THE MINERAL INDUSTRY OF

KYRGYZSTAN

By Richard M. Levine

Kyrgyzstan's mineral industry was involved in both mining and processing mineral products with its mining sector exploiting primarily antimony, coal, gold, mercury, rare earths, and tin deposits. Its metallurgical industry led the FSU in the production of two nonferrous metals, mercury, and antimony. Although Kyrgyzstan produced coal and some gas and oil, it was still significantly dependent on imported energy.

In 1995, GDP in Kyrgyzstan fell 6.2% and industrial output fell 12.5% compared with 1994. The fall in both gross domestic product and industrial output was less than one-half the rate of the decline for the previous 4 years.

Reportedly, in 1995 the energy sector comprised 2.4% and the nonferrous metallurgy sector 10.8% of industrial output. Reported production decreases in 1995 were sharper in the mineral sector than for general industrial output as output in the energy sector fell by 25.7% and in the nonferrous metallurgy sector by 16.9% compared with 1994. Reported output of construction materials in 1995 also decreased even more sharply than the average decrease in industrial output with cement output falling by 27.4% compared with 1994 to 310,000 t and production of other construction materials showing similar or steeper declines.

However, the production trends were not consistent within sectors. Reportedly, while coal production fell by 36.5% compared with 1994 to 474,000 t, natural gas production fell by only 8.5% to 35.7 m^3, and oil production increased by 0.3% to 88,500 t.

Kyrgyzstan developed a plan to begin privatizing its mineral enterprises beginning in 1995, except gold-mining enterprises, with the aim of turning these enterprises into joint-stock companies. Joint-stock companies in the FSU have taken varying forms and often include a combination of Government and private ownership with the issued stock initially either sold or distributed to workers, management, and national and local governments.

The major organization involved in mineral production is the state concern Kyrgyzaltyn comprised of five operating mining and metallurgical complexes and three under development. Kyrgyzaltyn administers the Kara Balta complex that had engaged in uranium mining. Kara Balta currently engages in gold refining and production of uranium concentrates and molybdenum compounds and is developing molybdenum, tin, and tungsten deposits.

In addition, Kyrgyzaltyn administers the Makmalzoloto gold mining complex, the Khaydarkan mercury mining and metallurgical complex, the Kadamzhay antimony production complex, and the Kyrgyz chemical and metallurgical complex mining and processing rare earths.

In 1995, Kyrgyzaltyn was engaged in developing the Kumtor gold mining joint venture with Canada's Cameco Corp. and the Dzheruy gold mining joint venture with the United States' Morrison Knudson Co. Krgyzaltyn was also engaged in a number of other gold development projects both independently and as joint ventures including the Kara Balta firm of Kyrgyzaltyn engaging in a joint venture with Swiss, Australian, and Malaysian firms to develop the Taldy Bulak Levoberezhnyy lode deposit with reportedly 54 tons of gold reserves. Annual production was planned at about five (t/yr) of gold from this joint venture. Total reserves in the Taldy Bulak field were reportedly between 200 t and 250 t.

The Kadamzhay antimony metal plant, the only producer of antimony metal in the FSU, with a capacity to produce 20,000 t/yr of metal and trioxide, was experiencing increasing difficulty in obtaining high quality raw materials. Its main source of such raw material was the Sakha/Yakutia region of Russia, and plans called for shipping a significant percentage of the Sakha concentrates to new antimony production facilities being developed in Russia.

Antimony is one of Kyrgyzstan's important exports with exports to the FSU going to Belarus, Kazakstan, Russia, and Ukraine and outside the FSU to, Germany, Switzerland, the United Kingdom, and other foreign countries. Antimony produced at Kadamzhay reportedly is free of selenium and therefore is suitable for a number of technical purposes requiring high purity antimony.

The Khaydarkan mining and metallurgical complex, which produces mercury and mercury compounds and antimony and fluorspar concentrates, has the capacity to produce annually 1,000 t of mercury; 5,000 t of fluorspar concentrate; and more than 4,000 t of antimony concentrate.

Production had fallen sharply at Khaydarkan since the breakup of the Soviet Union. Khaydarkan in 1995 was estimated to have increased mercury production slightly to 380 t compared with 378 t in 1994. In 1995, it was planned to increase fluorspar concentrate production to 850 t compared with 834 t in 1994. Plans for 1996 called for further increasing fluorspar concentrate production by

working lower levels of the Zapadnaya mine.

The Khaydarkan complex processes raw materials from Russia and Tajikistan and exports the majority of its products. In 1995, Khaydarkan exported 87% of its mercury output, mainly to Russia, Kazakstan, and Azerbaijan.

Plans call for a large increase in mercury production at Khaydarkan of between 70% and 75%. Khaydarkan also plans to improve its mining technology, to begin processing scrap containing mercury, and to begin producing antimony. Previously, when Khaydarkan received antimony-mercury concentrate from Tajikistan, it extracted the mercury and sent the antimony on to the Kadamzhay antimony plant in Kyrgyzstan for processing.

Kyrgyzstan was still seeking financing to develop the Sary Dzhaz tin and tungsten deposit reportedly containing over 150,000 t of tin and 100,000 t of tungsten as well as molybdenum.

