 11.7% compared those of 2004 and northbound crude petroleum and products totals increased by 12.5% compared with those of 2004 (U.S. Energy Information Administration, 2006§).

Natural Gas.—Most of Egypt's offshore discoveries have been of natural gas, and it was the fastest-growing mineral fuels sector in 2005. The International Egyptian Oil Company (a subsidiary of ENI-Agip of Italy) was Egypt's leading natural gas producer. The company operated in the Gulf of Suez, the Nile Delta, and the Western Desert. As of January 2005, the Government's revised estimate of proven natural gas reserves was about 1.9 trillion cubic meters, which was reported as 66 trillion cubic feet (U.S. Energy Information Administration, 2005§).

Apache Corp. announced two major natural gas discoveries—one onshore at the Mediterranean coast and the other in the Western desert close to the Qasr field. The Syrah 1X discovery in the Western desert was described as one of the region's largest, with estimated reserves of 2 trillion cubic feet of gas and 45 million barrels of condensate. Based on seismic surveys, the Syrah field would rank as the third-largest Jurassic gasfield found in the Western desert (Afrol News, 2005§).

Israel signed a \$2.5 billion agreement to import natural gas from Egypt for a 15-year period. Under the contract, Egypt will sell Israel 1.7 billion cubic meters of gas from October 2006 for a total of 25 billion cubic meters. There was an option to extend the contract for an additional 5 years. Eastern Mediterranean Gas (EMG), a private Egypt-Israeli firm, would buy the natural gas from Egypt. EMG planned to build a natural gas pipeline from Egypt to the coastal city of Ashkelon, Israel (Alexander's Gas & Oil Connections, 2005b§).

Egypt's 270-kilometer (km) natural gas pipeline to Jordan was intended as the first stage of a wider regional network, the Arab Natural Gas line, which would send supplies from Egyptian gasfields to Lebanon and Syria. The second stage of the project was a 395-kilometer-long pipeline, which runs through Jordanian lands to the Syrian border. The Governments of Egypt and Syria were considering steps to implement the third phase of the project, which would extend the pipeline through Syria to the Syrian-Turkish borders. Egypt and Syria were considering an agreement to export Egyptian natural gas to Syria to supply industrial areas and electrical energy stations (Alexander's Gas & Oil Connections, 2005c§).

The Government announced that Egypt would export an LNG consignment from the Damietta LNG exporting unit to Huelva, Spain, for the first time starting in February 2005. Expansions to the Italian and the United States markets were expected to start in 2006. Damietta was one of the world's largest LNG complexes in terms of capacity. The complex, with a capacity of 7.5 billion cubic meters per year of natural gas, can produce 4.8 Mt/yr of LNG for export. The LNG shipment was purchased by Union Fenosa of Spain, which was one part of the venture that built the Damietta facility on the Mediterranean coast (Alexander's Gas & Oil Connections, 2005a§).

Eni S.p.A., as a participant in the venture that owns the Damietta facility, announced the joint venture's plans to double the capacity of the Damietta facility to cover gas supplies for the construction of a second train of 5 Mt/yr of capacity; the joint

venture included BP plc, the Egyptian Natural Gas Holding Co., and Eni. Discoveries made in the Nile Delta and exploration of existing and new licenses were expected to provide enough gas supplies for the construction of the second train (Petroleum Economist, 2005).

Petroleum.—Egyptian petroleum production comes from four main areas: the Gulf of Suez (about 50%), the Western Desert, the Eastern Desert, and the Sinai Peninsula. Although the output of petroleum has declined, it was hoped that exploration activity in new areas could potentially discover sufficient oil to slow the decline. The leading producer in the Gulf of Suez was the Gulf of Suez Oil Co. (a joint venture of EGPC and Amoco Corp. of the United States). The second leading producer was Belayim Petroleum Co., which was a joint venture between International Egyptian Oil Co. and EGPC. The third ranked producer was the Suez Oil Co. (U.S. Energy Information Administration, 2005§).

