## GOVERNMENT OF INDIA COAL LOK SABHA

UNSTARRED QUESTION NO:2754 ANSWERED ON:17.12.2008 FIRE INCIDENTS IN COAL MINES Barman Shri Ranen

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

- (a) the number of coal mines where tire incidents have taken place during the last three years and the current year alongwith the reasons thereof:
- (b) the amount spent by the Government on the security of coal mines during the said period; and
- (c) the remedial steps taken by the Government to check such incidents of lire in coal mines?

## **Answer**

## MINISTER OF STATE IN THE MINISTRY OF COAL (SHRI SANTOSH BAGRODIA)

(a): There were 52 number of fire incidents in 43 coal mines of Coal India Limited (CIL) and 5 number of fire incidents in five coal mines of Singareni Collieries Company Limited (SCCL) during the last three years including current year. Reasons of fire in coal mines are as under:

The basic cause of coal mine fire is self-heating or auto-oxidation of coal that starts as soon as it is exposed to air in the course of mining operations. When the heat generated by the reaction of oxidation of coal is not dissipated at an adequate rate, rise in temperature occurs. This rise in temperature. in turn, accelerates the rate of oxidation, causing more heat and temperature, which ultimately leads to an outbreak of fire. This is termed as spontaneous combustion of coal, which depends on the intrinsic characteristics of coal and other extrinsic causes encountered in the course of mining operations. These causes may either facilitate or retard the initiation of mine fire.

The intrinsic properties are like chemical composition of coal (presence or certain macarals e.g. vitrinite etc.) moisture content, volatile matter, presence of pyrites and other geological factors (presence of igneous intrusion, faults etc.). The extrinsic causes include the method of mining(such as depillaring with caving, etc.), status of ventilation, presence of external combustible materials, un-scientific mining in pre-nationalized era etc. Some coal seams, especially in Ranigunj, Jharia, South Karanpura coalfields, are more sLlsceptible to spontaneous heating which increases the possibility of mine fire.

(b) & (c): CIL has made adequate provision for expenditure on safety of mines including provision for protection against mine fires etc. The details on expenditure on safety for the last three financial years and the current year (upto 2nd quarter) incurred by CIL are given below:

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(Rs. in lakh)

Financial year Amount spent

2005-06 51962.42

2006-07 56732.81
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2008-09 29265.25

Coal Companies and Coal India Limited (CIL) are strictly complying with the provisions of Coal Mines Regulations (CMR), 1957 in regard to steps to be taken lor tires in coal mines and other safety measures. Directorate General of Mines Safety (DGMS) under Ministry of Labour & Employment administers the CMR.