Coal Conservation

Conservation of Coal is an important area, particularly when our Coal reserves are finite. The aspect of conservation of Coal is taken into account right from the planning stage and maximum recovery is ensured during the implementation stage. Mines are designed to work the Coal seams either through opencast or through underground methods depending on the technical feasibility and economic viability.

Mechanized opencast (OC) mining is presently the commonly adopted technology for extraction of thick seams at shallow depth. This is also important from the conservation point of view since the percentage recovery by this technology is around 80% to 90%. Presently, this technology dominates the Coal industry contributing 93.7% of country’s Coal production. Further, whenever it is feasible, the developed pillars of underground mines are being extracted through opencast operations.

Introduction of new technologies like long wall method, short wall method, high wall mining and Continuous Miner technology have resulted in increased percentage of extraction in underground mining (UG).

With the improvement in roof support technology with mechanized bolting with resin capsules it has been possible to maintain wider gallery span and extract seams under bad roof conditions more efficiently resulting in improved conservation of Coal.

Sand Stowing

Sand stowing in underground mines is yet another effective means of Coal conservation, which is widely in use for extraction of Coal pillars from underground coal seams lying below built-up areas, such as important surface structures, railway lines, rivers, nallahs, etc. which otherwise would have resulted in locking of coal in pillars. Stowing also helps in the extraction of thick seams in several lifts increasing the percentage of extraction. Due to scarcity of sand, various experimental trials are being conducted to use other materials like fly ash, boiler ash and crushed overburden material etc. for stowing in underground mines as substitute for sand. Currently, crushed overburden material is being used commercially for stowing purposes in underground coal mines where sand is not available in the near vicinity of the mine or it is costlier to transport sand from distant river sources.

Conservation and Development of Transport Infrastructure

The Coal Controller acts as the Member Secretary for the Coal Conservation & Development Advisory Committee (CCDAC), constituted under the Coal Mines (Conservation & Development) Act, 1974. The office of the Coal Controller receives process and scrutinizes applications/claims from Coal Companies regarding Protective work, Scientific Development Works, road and railways infrastructure projects in the coalfields areas to release of funds through CCDAC.

Ministry of Coal vide its Office Memorandum No. 20011/12/2018-IFD dt.4.1.2019 communicated the Budget for two Plan Schemes as:

- Conservation & Safety in Coal Mines (including Tribal Sub-Plan) – ₹ 59.50 Crores.
- Development of Transport Infrastructure in Coalfields (DTIC) – ₹ 140.00 Crores

There was spill over amount of ₹ 33.57 Cr. in Conservation and Safety Head and ₹ 208.50 Cr. in Development of Transport Infrastructure Head from 2017-18 (i.e. after 81st CCDAC meeting).

MOC has released an amount of ₹ 42.40 Cr. in Conservation & Safety Head and ₹ 140.00 Cr. in Development of Transport Infrastructure Head up to 31.03.2019, there is spillover of ₹ 36.59 Lakh in Safety Head and ₹ 68.50 Cr. in Development of Transport Infrastructure Head.