

(d) Out of the Total detailed drilling of about 11.77 lakh meter during the year 2019-20 (up to Feb. 2020), about 6.03 lakh meter of drilling was achieved in Non-CIL blocks.

Safety measures in coal mines

3207. SHRI K. J. ALPHONS: Will the Minister of COAL be pleased to state:

- (a) the details of safety measures taken in coal mines;
- (b) number of deaths occurred in public sector mines during the last three years; and
- (c) the details of action taken to improve safety of workers?

THE MINISTER OF COAL (SHRI PRALHAD JOSHI): (a) The following safety measures are taken in coal mines by coal companies:

- Safety measures are taken as per provisions of the Mines Act 1952, the Mines Rules 1955, the Coal Mines Regulations 2017 and several bye-laws framed thereunder.
- Statutory permissions from DGMS are obtained before commencement of mining activities and all mining operations are done as per the stipulated provisions of DGMS permission.
- Coal companies have established multi-disciplinary Internal Safety Organization (ISO) to assist the line management in the matters related to Safety.
- Competent statutory mine officials are provided to supervise mining operations.
- Safety status of mine are being monitored at various level starting from mine level up to Ministry level.

(b) Number of fatalities due to mine accidents in public sector mines under Ministry of Coal for last three years are as under:

Year	2017	2018	2019
Coal India Limited (CIL)	37	43	34
Singareni Collieries Company Limited (SCCL)	12	7	8

(c) To improve safety of workers in coal mines in the country, inspection of mines are done by officers of Directorate General of Mines Safety (DGMS) to assess the safety parameters and to take following actions:

- (i) Pointing out contraventions
- (ii) Withdrawal of permission
- (iii) Issue of improvement notices
- (iv) Prohibition of employment
- (v) Informal stoppages
- (vi) Prosecution in the court of law

Apart from the above, the following actions have also been taken by coal companies to prevent mine accidents and to improve the standard of safety are as under:

1. Preparation and implementation of risk assessment based Safety Management Plans (SMPs)
2. Preparation and implementation of Principal Hazards Management Plans (PHMPs) along with Trigger Action Response Plan (TARP)
3. Formulation and compliance of Site-specific Risk Assessment based Standard Operating Procedures (SOPs)
4. Conducting safety audit of mines
5. Adoption of the state-of-the-art mechanism for Strata Management
6. Use of Surface Miners for blast free mining and avoidance of associated risks
7. Training on Simulators to dumper operators
8. Lighting arrangement using high mast towers for increasing level of illumination
9. Operator Independent Truck Dispatch System (OITDS) and Geo-fencing in some large OCPs for tracking movement of HEMMs inside OC mines.