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

DGMS(Tech)/Circular No. 03 of 2013

Dhanbad, dated 23.05.2013.

To
The Owners, Agents & Managers,
of all Coal Mines.

Sub: Accidents due to dumpers & tippers/trucks in Open Cast Coal Mines

Analysis of fatal accident statistics in coal mines from 2006-2011 revealed the followings:

- (i) Out of the total 487 fatal accidents, 135 accidents occurred in opencast coal mines;
- (ii) Out of the 135 accidents as mentioned above, 58 fatal accidents were due to dumpers, 59 due to tippers/trucks and 18 were caused by other vehicles;
- (iii) 42.96% of the accidents were caused by dumpers and 43.70% were caused by trucks/tippers, thereby, making them the largest cause group contributing to fatal accidents in opencast coal mines;
- (iv) Analysis also revealed that 12.07% of the accidents caused by dumpers was due to head on collision, 18.97% due to hit by dumpers, 24.14% due to run over while reversing, & about 20.69% was due to toppling.
- (v) 5.08% of the accidents caused by trucks/tippers were due to head-on collision, 40.68% were due to runover while reversing, 16.95% were due to toppling down of trucks/tippers and 15.25% were due to hit by truck/tippers;

- (vi) Reversing of dumpers and trucks/tippers contributed to a large percentage of the accidents;

Investigation into such accidents further identified the root causes as,

- (a) lack of awareness
- (b) lack of adequate training
- (c) issues regarding maintenance of dumpers, tippers/trucks etc.
- (d) design and maintenance of haul road, etc.

In order to prevent such accidents and to increase awareness among all stakeholders, several circulars had been issued by the DGMS in the past. A list of such circulars is enclosed.

I once again reiterate the need for exercising utmost caution in operation of such machines in opencast coal mines of the country and remind all concerned that compliance to the recommendations made in the circulars will go a long way in preventing accidents caused by dumpers, tippers/trucks, etc.

I would also like to draw your attention to the recommendations of the 7th & 8th Conferences (1988 & 1993) on "Safety in Mines" pertaining to the subject and urge all mine managements, supervisors, workers and contractors to implement the recommendations in right earnest.

All such accidents are preventable, and in order to achieve that, a thorough risk assessment, framing and implementation of an effective safety management plan need to be made at all mine level so that the risks from operation of dumpers, tippers/trucks and other wheeled - trackless transportation machinery are eliminated.



(Rahul Guha)

Director General of Mines safety

Encl: As above.

सेवा,

श्रीमान सुरक्षा विभाग

(सोसा)

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संख्या 1261-99 दिनांक 27-05-13

प्रतिष्ठित सुरक्षा

की उनके कार्यालय कार्यालयों के बीच

परिचालन हेतु प्रेषित।

श्रीमान सुरक्षा महानिदेशक

Annexure

List of Circulars issued earlier

1. Circular (Tech) 13 of 2002 on "Safety Management System", which specify Risk Assessment, Risk Management Plan & its control.
2. Circular (Tech) 9 of 2003 on "Provision of proper audio visual alarm during reversing of vehicles", which specify the specifications of Audio Visual Alarm.
3. Circular (Tech) 2 of 2004 on "Accidents due to tippers in opencast Mines", which specify about the fitment of exhaust brake.\
4. Circular (Tech) 6 of 2008 on "Separate road for light motor vehicles in mine premises of mechanized opencast coal and non-coal mines".
5. Circular (Tech) 9 of 2008 on "Modified standard condition stipulated under regulation 98 of CMR, 1957 and regulation 106 MMR, 1961 for using HEMM in opencast mines".
6. Circular (Tech) 1 of 2009 on "Use of Surveyed off equipment in opencast Coal and Metalliferous Mines".
7. Circular (Tech) 12 of 2009 on "Provision of rear vision system in equipment".
8. Circular (Tech) 5 of 2010 on "Safety features to be incorporated in Tippers/Trucks".
9. Circular (Tech) 4 of 2012 on "Accidents due to dumpers due to failure of braking and steering systems in mines".