

**GOVERNMENT OF INDIA
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 1853
ANSWERED ON 14TH DECEMBER, 2023**

AUDIT OF TUNNELS

**1853. SHRI DHAIRYASHEEL SAMBHAJIRAO MANE:
SHRI SANJAY SADASHIVRAO MANDLIK:
SHRI SHRIRANG APPA BARNE:
SHRIMATI APARUPA PODDAR:
SHRI PRATAPRAO JADHAV:
SHRI SUDHEER GUPTA:**

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) whether the Government has ordered a safety audit of all 29 tunnels being constructed on National Highways (NHs) in the country;**
- (b) if so, the details thereof and the time by which it is likely to be completed;**
- (c) whether the National Highway Authority of India (NHAI) has been asked to inspect all ongoing tunnel projects and submit a report in this regard;**
- (d) if so, the time by which the report is likely to be submitted;**
- (e) the detail of accidents and deaths on presently/ ongoing tunnel projects constructed by NHAI during each of the last three years and the current year, year-wise;**
- (f) the reason for not making a safety exit during construction of the Uttarkashi tunnel which collapsed and trapped 41 workers; and**
- (g) the other steps taken by the Government regarding safety of tunnels in the country?**

ANSWER

THE MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (d) All the National Highway(NH) works in respect of their strength, stability and safety are designed, constructed and maintained on different modes like Engineering, Procurement and Construction (EPC), Hybrid Annuity Model (HAM), Build Operate Transfer (BOT) etc., as per relevant Indian Road Congress (IRC) codes, Ministry's guidelines, International standards and best industry practices. The contract conditions of all these modes include standards/specifications and safety norms for implementation of the NH works including tunnels. Construction works and their safety aspects are regularly supervised by Independent Engineers (IEs)/Authority Engineers (AEs). Field officers and Senior officers of Ministry of Road Transport & Highways (MoRTH), National Highways Authority of India (NHAI), National Highways and Infrastructure Development Corporation Limited (NHIDCL), Border Roads Organization (BRO), State Public Works Departments (PWDs) and other executing agencies of MoRTH also inspect the NH works including their safety aspects. NHAI has recently taken up review of 26 under construction tunnel projects on NHs in which review of 17 tunnel projects have been completed and that of 05 tunnel projects are scheduled to be completed by December, 2023. Construction work of 04 tunnel projects has not yet commenced.

(e) Details of accidents and deaths which occurred on tunnel projects under implementation by NHAI during the last three years and current year are as below:

Financial Year (FY)	Number of accidents	Number of persons deceased
2022-23	1 (one)	10 (ten)

***No accident is reported for FY 2020-21, 2021-22 and 2023-24 (up to 30th November)**

(f) All operations connected with the construction of NH tunnels are carried out adopting appropriate safety precautions in accordance with the IRC guidelines. Safety of Technical Staff, Supervisors and Engineering Professionals during tunnel construction is ensured by adopting standard safety precautions. In the Silkyara bi-directional tunnel on Dharasu – Yumunotri highway (NH-134), a provision of separation wall has been provided at the center of the carriageway along with egress openings at an average interval of 565 m for vehicular crossover and at an average interval of 300 m for pedestrian cross passage for escape purposes during emergencies.

(g) Safety measures are an integral part of highway / tunnel projects during different stages of design, construction and Operation & Maintenance (O&M). Appropriate safety measures in accordance with IRC codes/guidelines are adopted for the design, construction and maintenance of NHs / tunnels. Subsequent to the collapse in Silkyara Tunnel on NH-134 in the state of Uttarakhand, a Committee of Experts has been constituted by the Government for investigation of the reasons for collapse of the tunnel and for

recommendation of Standard Operating Procedures (SOPs) to be followed in case of tunnel collapse and in respect of safety measures during tunnel construction.
