

**ONE DAY BRAIN STORMING TECHNICAL SESSION ON  
"IMPROVING VENTILATION SYSTEMS IN UNDERGROUND COAL MINES OF  
M/S MCL".**

\*\*\*\*\*

- 1.0 M/s Mahanadi Coalfields Limited has some of the oldest operating belowground coal mines of the country, dating back as much to the year 1926. These mines are operating in normal thickness of coal seams from upto 5 to 10 m to a maximum of about 40 m thickness, in single/multiple sections. The mines are spread over in two coal fields namely the 'Talcher Coalfield' and the 'Ib Coalfield', and numbering 2 and 4 respectively. Though mines in Talcher field have been also liquidated by caving/stowing method, on a random basis, the mines of 'Ib Coalfield' are only on developmental activities for all these years with a vast and extensive network. As a result, the ventilation system by and large is severely throttled and loaded in all mines leading to uncomfortable levels which are beyond the statutorily prescribed minimum. The problems are further compounded by extraneous reasons like absence of arrangements for ventilation maintenance like well trained persons, material, executing agency, etc. Under such complex nature of ventilation arrangements, emergency management will be not only impossible closest to seat of problem but may even lead to closure of mines. In nut shell, the ventilation systems are in dire need of urgent intervention for course correction for not only ensuring statutory stipulations but also providing better working environment.
- 2.0 With this backdrop and with the blessings of Shri Rahul Guha – Director General of Mines Safety and Shri P.Ranganatheeshwar – Deputy Director General of Mines Safety(HQ & SEZ), a brain storming technical session titled "Improving Ventilation Systems in Underground Coal Mines of M/s MCL", was organized in Bhubaneswar Region of DGMS between 09.30 hrs and 15.00 hrs on the 13<sup>th</sup> August, 2015, for the benefit of around 21 field level mining professionals of the rank of Ventilation Officers/Manager/Agents drawn from mines of both 'Talcher Coalfield' and 'Ib Valley Coalfield'. The faculty for the technical session comprised of the posted officers of Bhubaneswar Region, and Shri G.Venkateshwarlu – Senior Manager, R&D Wing of M/s Singareni Collieries Company Limited – who has exposure and expertise on mine ventilation planning and networking.
- 3.0 Shri R.Subramanian – Director of Mines Safety, Bhubaneswar Region welcomed all the invitees and highlighted the current poor status of affairs and the gross inadequacies in existing infrastructure in terms of both required policy/equipments and the organization. He also highlighted the underlain dangers in sustaining with the present system of mine ventilation which was both qualitatively and quantitatively lacking. Before commencing the technical session, a video clip of blessings and advice from Shri P.Ranganatheeshwar – Deputy Director General of Mines Safety(HQ & SEZ) was played to the audience,
- 4.0 The technical session began with power point presentations covering the statutory aspects of mine ventilation, made by Shri Arvind Kumar – Deputy Director of Mines Safety and Shri N.K.Sriram - Deputy Director of Mines Safety. Problems associated with contractual execution of routine as well as emergency ventilation measures were discussed at length and various dangerous short-comings thereof, were highlighted. Shri G.Venkateshwarlu from M/s Singareni Collieries Company Limited made a presentation on 'Ventilation Systems in Underground Coal Mines'. The presentations were focussed on various common omissions on day to day ventilation planning and also on approach to sealed-off area monitoring and behavioural analysis and controls.
- 6.0 The technical session ended with a resolve to improve ventilation arrangements in mines on both short-term and long-term basis, with scientific investigations to be done on the existing ventilation network for better understanding. It was also decided to formulate a check-list for examination of all old workings in mines, both open and sealed-off.
- 7.0 At the end, all attendees thanked DGMS for taking the initiative to organizing such technical meet and also thanked Shri G.Venkateshwarlu – Senior Manager, R&D Wing of M/s Singareni Collieries Company Limited for his interesting presentation.

**Shri R.Subramanian, DMS, BBSR addressing the gathering.**



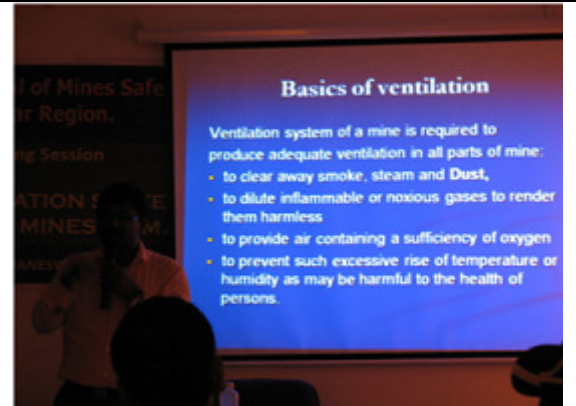
**Presentation by Shri Arvind Kumar, Dy.DMS**

**Presentation by Shri N.K.Sriram, Dy.DMS**



**Presentation by Shri G.Venkateshwarlu.**

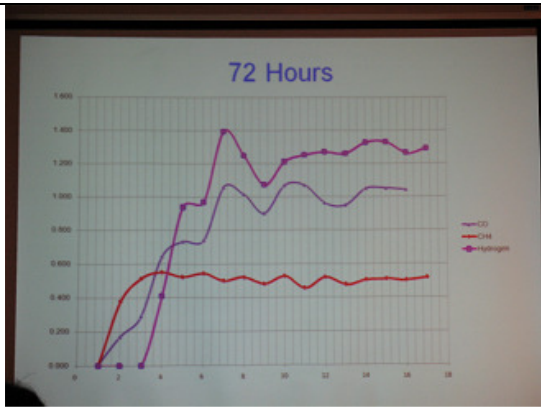
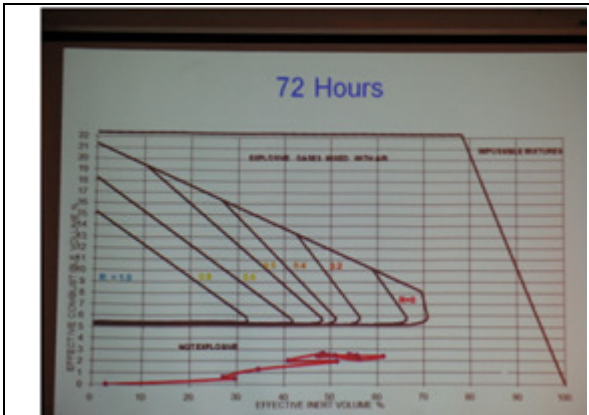
**Technical Presentation.**



**Technical Presentation.**



**Technical Presentation.**



Technical Presentation.