





Government of India श्रम एवं रोजगार मंत्रालय Ministry of Labour & Employment खान सुरक्षा महानिदेशालय Directorate General of Mines Safety



DGMS(Tech)(MAMID)Circular No. 04 of 2017

Dhanbad: 16/06/2017

To

All Owner, Agent & Managers of Coal Mines

Subject: Providing Environmental Monitoring System in belowground coal mines.

Sir,

Of late there were incidences of fires in sealed off areas of underground coal mines which remained unnoticed till general body of air outside the area became contaminated with Methane, Carbon Monoxide, Hydrogen and other Hydrocarbons. In one such case the situation demanded withdrawal of persons from belowground workings and fighting of fire from surface by injecting/pouring Carbon Dioxide through boreholes, keeping main mechanical ventilator running at 25% of its normal water gauge. It was also inferred from the analysis of the air samples from the environment inside the sealed off area that series of explosions had taken place resulting increase of Hydrogen during distillation of coal. It is pertinent to note that any such hazardous situation could have caused disaster in the mine in case of firedamp or coal dust explosion, resulting huge loss of lives & properties.

In this regard your attention is drawn to the Recommendation of 7<sup>th</sup> National Conference on Safety in Mines wherein it was suggested to provide necessary facilities for continuous type monitoring of the environmental parameters in respect of combustible and toxic gases in belowground coal mine workings in gassy seam of third degree and other coal mines having active underground fire. Noticing increasing trend of incidences of fire in coal mines; 8<sup>th</sup>, 9<sup>th</sup>, 10<sup>th</sup> & 11<sup>th</sup> Conference on Safety in Mines carried forward the said Recommendation.

This Directorate, through DGMS (Tech) Circular No. 08 of 2012 dated 23.03.2012, expressed concern for not abiding by the above-mentioned recommendation.

While taking stock of the situation as regard to installation of Environmental Monitoring System in gassy seam of third degree and fiery coal seams, after a series of fire in coal mines, it was noted that progress made toward the recommendation was minimal. It was further revealed that had such continuous monitoring system been installed in

degree three coal seams/fiery coal seams, detection of fire in early stage could have been possible and preventive action could have been taken.

Therefore, all concerned are requested to initiate procurement of approved Environmental Monitoring System immediately for all belowground coal mine workings in third degree gassy seams & fiery coal seams.

Yours faithfully,

(P.K. Sarkar)

Director General of Mines Safety