The Government signed four new agreements and an amendment to an existing agreement with international oil companies for the exploration of acreage in different locations across the country. The deals, which were estimated to be worth about \$110 million, were between EGPC and four groups of companies. The first agreement was signed with a group led by Devon Energy Co. of the United States and Australia's Santos Co. and included Japan's Teikoku Oil Co. The license covered exploration for petroleum in the 4,901-km² North Qarun block in the Gindi basin of the Western desert. The second agreement was a joint venture between Devon and Teikoku to carry out exploration in the 44-km² South October block in the Gulf of Suez. The third agreement was with Burren Energy plc of the United Kingdom to explore the 242-km² North Hurghada Marine block in the Gulf of Suez. The fourth agreement was with the joint venture of IPR Energy Red Sea, a subsidiary of the United States IPR Group, and India's ONGC Videsh. The fifth agreement amended an existing contract between IPR and EGPC. The joint venture was involved in petroleum exploration at the Alamein field and was the only concession in Egypt that operated under a cost-sharing agreement (Middle East Economic Digest, 2005b).

BP announced that it would spend \$615 million during a period of 6 years on exploration and development work to further develop its two oilfields in the Gulf of Suez after the Government agreed to extend concessions for the area. The Government extended the merged concession agreement (MCA) for another 20 years, and a further 10 years on the South Gharib concession. MCA and South Gharib represented about 80% of BP's oil business in Egypt. The fields were operated by the Gulf of Suez Petroleum Co., which was a 50-50 joint venture between EGPC and BP (AFX News Ltd., 2005§).

Outlook

The Egyptian mineral fuels industry is set to continue to grow during the next 3 to 4 years, mainly as a result of the Government's recent restructuring of the energy sector following several natural gas discoveries. The Government will continue to move forward with its policy to develop the country's hydrocarbon resources. The natural gas sector is expected to expand rapidly as a result of additional output from two LNG

export terminals. Although natural gas exports are likely to overtake petroleum exports in the near future, the presence of several foreign companies exploring for petroleum in offshore Egypt in 2005 suggests the possibility of further development of the petroleum sector if new discoveries are made.

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TABLE 1
EGYPT: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Thousand metric tons unless otherwise specified)

Commodity ³	2001	2002	2003	2004	2005
METALS					
Aluminum metal metric tons	191,000	195,000	194,600 ⁴	215,000	243,800 ⁴
Copper, refined, secondary do.	4,000	4,000	14,119 ³	14,000	14,000
Iron and steel:					
Iron ore and concentrate	2,600 ⁴	2,618 ⁴	2,237 ⁴	2,400 ^r	2,600
Metal:					
Pig iron	1,400	1,700	1,000 ^{r,4}	1,000 ^r	1,100 ⁴
Direct reduced iron	2,370	2,530	2,870 ^r	2,800 ^r	2,600
Steel, crude	3,799 ⁴	4,316 ⁴	4,398 ⁴	4,500 ^r	5,600 ⁴
Ferroalloys:					
Ferromanganese	30	30	30	30	30
Ferrosilicon	55	55	55	55	50
Manganese ore metric tons	20,000	20,000	20,000	20,000	20,000
Titanium, ilmenite	125	125	120 ³	120	120
INDUSTRIAL MINERALS					
Asbestos	2,000	2,000	1,000 ^r	--	--
Barite	500	500	500	500	500
Cement, hydraulic, all types	25,700	28,155 ⁴	26,639 ⁴	28,763 ⁴	29,000
Clays:					
Bentonite	50	50	26 ⁴	30	30
Fire clay	300	300	300	300	300
Kaolin metric tons	260,000	260,000	260,000	260,000	260,000
Feldspar, crude do.	300,000	350,000	350,000	350,000	350,000
Fluorspar do.	500	500	500	500	500
Gypsum and anhydrite, crude	2,000	2,000	792 ⁴	1,000	1,000
Lime	800	800	800	800	800
Nitrogen:					
Ammonia, N content	1,801 ⁴	1,839 ⁴	1,790 ⁴	1,652 ⁴	1,640
Urea, N content	1,091 ⁴	1,078 ³	1,134 ⁴	1,078 ⁴	1,000
Phosphate:					
Phosphate rock	972	1,500	2,183 ³	2,219 ⁴	2,730
P ₂ O ₅ content	293	434	630	650	800
Sodium compounds:					
Salt	2,400	2,400	1,341 ⁴	1,400	1,400
Soda ash	50	50	50	50	50
Sodium sulfate metric tons	2,500	2,500	2,500	2,500	2,500
Stone, sand and gravel:					
Basalt thousand cubic meters	300	300	300	300	300
Dolomite	3,000	3,000	3,000	3,000	3,000
Granite, dimension stone cubic meters	40,000	40,000	40,000	40,000	40,000
Gravel thousand cubic meters	11,000	11,000	11,000	11,000	11,000
Limestone and similar do.	25,000	25,000	25,000	25,000	25,000
Marble (includes alabaster) blocks cubic meters	140,000	140,000	140,000	140,000	140,000
Sand:					
Industrial sand (glass sand)	600	600	640 ⁴	650	650
Construction sand	21,000	21,000	21,000	21,000	21,000
Sandstone thousand cubic meters	10	10	10	10	10
Sulfur:					
Elemental, byproduct metric tons	4,500	4,500	4,500	4,500	4,500
Sulfuric acid, S content	220	220	220	220	220
Talc, soapstone, pyrophyllite metric tons	40,000	45,529 ⁴	40,000	40,000	40,000
Vermiculite do.	12,000	12,000	12,000	12,000	12,000
MINERAL FUELS AND RELATED MATERIALS					
Coal	58	58	139 ⁴	100	75
Coke	1,400	1,400	1,406 ⁴	1,400	1,400

