

**GOVERNMENT OF INDIA
MINISTRY OF COAL**

**LOK SABHA
UNSTARRED QUESTION NO. 1707
ANSWERED ON 13.12.2023**

Safety and Security of Coal Miners

1707. SHRI MAHESH SAHOO:

Will the Minister of **Coal** be pleased to state:

- a. whether the safety and security of Coal Miners are under jeopardy in several coal mines in the country and if so, the reasons therefor;
- b. the measures taken by the Government to make coal mines safe and secured for coal workers; and
- c. whether the coal mines are affected very badly due to excessive rains, floods and landslides and if so, the details thereof?

**ANSWER
MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES
(SHRI PRALHAD JOSHI)**

(a): No, Sir. Coal companies under Ministry of Coal are conscious, responsible and proactive as regards Safety & Security preparedness in their operations. The prime objective is to ensure that coal mines are operated in a safe manner that protects the employees as well as the people around the mines and also the environment. All the operations of mine are systematically planned, designed and executed in accordance with extant and relevant statute for ensuring safety of workers engaged in coal mines.

(b): The effective measure being taken by the coal companies to make coal mines safe and secure for coal workers, are as under:

1. Compliance of the statutory provisions under the Mines Act, 1952, the Mines Rules 1955, the Coal Mine Regulations 2017 and Bye-laws & Standing Order framed thereunder to ensure safety in coal miners.
2. Preparation and implementation of Site Specific Risk Assessment based Safety Management Plans (SMPs).
3. Preparation and implementation of Principal Hazards Management Plans (PHMPs).
4. Formulation and compliance of Site-specific Risk Assessment based Standard Operating Procedures (SOPs).
5. Conducting Safety Audit of mines through multi-disciplinary Safety Audit teams.
6. Adoption of the state-of-the art mechanism for Strata Management such as:
 - Scientifically determined Rock Mass Rating (RMR) based Support System. Strata Control Cell for monitoring efficacy of strata support system.
 - Roof bolting by using mechanized Drilling for Roof Bolting with Resin and Cement capsules and use modern Strata Monitoring Instruments.
7. Mechanism for monitoring of mine environment:
 - Detection of mine gases by Methanometer, CO-detector, Multi-gas detector etc.
 - Continuous monitoring of mine environment by installing Environmental Tele- Monitoring System (ETMS) & Local Methane Detectors (LMD) etc.
 - Application of Gas Chromatograph for mine air sample analysis with better accuracy.

- Use of Personal Dust Sampler (PDS).
 - Use of Continuous Ambient Air Quality Monitoring System (CAAQMS) in large OCPs to assess the ambient dust concentration.
8. Specific Safety measures for OC mines:
- Use of eco-friendly Surface Miners for blast free safe mining. Formulation and implementation of Mine-specific Traffic Rules. Training on Simulators to HEMM operators.
 - Dumpers fitted with Proximity Warning Devices, Rear view mirrors and camera, Audio-Visual Alarm (AVA), Automatic Fire Detection & Suppression system etc.
 - Ergonomically designed seats & AC Cabins for operators' comfort.
 - GPS based Operator Independent Truck Dispatch System (OITDS) and Geo-fencing in some large OCPs for tracking movement of HEMMs inside OC mine.
 - Lighting arrangement using high mast towers for increasing level of illumination.
9. Training on Mine Safety:
- Initial and Refresher training & On-the-Job Training as per statute. Training on Simulators to HEMM operators.
 - Skill up-gradation of frontline mine officials on continual basis on various topics.
 - Sensitization of all employees including Members of Safety Committees and contractual workmen on regular basis.
 - Various training programme for enhancement of knowledge of mine executives.
 - Training on Risk Management by SIMTARS accredited executives of CIL.
10. Mine Safety Inspection:
- Round-the-clock Supervision of all mining operations by adequate number of competent & statutory Supervisors and mine Officials.
 - Regular Inspection by Workmen Inspectors appointed in each mine. Surprise back shift mine Inspections by mine and area level officials.
 - Regular mine Inspection by officials of Internal Safety Organization of respective subsidiary and CIL.
 - Periodic mine Inspections by senior officials of CIL & Subsidiaries.
11. Regular safety awareness programs are conducted in every mine to increase safety awareness amongst grass root level workmen for ensuring compliance of safety norms. It is implemented through:
- Safety talks & oaths at the beginning of the shift, Safety Posters,
 - Pictorial hoardings,
 - Propaganda through local cable TV channels,
 - Circulation of code of safe practices for every operation and activity,
 - Animation films and VTC module films in VTC during special and refresher trainings,
 - Monthly PSC meetings in all the mines,
 - Informal WhatsApp group is created in each mine for circulation of safety videos and safety guidelines among all workers and officials.
12. Online Centralized Safety Monitoring System "CIL Safety Information System (CSIS)" for monitoring different safety parameters.
13. Deployment of security personnel like CISF (Central Industrial Security Force).
14. Coal mines start working after obtaining necessary permissions from DGMS and Ministry of Environment, Forest and Climate Change. The implementation of the conditions imposed in the permission letter are verified through inspections by DGMS officials.

(c): No, Sir. The mines near the river, nallah, jore or other source of surface water are guided as per the provisions of the Coal Mines Regulations 2017 and orders made thereunder.