The Kyrgyz Chemical and Metallurgical complex which produces a range of rare earth metals including dysprosium, erbium, europium, gadolinium, lutetium, neodymium, thulium, ytterbium, and their compounds and alloys reported working at only 20% of capacity in 1995. In 1993 and 1994, the plant was almost shut down as orders ceased. Ores at the Kyrgyz complex were practically depleted and the complex was processing raw material mainly from Kazakstan and Russia. The Kyrgyz complex reportedly was engaged in agreements with Russia to supply raw materials and was planning a joint venture to mine a rare earth deposit in Kazakstan.

The complex's main customers during the Soviet period had been in Belarus, Kazakstan, Lithuania, Russia, Ukraine, and Uzbekistan, but shrinking demand from these countries forced the Kyrgyz plant to export beyond the FSU to customers in Austria, Japan, and the United Kingdom to which in 1995 it sold more than 90% of its output. Reportedly, in 1995, the Kyrgyz Chemical and Metallurgical complex sold 10 t of yttrium oxide and 800 kilograms (kg) of metallic dysprosium to the United Kingdom and 150 kg of holmium oxide to Japan. The plant reportedly also sold 470 kg of yttrium alloy to Kazakstan and 170 kg of cerium oxide to a Russian buyer from Severo-Dvinsk.

With the breakup of the Soviet Union, Kyrgyzstan was cut off from consumers, fabricators, and processors of most of its mineral products, and its mineral industry had to sharply curtail output of many mineral products. To alleviate this situation, the Government of Kyrgyzstan placed all of its major mineral enterprises under the administration of a newly formed state mineral concern, Kyrgyzaltyn for the purpose of expending it major effort to develop the gold mining sector.

Kyrgyzstan was one of the most successful of the new countries of the FSU in attracting foreign investment in its gold-mining sector. Kyrgyzstan, however, has not yet attracted major foreign investment in its other mineral industries and their survival could depend on their ability to attract foreign investment and enter world markets.

OTHER SOURCES OF INFORMATION

Kyrgyzaltyn
55 Manas St.
720001 Bishkek, Kyrgyzstan
Telephone: 7-3312 220 941
Fax: 7-3312 227 228

Ministry of the Economy
Erkindid Prospekt 58
720345 Bishkek, Kyrgyzstan
Telephone: 7-3312-22-89-22
Fax: 7-3312-22-74-04

State Commission on Foreign Investment and Economic Assistance
(GOSKOMINVEST)
Erkindik Prospekt 58A
720874 Bishkek, Kyrgyzstan
Telephone: 7-3312-22-32-92/22-12-52
Fax:7-3312-22-03-63/62-01-88
Telex: 245169 ASKAR SU

TABLE 1
KYRGYZSTAN: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity	1992	1993	1994	1995
Antimony:				
Mine ouput, Sb content	2,000	1,600	1,400	1,400
Metal	11,000	11,000	9,000	9,000
Cement 2/	1,100,000	700,000	400,000	310,000
Coal 2/	2,200,000	1,700,000	800,000	474,000
Fluorspar concentrate	850	850	834 2/	850
Gold kilograms	1,000	1,000	835	850
Mercury:				
Mine output, Hg content	300	300	300	300
Metal	400	400	378 2/	380 2/
Natural gas 2/ million cubic meters	100	40	40	36
Petroleum, crude 2/	100,000	100,000	85,900	88,500

1/ Estimated based on information available through July 10, 1996.
2/ Reported data.

TABLE 2
KYRGYZSTAN: STRUCTURE OF THE MINERAL INDUSTRY FOR 1995

(Metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity e/
Antimony:			
Metal content of ore	Kadamzhay and Khaydarkan complexes	Kadamzhay, Khaydarkan regions,	2,400.
Metal	Kadamzhay metallurgical complex	Kadamzhay region	20,000.
Coal	7 underground mines, 5 open pits	Southwestern, central, and northeastern parts of country	2,200,000.
Cement	Kantskiy cement plant	Kant	1,500,000.
Fluorspar	Khaydarkan mining and metallurgical complex	Khaydarkan deposit	5,000 (fluorspar concentrate).
Gold	Kyrgyzstaltyn State Concern	Makmal deposit, (Kumtor, Dzheruy Taldy-Bulak Levoberezhny deposits under deve;pment)	3 (development of new deposits could raise annual capacity to 22 to 25 t/yr in 5 to 6 years).
Mercury:			
Metal content of ore	Khaydarkan mining and metallurgical complex	Khaydarkan deposit	700.
Metal	Do	Khaykdarkan	1,000.
Petroleum and Natural gas million cubic meters	Approximately 300 wells: major deposits include Changyr-Tashskoye Izbaskentskoye, Mayli-Suyskoe, Chigirchikskoye Karagachskoye, Togap-Beshkentskoye, Suzaskoye	Western Kyrgyzstan near Mayli-Say	150,000 (petroleum). 100 (natural gas).
Rare earths	Kyrgyz mining and metallluargical complex	Aktyuz deposit	NA.

e/ Estimated. NA Not availabale.