

<p>Project title: Advice on use of ash from DCPD with overburden at Gare Pelma IV/1 Opencast mine, Tamnar Phase-III(4)</p> <p>Project No - CNP/4862/2019-20</p>	<p>Executive Summary:</p> <p>JSPL, Dongamauha Captive Power Plant, Tamnar has no ash pond and therefore the management of JSPL wanted to utilize major portion of the ash generated from their power plant as a backfill material in nearby opencast mines of Gare Pelma IV/I. Therefore, they approached CSIR-CIMFR to carry out the above-mentioned study. The main objective of the study was to develop a methodology of dumping ash in the abandoned portion of the mine based on the results of modelling so that the ash-OB benches are stable. This project is an extension of previous project and the study also included monitoring of metrological, ground water, particulate parameters etc. data to assess the influence of ash backfilling in the core and buffer zone. Field studies were undertaken to collect data on mine void geometry, hydrogeology which was used as an input for modelling and other above-mentioned monitoring parameters. On the basis of numerical modelling a method of dumping was suggested where coal ash admixture will be dumped in alternate layers, of height not exceeding 5.0 m in each layer with an initially row of OB dumps not less than 15m wide and 5m high shall be dumped all around the area proposed for ash dumping over a deck (of 30 m height) and adequately compacted. Thereafter, mixtures of ash (25%) and overburden (75%) shall be dumped within the area surrounded by such OB dumps. In this manner, the dumping shall be laid in the layer of 5 m height containing both overburden as well as ash and subsequent layer of 5m height of OB alone so as to form a deck of height not more than 30 m.</p>
---	---