

CHAPTER XII: DEPARTMENT OF MINES

National Aluminium Company Limited

12.1.1 Investment in commercially unproven technology

Owing to omission on the part of the Company to ascertain the commercial viability of the new technology, the expenditure of Rs.2.63 crore incurred in acquiring it was not productively utilised.

A Nickel Technology Proving Plant (Nickel-TPP) for production of basic nickel carbonate from Chromite Overburden (COB) was installed (September 1999) in the premises of the Regional Research Laboratory, Bhubaneswar jointly by Hindustan Zinc Limited (HZL) and the Council of Scientific and Industrial Research (CSIR) at a cost of Rs.10.50 crore on equal sharing basis. The nickel carbonate was to be processed into nickel oxide to facilitate extraction of nickel metal.

In view of the proposed disinvestment of HZL, the Ministry of Mines, the GOI directed HZL (October 2001) to assign the patent right of the technology for extraction of nickel from COB to National Aluminium Company Limited (Company). It also directed the Company to set up a nickel extraction plant for which techno economic feasibility report (TEFR) was to be prepared.

The Company accepted the proposal without expressing any reservation about its viability to the Ministry and entered (December 2002) into an agreement with HZL for acquiring patent rights of the know how package including rights for Nickel-TPP and paid Rs.5.25 crore (50 per cent of the cost of TPP) to HZL in August 2003. National Mineral Development Corporation Limited (NMDC) also joined (November 2005) the project and reimbursed Rs.2.62 crore * to the Company.

It was observed in Audit (March 2006) that while acquiring the project the Company was aware that for commercial production of nickel, nickel carbonate was to be processed into nickel oxide for which the technology was to be procured. The TEFR for this project was also to be prepared to ascertain the commercial viability and judge the effectiveness of the technology. Economic viability of the nickel plant also depended on gainful treatment of residues generated during nickel production for iron extraction. For this also a feasibility study for application of ROMELT technology was required. The Company, however, had not prepared the TEFR (September 2006) even after three years of acquiring the technology. Thus, due to delays in ascertaining the commercial viability of the new technology and completing the nickel extraction process the expenditure incurred in acquiring the technology remained unproductive.

The Ministry while accepting the fact stated (December 2006) that NALCO, NMDC and RRL had agreed in principle to go ahead with the preparation of the techno economic

* 50 per cent of the amount paid to HZL

feasibility report for establishing a commercial scale plant for extraction of nickel from Chromite overburden. RRL had furnished a draft 'invitation for global expression of interest' for preparation of the techno economic feasibility report which was under finalisation.