

GOVERNMENT OF INDIA  
MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

**LOK SABHA**  
**UNSTARRED QUESTION NO.898**  
ANSWERED ON 21<sup>ST</sup> NOVEMBER, 2019

**USE OF PLASTIC WASTE IN CONSTRUCTION OF HIGHWAYS**

898. SHRI BIDYUT BARAN MAHATO:  
SHRI MANOJ KOTAK:  
SHRIMATI MEENAKASHI LEKHI:  
SHRI GAJANAN KIRTIKAR:  
SHRI SUDHEER GUPTA:  
SHRI SANJAY SADASHIV RAO MANDLIK:

Will the Minister of ROAD TRANSPORT AND HIGHWAYS

सड़क परिवहन और राजमार्ग मंत्री

be pleased to state:

- (a) whether the Government/National Highway Authority of India (NHAI) has used or proposes to use waste/recycled plastic in wearing course of highway construction on a pilot basis in the country particularly in the State of Tamil Nadu and if so, the details thereof;
- (b) whether the Government proposes to make it compulsory for NHAI to use eight per cent of plastic waste in construction of highways especially in areas located within 50 KM of urban areas that have a population of five lakh or more and if so, the details thereof;
- (c) whether the Government has recently directed all the regional offices of NHAI to collect plastic waste and coordinate with the States/Union Territories to receive plastic waste for use in road construction and if so, the details thereof;
- (d) whether the Government has also undertaken various awareness generation programmes against the use of plastic and if so, the details thereof;
- (e) whether the Government has conducted any field trials on the roads which are constructed with the use of plastic waste in order to consider its use on national highways and if so, the details thereof and the total length of roads constructed using plastic waste during each of the last three years; and
- (f) whether the technology being used is according to the guidelines of the Indian Road Congress for construction of highways at present and if so, the details thereof?

**ANSWER**

MINISTER OF ROAD TRANSPORT AND HIGHWAYS

(SHRI NITIN JAIRAM GADKARI)

(a) to (f) Indian Roads Congress (IRC) has formulated IRC SP: 98:2013 'Guidelines for the use of Waste Plastic in Hot Bituminous Mixes (Dry process) in Wearing Courses' based on laboratory as well as field performance studies/investigations carried out in

India. As per IRC SP: 98: 2013, use of plastic waste is up to 8 percent by weight of bitumen and as per mix design requirement. To encourage use of waste plastic on National Highway, Ministry has also issued Guidelines for its use within 50 km periphery of urban areas having population 5 lakh or more. The Guidelines also stipulate to take up a stretch of at least 10 km as pilot project for assessment of its performance. In the last 3 financial years, waste plastic has been utilised in wearing course in about 11 km of NH stretches in the State of Tamil Nadu. Moreover, Government has decided that in 2019-20 the “Swachhata Hi Seva Campaign (SHS)” will focus on plastic waste management as main theme, wherein instructions have been issued for collection and re-use of waste plastic. This includes awareness generation, recycling, effective disposal of collected plastic waste including its usage in road construction.

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