



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



No. DGMS (Tech) Circular (MAMID)/ 02

Dhanbad, dated : 07/05/2015

To

The Owner, Agent and Manager of all Mines

Subject: Accidents due to wheeled trackless machinery during 2014.

Sir,

At present, wheeled trackless transportation machineries like dumpers/tippers (henceforth 'dumpers' only) are used by mine operators widely in Open Cast mines. While increase in production of coal is a primary objective of the mine management, at the same time it has to ensure the safety and welfare of its workers. The coal mines in India need to use these machines in a judicious way to meet these two important goals. It is observed that during 2014, 13 accidents occurred due to dumpers out of a total of 64 fatal accidents. A detailed analysis of these fatal accidents revealed the following,

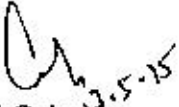
- (i) During 2014, 67 persons were killed in coal mines as a result of 64 fatal accidents,
- (ii) Out of these 64 accidents, 13 accidents involving 14 fatalities happened due to dumpers,
- (iii) Majority of accidents occurred either at the haul road or at stock yard,
- (iv) 8 operators, 3 fitters, 1 mechanic, 1 deputy supervisor and 1 tipper helper were victims,
- (v) Out of 14, 11 were regular workers and 3 worked under contractors,
- (vi) In some cases, mechanical fault of dumpers resulted into accidents indicating that the management was not vigilant enough to check the condition of dumpers before operating it,
- (vii) One of the sub-causes was identified as movement of dumper in reverse direction indicating the failure of the dumper driver/supervisory staff/management to ensure the safety and security of the workers in the vicinity and possibly non-functioning of the audio-visual reversing alarm. In a case, where a contractual light vehicle operator aged 22 years had died, it was revealed that the accident occurred while restarting a breakdown loaded dumper on the mine haul road. The dumper was moved in reverse direction mistakenly, hitting a contractual jeep driver standing behind it,
- (viii) A case had been identified where the driver of the dumper was not wearing the seat belt,

- (ix) In one case a loaded dumper with overburden material was travelling down on an unconsolidated ramp which was under preparation in an opencast coal mine. Due to this activity, the dumper fell into a sump to a depth of about 17m due to sliding of the ramp, submerging the operator cabin in sludge/water. The operator died due to drowning. Thus, if the dumper had not been allowed to operate in an unconsolidated ramp, the life of the dumper operator could have been saved.

The above mentioned analysis is brought to the notice of all concerned so that valuable lessons are learnt and similar incidents are avoided in future. I, once again reiterate the need of the following precautions among others in operation of dumpers in Open Cast mines of the country,

- (i) Ensure that dumpers are fit to operate in all respects before it is engaged in mines,
- (ii) Ensure that the path of the moving/standing dumper remains clear from objects/individuals,
- (iii) Ensure that the alarm systems of the dumper are in working condition,
- (iv) Ensure that the dumper operators use seat belt while operating the same,
- (v) Ensure that the dumpers are not overburdened due to unmanageable load of material.

Yours faithfully,


(Rahul Guha) 7.5.15
Director General of Mines Safety