

In 2006 mining resources above the feeding level of the old Sewell concentrator will be depleted, and at that time it will be necessary to decide on their replacement by a more modern unit in Colón the technical and economic feasibility of transporting mineral up to the concentrator.

Information on the equipment used in Teniente may be found in Directory XI.2, Equipment Inventory.

II.2.1.8 Challenges to Codelco.

Decreased productivity, increased costs, lower grade minerals and depletion of deposits are the main problems faced by Codelco at present.

Investments made by Codelco have not been excessive. Extraction methods have not varied significantly with respect to methods used 15 to 20 years ago. Operations have been rationalized, economies of scale have been introduced, and the use of facilities has been intensified. The most important technological contribution has consisted of obtaining higher productivity using existing equipment. Availability of equipment has increased, with adequate programmed maintenance, and marginal investments have been made.

Most of the new developments are based on conventional technology, and the most important ones have been the solution to the problem of mineral treatment at Exótica - today Mina Sur - and the smelting system at El Teniente.

Other problems that are expected in the future involve the increased impurities and other metallic elements that will appear as exploitation takes place at greater depths, which will require the development of control and recovery methods. Perhaps exaggeratedly, it has been said that Chuquicamata now contains more arsenic than copper.

The solution to these difficulties has raised operating costs in all Corporate Divisions. Average costs of producing a pound of copper have increased from US¢ 48 in 1985 to US¢ 60.25 in 1991.

In Chuquicamata costs rose from 47.6 cents to 50.2 cents in Salvador from 73.5 to 84 cents, in Andina from 48.4 to 50.5 cents (without processing) and in El Teniente from 49.9 to 68.1 cents.

In addition to the pressure on costs resulting from changes in technology there are higher salary demands now. This item increased from 11.1 cents per pound in 1985 to 16.1 in 1990.

This point brings up another of Codelco's problems, which is productivity. Remuneration costs are high mainly because of the number of workers and labor absenteeism. The start-up of La Escondida, which will have higher production than El Teniente with a staff of only 1,000 workers (without processing), has emphasized this problem. The personnel at El Teniente is about 9,300 workers.

II.2.1.9 The Codelco Law.

In mining, one of the most controversial aspects of President Aylwin's first year of government was the Law that will govern the Corporación del Cobre.

The bill presented to Congress by the President of the Republic was divided into six articles with the following content:

1. Empowers Codelco, with the authorization of the Chilean Copper Commission, to dispose of claims that are currently unexploited.
2. Refers to the scope of that authorization; it refers to the juridical acts that Codelco is permitted to carry out with the claims.
3. Authorizes Codelco to transfer those claims that do not justify exploitation on a large-mining scale to Enami.
4. Establishes the requirements necessary to adopt a decision to associate - which requires favorable votes from five of the seven members of the Codelco Board of Directors - (among them the votes of the Minister of Finance and Minister of Mining) and stipulates that the agreement must be countersigned by the President of the Republic.
5. Stipulates that the rights acquired by Codelco in the partnerships they form can be transferred only if the requirements indicated in the preceding paragraph are met.
6. Indicates that the Chilean Copper Commission's report, which establishes that the deposits that are transferred correspond to claims that were not being exploited when DL 1.167 of February 27, 1976 was issued, must be a favorable one.