See footnotes at end of table.

TABLE 1--Continued
 EGYPT: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2}

(Thousand metric tons unless otherwise specified)

Commodity	2001	2002	2003	2004	2005		
MINERAL FUELS AND RELATED MATERIALS--Continued							
Gas, natural:							
Gross production		million cubic meters	30,100	27,700	30,969 ⁴	31,000	31,000
Dry		do.	24,550 ³	19,605	17,680 ⁴	18,000	18,000
Petroleum:							
Crude, including condensate		thousand 42-gallon barrels	277,000	221,350 ⁴	221,219 ^{4,5}	216,956 ^{r,4,5}	218,000
Refinery products:							
Liquefied petroleum gas		do.	5,500	6,705 ⁴	6,763 ^{4,7}	6,800	6,800
Gasoline and naphtha		do.	45,000	51,572 ⁸	53,210 ⁸	54,000	54,000
Kerosene and jet fuel		do.	16,000	19,579 ⁴	19,335 ⁴	20,000	20,000
Distillate fuel oil		do.	46,000	57,457 ⁴	61,060 ⁴	61,000	61,000
Residual fuel oil		do.	83,000	66,687 ⁴	68,884 ⁴	69,000	69,000
Lubricants		do.	1,800	1,960 ⁴	1,855 ⁴	1,900	1,900
Asphalt		do.	6,000	5,484 ⁴	5,709 ⁴	5,800	5,800
Unspecified ⁶		do.	1,700	2,139 ⁴	2,155 ⁴	2,200	2,200
Total ⁹		do.	205,000	211,583 ⁴	218,971 ⁴	220,700	221,000

^rRevised. -- Zero.

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

²Table includes data available through November 1, 2006.

³In addition to those listed, Egypt produced a number of commodities for which data were unavailable; these include gemstones, and some metals, such as gold and lead, which were produced from recycled material; zinc; and manufactured mineral commodities, such as carbon black and glass.

⁴Reported figure.

⁵Source: Ministry of Petroleum of the Arab Republic of Egypt.

⁶Excluding condensate.

⁷Excluding product from fields.

⁸Gasoline only.

⁹Amounts needed to complete reported refinery products totals shown.

