



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



No. DGMS (Tech) Circular (MAMID)/ 03

Dhanbad, dated : 22 / 04 / 2014

To

The Owner, Agent and Manager of all Mines

Subject: Accident due to Dump Failure

In an opencast coal mine, several villagers were fatally injured while picking/collecting remnant coal from the toe of an external overburden dump.

The enquiry into the accident revealed the following:

1. Fencing of substantial construction was not erected around the dump to prevent inadvertent entry into the dump area;
2. The dumping was made in two lifts. Overall height of the dump was about 64m and the width between the lifts was not sufficient;
3. The ground water pressure in the dump increased due to ineffective drainage system both inside and outside the overburden dump;
4. Top soil, dumped at the bottom of the overburden dump, had created an unstable base;
5. The carbonaceous shale and coal, dumped with overburden rock, had caught fire with passage of time. The creation of void due to burning of carbonaceous shale and coal had further disturbed the dump and accentuated the slide.

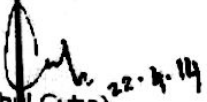
In order to prevent the recurrence of such type of accident(s) in future, you are requested to inter alia take the following steps :

1. A scientific study is to be made, in case the planned height of the dump is beyond 30m. The width of any bench in waste dumps shall not be less than its height.
2. In case of existence of any road nearby, dumping shall be done in such a way that the distance between the toe of dump and the road is not less than twice the overall dump height.
3. The top soil and sludge shall not be dumped at the floor to create the base of the dump.

4. For reducing the ground water pressure in the dump rock above phreatic surface, effective drainage system shall be provided both inside and outside the overburden dump. In this regard, the guidelines provided in DGMS Circular (Tech) No. 2 of 2001 in designing pit slope shall be followed.
5. The dump area shall be substantially fenced, in accordance with Regulation 112 of the Coal Mines Regulations, 1957, to prevent inadvertent entry of any person to the dump.
6. Precautions shall be taken to prevent spontaneous heating and fire in the carbonaceous shale and coal dumped along with overburden rock.

I am sure, that the precautions laid down above shall go a long way in preventing such accident(s) in future.

Yours faithfully,


(Rahul Guha)
Director General of Mines Safety