

MECON, EIL and IBM are the major organisations providing environmental management services while Regional Research Laboratories (RRL) of CSIR undertake research on issues for ultimate adoption. RRL, Bhubaneswar (Orissa) recently conducted research on utilisation of iron ore fines and chromite slimes with a view to check pollution. According to an estimate, some 30 million tonnes of hematite ore are processed (washed) annually, resulting in over 6 million Mt of slimes in the country. Besides polluting the atmosphere, these slimes also cause a loss of mineral wealth if not processed further.

Moreover, with the fast depleting of high or better grade ores (Chromite, manganese, copper, lead-zinc), it has become necessary the use subgrade ore in order to bridge the demand/supply gap.

Canadian Experience

Canada has a well developed mining industry and mining technologies, and thus can help India in developing its mining sector, whose record in the past decade has been below the GOI's expectations. This is attributed to financial constraints. Though Canadian services have been retained in the past for the development of coal, zinc and nickel projects, its present participation is not as wide as that of Russia and other communist countries, the UK and Germany. This could, perhaps, be traced to the GOI's earlier restrictive policies. With the opening of the economy, including the mining sector, Canada can now enlarge its participation in areas such as:

- (i) air and water quality maintenance
- (ii) land reclamation
- (iii) toxic waste storage or elimination in industries such as copper, zinc, iron and steel, aluminium
- (iv) controlling sulphur and other gaseous emissions
- (v) treatment and utilisation of slimes (e.g. iron ore and chromites)
- (vi) designing sumps for large sized mines (coal, iron ore etc)
- (vii) project management
- (viii) interpretation and analysis of geological data
- (ix) exploration and prospecting, with the help of modern tools
- (x) utilisation/exploitation of lean ores (copper, chromite, nickel) and even low quality coal.