TABLE 2
EGYPT: STRUCTURE OF THE MINERAL INDUSTRY IN 2005

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum		Aluminium Co. of Egypt (Government, 80%, and private interests, 20%)	Nag Hammadi	230.
Aluminum, secondary		The Egyptian Copper Co.	Alexandria	50.
Carbon black		Alexandria Carbon Black Co. (Egyptian Holding Co. for the Chemical Industry, 49%; Inco-Bharat, 36%; Grasim Industries 15%)	do.	20.
Cement		Amirya Cement Co.	do.	2,500.
Do.		Cemex Egypt	Assiut	5,000.
Do.		Arab Swiss Engineering Co. (ASEC) (Suez Cement Co., 68.7%)	Helwan	2,800.
Do.		do.	El Minya	200.
Do.		Egyptian Cement Co. (Orascom Group, 40%; private interests, 40%; Holderbank Financiere Glaris Ltd., 20%)	70 kilometers east of Cairo	1,400.
Do.		Suez Cement Co. (Cements Français S.A., 54.2%)	Suez	3,000.
Do.		do.	Qattamiah	2,500.
Do.		do.	Tourah	2,500.
Do.		Alexandria Portland Cement Co. (Government 77%, and private interests, 23%)	El Mex	800.
Do.		National Cement Co. (Government, 77%, and private interests, 23%)	El Tabbin	4,000.
Do.		do.	Beni Suef	1,000.
Fertilizers, nitrogenous		Abu Qir Fertilizer & Chemical Industries Co. [private and public interests, 80.9%, and Egyptian General Petroleum Corp. (EGPC), 19.1%]	Abu Qir A	660 (ammonia); 760 (ammonia nitrate).
Do.		do.	Abu Qir B	300 (ammonia); 500 (urea).
Do.		do.	Abu Qir C	330 (ammonia); 600 (urea).
Do.		Société El-Nasr d Engrais et d'Industries Chimiques (Government, 100%)	Suez	146 (ammonia); 450 (nitric acid); 365 (ammonia nitrate).
Do.		do.	Talkha	330 (ammonium nitrate); 570 (ammonia and urea).
Do.		Egyptian Chemical Industries (Government, 100%)	Kima	330 (ammonia); 600 (nitric acid); 800 (ammonium nitrate).
Iron ore		Egyptian Iron and Steel Co. (Government, 100%)	El-Gedida Mine, El Bahariya	3,000.
Iron oxide		El-Nasr Mining Co. (Holding Company for Metallurgical Companies, 100%)	Mines near Sinai and Aswan	150.
Natural gas	million cubic meters	Egyptian General Petroleum Corp. (EGPC) (Government, 100%)	Abu Madi	3,800.
Do.	do.	do.	Badreddin-3	3,000.
Do.	do.	do.	Abu Qir/Naf	1,900.
Do.	do.	do.	Ras Shukheir	1,600.
Do.	do.	Grupo Khalda (Repson Group, 50%; Apache Oil Co., 40%; Samsung Inc., 10%)	Khalda	24.
Petroleum, crude	million 42-gallon barrels	Gulf of Suez Oil Co. [Egyptian General Petroleum Corp. (EGPC), 50%, and Amoco Inc., 50%]	October, Suez Gulf	45.
Do.	do.	do.	El Morgan, Suez Gulf	27.
Do.	do.	Belayim Petroleum Co. [Egyptian General Petroleum Corp. (EGPC), 50%, and International Egyptian Oil Co., 50%]	Belayim, Suez Gulf	65.
Do.	do.	Suez Oil Company [Egyptian General Petroleum Corp. (EGPC), 50%; Deminex SA, 25%; Repsol S.A., 25%]	Ras Budran, Suez Gulf	15.

TABLE 2--Continued
EGYPT: STRUCTURE OF THE MINERAL INDUSTRY IN 2005

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum, pipeline	do.	Arab Petroleum Pipeline Co. (Egypt, 50%; Saudi Arabia, 15%; Kuwait, 15%; United Arab Emirates, 15%; Qatar, 5%)	Ain al-Sokhna to Sidi Kir	875.
Petroleum, refined	do.	Cairo Petroleum Refining Co. (Government, 100%)	Mostorod	42.
Do.	do.	do.	Tanta	15.
Do.	do.	Alexandria Petroleum Co. (Government, 100%)	Alexandria	42.
Do.	do.	El-Nasr Petroleum Refining Co. (Government, 100%)	Suez	36.
Do.	do.	Ameriya Petroleum Refining Co. (Government, 100%)	Ameriya	27.
Do.	do.	Suez Petroleum Processing Co. (Government, 100%)	Suez	21.
Do.	do.	Asyut Petroleum Refining Co. (Government, 100%)	Asyut	18.
Phosphate rock		El-Nasr Mining Co. (Holding Company for Metallurgical Companies, 100%)	Mines at East Sabaiya, West Sabaiya and El Qusier	1,000.
Steel		Ezz El-Dekheila Group (EZDK) (Alexandria Iron and Steel Co., Al Ezz Flat Steel Co., and Al Ezz Steel Rebars)	Plants at Alexandria, Sadat City and Suez	4,500.
Do.		Egyptian Iron and Steel Co., Hadisob (Government, 100%)	Helwan steel plant	1,500.