

**GOVERNMENT OF INDIA
COAL
LOK SABHA**

UNSTARRED QUESTION NO:4413
ANSWERED ON:17.04.2001
KAWADI COAL MINE TRAGEDY
VILAS BABURAO MUTTEMWAR

Will the Minister of COAL be pleased to state:

- (a): whether a High Powered Committee to probe into the causes of accident of Kawadi opencast coal mines of Western Coalfields Limited has since submitted its report;
- (b): if so, the recommendations made by the Committee and the outcome thereof; and
- (c): the steps being taken by the Government to implement these recommendations?

Answer

THE MINISTER OF STATE FOR COAL (SHRI SYED SHAHNAWAZ HUSSAIN)

(a): Yes, Sir.

(b) & (c) the details of recommendation made by the committee are annexed. CIL has been requested to implement the recommendations.

Annexure referred to in reply to Lok Sabha Unstarred Question No. 4413 for 17.4.2001.

Recommendations of High Powered Technical Committee Kawadi opencast mine accident.

1. The conditions specified by Directorate of Mines Safety in relation to width and height of benches should be strictly followed. This would give a higher factor of safety to take care of uncertainties.
2. If any change has to be done, it must be spotted with scientific analysis on slope stability and necessary permission should be obtained from the Competent Authority.
3. Slope in the direction of gradient of rocks is more risky, due to gravity helping the slope failures. Therefore, benches in the in-crop side need extra precautions. Such slopes, particularly in weaker formation must always be analyzed.
4. Existence of fire in the underground galleries contributes in the weakening of overlying strata and reduction in factor of safety. Therefore, a higher factor of safety should be planned in such cases, e.g. by increasing the width of bench.
5. Wherever benches are formed near a fault a detailed examination should be conducted and it should be ensured that likely sliding mass is removed or stabilized properly.
6. In the instant case of Kawadi OC, rainwater did not have much impact on stability, due to the safe of barrier. In other cases it can create significant pore pressure and in association with tension cracks, can cause instability. Every effort should be made to ensure that water is drained away from slope.
7. Growth of plants in specific cases may help in stabilizing the soft rocks.
8. A system should be created in each opencast mine to draw cross sections of all the sides every month. These cross sections will be signed by Surveyor, Manager, Agent and countersigned by the Chief General Manager of the area.
9. A measurement system already introduced by CIL should be enforced to ensure cross checking of overburden removal at all the mines. The committee recommends that Modern Technology using laser profiling system/ computer processed videography/ high resolution satellite imagery should be used for survey and section preparation etc. These technologies are already established and data collection is almost free from human errors.
10. The inquiry also revealed that the conditions stipulated by DGMS as applicable to final operations were not clear to many concerned officials. It is generally noticed that there is deterioration in the managerial and technical skills. Management needs to revamp its policies leading to improvement in managerial and technical and quality of supervision.
11. The institution of Pit Safety Committee and workmen inspection should be strengthened and also made accountable.

12. Colliery Manager's authority and role be enhanced commensurate with the responsibility entrusted to him.

13. CIL should organize a detailed scientific study on the stability/ failure of slopes in the coal industry.