

III.4. Mining of the Salt Lakes.

III.4.1.- Lithium.

Chile is the second largest producer of lithium in the world.

Production of lithium carbonate in 1991 was 8,575 tons compared to 9,082 the previous year.

All of the product is exported. Exports during 1990 were 8,228 tons worth US\$ 23.6 million. In 1989 exports were 8,102 tons, worth US\$ 22.5 million.

Estimated reserves in the Atacama Salt Mine are 4 million tons of lithium. There are also 53 million tons of potassium, 26 million tons of magnesium and 11 million tons of boric acid.

The only producer of lithium in Chile is Sociedad Chilena del Litio, which is owned by Foote Minerals of the U.S.A., a subsidiary of Cyprus Minerals Company. When the Minsal project of Amax is completed, lithium production could increase to about 25,000 tpy.

III.4.1.1.- Sociedad Chilena del Litio - Foote Minerals.

Sociedad Chilena del Litio was created as a joint venture between Foote Minerals of the U.S.A. and Corfo. During 1988 Corfo sold part of its share in the company to Cyprus Minerals for US\$ 6.5 million, and in 1989 it sold its last block of shares of 20% to Foote Minerals, a Cyprus Minerals subsidiary, for US\$ 7.5 million.

At the end of 1988 Sociedad Chilena del Litio's authorized monopoly of these salts expired.

In July, 1988 the company finished construction of a potassium chloride plant in the Atacama Salt Mine, which has a capacity of 35,000-45,000 tpy. According to a contract with SOQUIMICH, the latter will buy all the production, thereby substituting part of its imports. The investment in the project was US\$ 3 million.

A second plant is also under construction at La Negra (Antofagasta) to remove the boron content in lithium salts before carbonate precipitation. This plant will also make production of metallic lithium and lithium chloride easier. The plant cost US\$ 2.6 million.

III.4.1.2.- Potassic salts.

Compañía Minera Salar de Atacama (MINSAL) is a joint venture between Amax Exploration Inc (63.75%), Molibdenos y Metales S.A. (Molymet) (11.25%) and Corporación de Fomento de la Producción (Corfo) (25%). It was established in 1986 to develop the mixed salts project in the Atacama Salt Mine. The products to be obtained were lithium carbonate (15,000 tpy), potassium chloride (500,000 tpy), potassium sulfate (230,000 tpy) and boric acid (16,000 tpy). Investment in the project requires US\$ 400 million.

The financing had been requested of NM Rothschild & Sons of London by Amax. Jacobs Engineering company of the U.S.A. completed the feasibility study in February 1990. The main obstacle to initiating the investment is the products' price, which could fall with such high production. This is especially true for lithium whose price is only US\$ 1.20 per pound.

The project would provide work for 600 people when operating at full capacity, and it also includes the construction of a mechanized port in Mejillones.

Amax, which had until February, 1991 to decide on the projects' start-up, has offered its share for sale. International Finance Corporation (IFC), which has its own technical analysis on the Minsal project, is interested in buying. One financing alternative is the one Escondida used, guaranteeing credits with advanced sales of production. The use of DL 600 for US\$ 320 million has been authorized by the Banco Central. Other buyers that have been mentioned are U.S. Borax, BHP of Australia and Cyprus. If the buyer were the latter, it would control world production of lithium.

In March 1991 there were five parties interested in its implementation who were analyzing the possibility of buying Amax's share or a part of it. Corfo contacted 38 companies offering them a share in the project. Five of the companies in the final decision-making stage.

The Chilean company Sociedad Química y Minera de Chile (SOQUIMICH), in a joint venture with Lithium Corporation (LITHCO), and Tenneco of North America alone have been mentioned among the most serious candidates. In both cases the projects would be redefined for a US\$ 150 million investment and production of 33 million pounds of lithium plus an amount of potassium chloride. The advantage of the first