(b) the Government of India have been in ronstani touch with the Government of Ceylon to safeguard the interests of Indian nationals affected by these measures.

ROOF COLLAPSE AT STEEL MELTING SHOP AT Rot'RKri.A

*129. SHRI M. K. MOHTA : .SHRI K. CHANDRASEKHARAN : SHRI I.OKA NATH MtSRA : SHRI LAL K. ADVANI : SHRISUNDAR SINGH BHAN- DARI: SHRI SUNDAR MAM PATEL : SHRI JAGDISH PRASAD MATHUR: SHRI NIREN GHOSH : SHRI MONORANJAN ROY : SHRI N. G. GORAY : SHRIK. C. PANDA :

Will the Minister of STEEL AND MIMP.S/ इस्पात और खान मंत्री be pleased to State :

(a) whether the Committee appointed lo go into the cases of roof collapse at the Steel Melting Shop :n Rourkela lias submitted its report to Government ; and

(b) if so, the findings of the Committee and the action taken/proposid to he taken by Government thereon ?

THE MINISTER OF STEEL AND MINES/ इस्पात और खान मंत्री (;SHR1 S. MOHAN KUMARAMANGAIAM) : (a) Yes, Sir.

(b) \ Statement is [aid or, the Table Hous-.

STATEMENT

Findings of the Committee	R.ecomm?ndatio.ii ol i11.- Committer	A tio i tak.-n by the Government
The Committee has come to the following important conclli- sions : (a) There was a similar accident but on a much smaller scale in 1963; although follow- ing the report of the Enquiry Committee set up on that occa- sion some instructions for the maintenance of the buildings were issued, no definite, and detailed follow-up action was taken, and strengthened, wherever required. (bl The procedure laid down for cleaning of roofs and remov- ing the iron dust deposited on the S. M. S. roof was not en- tirely satisfactory. (c) The cleaning of the Steel Melting Shops roof was not adequately supervised. The Contractor did not employ a sufficient number of labourers nor did he perform his task in accordance with the contract. This was mainly responsible for the collapse of the roof. (^d) There was no set proce- di\reor agency for inspection of buildings and structures.	The miior recommenda- lions are : (a) A regular inspection system must bo established for periodical inspection of all buildings, galleries etc.in all Steel Plants. The peri- odicity and responsibilities for the maintenance must be fixed and specified. All standing structures (in parti- cular the SMS building) must be thoroughly checked by the Committee are removsd and necessary Safety checks are undertaken not only in important items where large capita] investments are made should be submitted within a period of one year after commissioning. I liese should indicate the performance in terms of capacity and fin an - cial justification, lo exercise control and lo ensure that there is no negli- gence in this respect,	The findings and recom- me.ndattons of the Technical Enquiry Committee have been accepted by (. ment. Chairman, HSE has asked to take necessary action against all those held responsible by the Committee for the conditions leading to the accident. He has also b"en steps to ensure that the tech- nological and managerial de- ficiencies pointed out by the undertaken not only in Rourkela but also in the other SteH Plants of HSL, (b) Performance reports of (c) The cleaning of the roof is best done deparlment- ally, as it would be easier

Findings of the Committee	Recommendations of the Committee	Action taken by the Government
(e) A gas cleaning plant for the L. D. Converters was installed in 1967/69 at a cost of Rs. 1.2 crores to prevent pollution of the atmosphere. Although the guarantee tests were preformed and found satisfactory, the plant was not kept running for alleged lack of manpower and some minor mechanical difficulties. Had this Plant been in operation the dust deposited on the roof would have been practically nil. As this was not a production unit sufficient attention was not paid to this matter	(d) A survey should be made of the plant and equipment lying idle in all Steel Plants and steps taken to recommission these.	
	(e) The management-labour relationship should be improved.	
(f) The collapse of the roof was brought about by overloading. This was caused because of heavy accumulation of dust on the roof nearest to the LD converters particularly on the monitor. The density of this dust increased by about 25% during the heavy rainfall on the night of 11/12 July. There was also choking of drains and downtake pipes as a result of the Commission to clean the roof properly. This also countributed to the overloading of the structure. All this resulted in the collapse of the monitor roof, which, in turn damaged a roof column and caused the disaster in the manner in which it occurred.	(f) To enable the General Manager to devote more time to his primary responsibility of getting the maximum output of steel, he should be relieved of certain direct responsibilities by reorganising and introducing one or two senior officers of appropriate grades under him.	
(g) The LD Plant and buildings were designed and erected by Messrs VOEST of AUSTRIA on a turn-key basis. The building was designed according to German Specification DIN 1050. Although the roof was designed to take a live load of 30 Kg/sq. metre and a point load of 100 Kg. at the worst location, it could take a much higher load of about 120 Kg/sq. meter without the point load.		
(h) The metallurgical tests conducted on the samples from collapsed roof structure showed that rimming quality steel had been used in the roof structure which is prohibited in German Specification DIN 17100 (St. 37). The collapse of the structure was due however, to overloading due to the dust on the roof and not to the quality of steel.		