

GOVERNMENT OF INDIA
MINISTRY OF STEEL

RAJYA SABHA
UNSTARRED QUESTION NO. 951
FOR ANSWER ON 11/12/2023

USE OF STEEL PLANT WASTE IN ROADS

951. SHRI NEERAJ DANGI:

Will the Minister of Steel be pleased to state:

- (a) whether several lakh metric tonnes of waste is generated from different steel plants in the country every year;
- (b) if so, the details of the waste generated every year;
- (c) whether a 1 km long road has been constructed from steel plant waste at Hazira in the State of Gujarat, if so, the details thereof;
- (d) whether Government has any proposal to use steel waste in constructing highways in different States in the country in the coming days; and
- (e) whether the roads constructed from such steel plant waste are safe, if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE
MINISTRY OF STEEL

(SHRI FAGGAN SINGH KULASTE)

(a) & (b): Yes, Sir. Steel Slag is generated as a solid waste during steel production. For every tonne of steel production around 180 - 200 kg of steel slag is generated in the integrated steel plants, which amounts to around 15 million tonnes steel slag generation annually.

(c) Yes, Sir. Ministry of Steel has funded a R&D project on "Development of Design Guidelines and Specifications for utilization of steel slag in road construction" being pursued by CSIR-CRRI in association with the steel industry. Under this R&D project, India's first six lane steel slag based road connecting NH-6 to Hazira port was constructed in May, 2022 at Surat Hazira using processed steel slag aggregates as substitute of natural aggregates in all layers of bituminous pavement. In this 1 km long test section, processed Electric Arc Furnace (EAF)/ CONARC slag from Arcelor Mittal Nippon Steel (AMNS) steel plant at Hazira has been used.

(d) & (e): The draft guidelines for construction of steel slag based roads, developed as part of the aforementioned R&D project, prepared by CSIR-CRRI, has been shared with the Indian Road Congress and Ministry of Road Transport & Highways. Upon finalisation of the said Guidelines, the road making agencies would be at liberty to use the processed steel slag based on techno-economic feasibility.
