



**Govt. of India**  
**Ministry of Labour and Employment**  
**Directorate General of Mines Safety**



DGMS Circular (Technical) No. 08

of 2013 Dhanbad, Dated 23.9.2013

To

All Owners, Agents and Managers of the Mines

Subject : - Design, control and monitoring of Pit and Dump Slopes in Opencast Mines.

Sir,

With ever increasing demand for minerals, the opencast mines are growing deeper and deeper. The increased speed of mining introduce additional risks to the standing slopes in opencast mines in terms of their stability. Compounding the problem is the lack of adequate dumping areas for the operating mines due to a variety of reasons forcing the mines to go for in-pit dumping. Various dangers associated therewith had been clearly brought out in DGMS Technical Circular No. 2 of 2010 dated 06.07.2010.

In view of the above, the following measures are recommended for all operating opencast mines.

- (i) Design mine and the pit as well as dump slope scientifically taking into consideration geotechnical parameters of rock and the dumps including hydro geologic and weather conditions etc., to ensure stable Pit and Dump slope profile not only during mining but thereafter also and
- (ii) Deploy a suitable slope monitoring system in mines customized to the local needs as arrived at by a Risk Assessment Process, for ensuring timely withdrawal of men and machinery from any area in a mine likely to be affected by an impending slope failure.

This Circular supersedes all clarifications issued earlier by this office on the subject.

(Rahul Guha)

Director General of Mines Safety

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