

**GOVERNMENT OF INDIA  
MINISTRY OF COAL  
LOK SABHA  
UNSTARRED QUESTION NO. 2552  
ANSWERED ON 07.08.2024**

**Safety Protocol in Coal Mines**

**2552. Shri Praveen Patel:**

**Shri Vijay Kumar Hansdak:**

**Smt. Daggubati Purandeswari:**

**Shri Naresh Ganpat Mhaske:**

**Dr. Shrikant Eknath Shinde:**

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

- (a) the current safety protocols in place for coal mines and the total number of mines that are compliant with these protocols;
- (b) the details of coal mine safety inspections conducted during the last three years along with their findings;
- (c) the number of accidents reported in Coal Mines since 2019, State-wise;
- (d) the details of funds allocated under Conservation and Safety of Coal Mines during the last five years;
- (e) the total budget allocation for improving safety in coal mines during the last three years and the manner in which this has been utilized; and
- (f) the details regarding specific measures implemented to check occurrence and reduce accidents in coal mines and the data relating to reduction in the number of these accidents as a result of the same?

**ANSWER  
MINISTER OF COAL AND MINES  
(SHRI G. KISHAN REDDY)**

**(a):** The safety protocols in place in all coal mines under Ministry of Coal 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 Mine Vocational Training Rules, 1966, The Mines Rescue Rules, 1985, The Mines Creche Rules, 1966 and The Coal Mine Regulations 2017 and Bye-laws & Standing Order framed thereunder to ensure safety in coal mines.
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.

(b): The details of safety inspections in coal mines and findings related to contravention of provisions of Mines Act, 1952 and its subordinate Regulations are pointed out for rectifications are given hereunder

Year	No. of Inspections in Coal Mines by DGMS officers	No. of Contravention of provisions under Mines Act 1952 and rules & Regulations made thereunder	No. of Improvement Notices issued under Sec. 22A (1) of the Mines Act 1952	No. of Prohibitory orders issued und Sec. 22 (3) of the Mines Act 1952
2021	1696	5781	71	14
2022	3693	8833	49	22
2023	3685	10935	105	43

(c): The details of state-wise accidents in coal mines reported since 2019 are as below:

State	Fatal Accidents					Serious Accidents				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Chhattisgarh	7	12	5	4	3	10	5	10	19	12
Gujarat	-	-	-	-	-	-	1	-	1	2
Jharkhand	11	8	7	7	9	7	11	15	16	13
Madhya Pradesh	3	4	7	6	4	8	5	15	18	7
Maharashtra	3	4	4	0	3	12	4	5	9	2
Orissa	7	5	2	0	6	2	2	3	4	1
Rajasthan	1	-	-	0	-	0	-	-	1	-
Telangana	8	9	7	5	6	143	79	126	102	65
Tamil Nadu	1	-	0	0	1	0	-	1	1	-
Uttar Pradesh	2	-	1	0	0	0	2	1	1	6
West Bengal	8	6	10	2	5	11	8	10	9	4
<b>Total</b>	<b>51</b>	<b>48</b>	<b>43</b>	<b>24</b>	<b>37</b>	<b>193</b>	<b>117</b>	<b>186</b>	<b>181</b>	<b>112</b>

(d): The funds allocated under Conservation and Safety of Coal Mines during last five years:

Year	Funds allocated (Rs. in Crores)
2020-21	06.00
2021-22	04.50
2022-23	04.00
2023-24	20.00
2024-25	20.00

(e): The total budget allocation for improving safety in coal mines during the last three years:

BUDGET ALLOCATION (Rs. in Crores.)			
Coal Company	2021-22	2022-23	2023-24
CIL	740.39	769.93	787.52
SCCL	129.38	116.864	122.35

**(f):** All Coal mines are governed by the Mines Act, 1952 and rules and regulations framed thereunder. Mines Act, 1952 is administered by DGMS by way of development of suitable legislations, rules, regulations, standard and guidelines, inspections, investigation of accidents, awareness activities, formulating risk management plans.

Apart from 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 there under the following steps are being taken to reduce occurrence of such accident in mines:

1. Preparation and implementation of Site Specific Risk Assessment based Safety Management Plans (SMPs)
2. Preparation and implementation of Principal Hazards Management Plans (PHMPs)
3. Formulation and compliance of Site-specific Risk Assessment based Standard Operating Procedures (SOPs)
4. Conducting Safety Audit of mines through multi-disciplinary Safety Audit teams.
5. Adoption of the state-of-the art mechanism for Strata Management
6. Monitoring of mine environment
7. Specific Safety measures for OC mines, such as:
  - 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.
8. Specific safety measures for Underground coal mines, such as:
  - Elimination of basket loading by introducing semi mechanization with LHDs and SDLs.
  - Replaced the cement capsules with resin capsules for effective roof control system with bolting by pneumatic /hydraulic roof bolting system
  - Wherever geology permits, Continuous Miner technology is adopted
  - Emergency Response & Evacuation Plans (ER & EP) prepared as per Regulation 252 of CMR 2017
  - Air chilling plant to improve underground mine environment.
  - Cordless cap lamps have been procured for the use by rescue personnel.
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 a regular basis.
  - Various training programmes for enhancement of knowledge of mine executives.
  - Training on Risk Management by SIMTARS accredited executives
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 the Internal Safety Organization.
- Periodic mine Inspections by senior officials.

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