

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**STARRED QUESTION NO. 27**  
TO BE ANSWERED ON 01.12.2015

**Air Pollution**

\*27. SHRI D. K. SURESH:

Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

- (a) whether the Government has taken note of rise in air pollution due to diesel powered vehicles in various parts of the country including metropolitan and big cities severely affecting senior citizens, women and children;
- (b) if so, the reaction of the Government thereto;
- (c) whether the Government has set any emission norms to check the air pollution in the country and if so, the details thereof;
- (d) whether the Government has put any mechanism in place to ensure that the vehicles adhere to the said emission norms, if so, the details thereof and the response received in this regard; and
- (e) the corrective action taken by the Government to curtail air pollution in the country?

**ANSWER**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI PRAKASH JAVADEKAR)

(a) to (e): A statement is laid on the Table of the House

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**Statement referred to in reply to Lok Sabha Starred Question No. 27 due for reply on 01.12.2015 regarding 'Air Pollution' by SHRI D. K. SURESH, Hon'ble Member of Parliament**

(a) & (b) As per the report on Source Apportionment Studies undertaken by the Central Pollution Control Board in association with other leading national institutions in six metropolitan cities including Delhi during the 2007-09, contribution of vehicles including diesel vehicles to particulate matter (PM<sub>10</sub>) in ambient air ranges between 9-20% in these cities. Air pollution is known to be one of the aggravating factors for many respiratory ailments and cardiovascular disease.

(c) The Government has notified the BS-IV emission norms for 63 cities and BS-III norms for rest of the country. The details of emission norms are given in the Annexure.

(d) The Government has set up a mechanism to ensure adherence to the emission norms through the Pollution Under Control (PUC) systems. The State Government agencies including Department of Transport implement the emission norms and non-compliant vehicles are challaned. The Mass emission norms prescribed for New Vehicles are ensured through Type Approval (TA) and Conformity of Production (CoP) testing are being done as certified testing agencies, namely, Automotive Research Association of India (ARAI) – Pune, Vehicle Research & Development Establishment - Ahmednagar, Central Farm Machinery Testing and Training Institute – Budhni, Indian Institute of Petroleum – Dehradun, Central Institute of Road Transport – Pune, and International Centre for Automotive Technology – Manesar.

(e) The corrective action taken by the Government to curtail air pollution include:

- Progressive tightening of the Emission Norms along with supply of commensurate Fuel Quality.
- Implementation of BS-IV norms throughout the country by April, 2017.
- Strengthening of Pollution Under Control (PUC) systems by State / UT Governments.
- Introduction of alternative fuels like CNG, LPG and bio-diesel (B20).
- Introduction of 5% ethanol gasoline fuel blends across the country by Ministry of Petroleum and Natural Gas.
- Launching of National Air Quality Index by the Prime Minister in April, 2015 starting with 10 cities to create awareness.
- Launching of Clean Indian Mission (Swachh Bharat Abhiyan).
- Banning of burning of leaves/biomass.
- Taking up with State Governments by Central Pollution Control Board for formulating action plan for mitigation of air pollution in about 95 non-compliant cities in the country.
- Enforcement of lane discipline, car pooling, vehicle maintenance etc.

ANNEXURE referred in the statement referred to in reply to Lok Sabha Starred Question No.27 due for reply on 01.12.2015 regarding 'Air Pollution' by SHRI D.K. SURESH, Hon'ble Member of Parliament.

**Emission Standards for 4-Wheelers**

**I. Emission Standards for Light Duty Vehicles :**

This category comprises passenger cars, utility vehicles, vans, and light commercial vehicles.

**A. Gasoline Vehicles:**

Vehicle	Emission Standards (Year)	Emission Standards in g/km				Deterioration Factor DF)
		CO	HC	NO <sub>x</sub>	HC + NO <sub>x</sub>	
<i>LDVs</i> (Gasoline)	BS III*	2.30	0.20	0.15	-	1.2
	BS III**	2.3 - 5.22	0.20 - 0.29	0.15 - 0.21	-	
	2010 BS IV*	1.00	0.10	0.08	-	1.2
	2010 BS IV**	1.00 - 2.27	0.10 - 0.16	0.08 - 0.11	-	

**B. Emission Standards for Diesel Vehicles**

Vehicle	Year	Emission Standards					Deterioration Factor DF)
		CO	HC	NO <sub>x</sub>	HC + NO <sub>x</sub>	PM	
<i>Light Duty Vehicles</i> (Diesel)	<b>By Chassis Dynamometer in g/km #</b>						
	2005 B.S III*	0.64	-	0.50	0.56	0.05	DF: CO 1.1, NO <sub>x</sub> 1.0, PM 1.2
	2005 BSIII* *	0.64 - 0.95	-	.50 - 0.78	0.56 - 0.86	0.05 - 0.10	
	2010 B.S IV*	0.50	-	0.25	0.30	0.025	DF: CO 1.1, NO <sub>x</sub> 1.0, PM 1.2
2010 BSIV* *	0.50 - 0.74	-	0.25 - 0.39	0.30 - 0.46	0.025 - 0.06		

**Note:** For Catalytic Converter Fitter Vehicles

\* Upto 6 seaters and Gross Vehicle Weight (GVW) upto 2500 kg

\*\* More than 6 seaters and GVW upto 3500 kg.

**ANNEXURE** referred in the statement referred to in reply to Lok Sabha Starred Question No.27 due for reply on 01.12.2015 regarding 'Air Pollution' by SHRI D.K. SURESH, Hon'ble Member of Parliament.

**Emission standards for Gasoline powered 2 Wheelers**

Vehicle	Year	Emission Standards in g/km				
		CO	HC	NOx	HC + NOx	Deterioration Factor DF)
<i>Two wheelers</i>	2010 BS III	1.0	-	-	1.0	1.2

The emission limits of Co in case of BS-III 2 wheelers have reduced around 92% as compared to 1991 limits. The combined limits of HC+ NOx in case of BS-III 2 wheelers have also reduced by 87.5 % in comparison with 1991 limits .

**Emission standards for gasoline powered 3 Wheelers**

Vehicle	Year	Emission Standards in g/km				
		CO	HC	NOx	HC + NOx	Deterioration Factor DF)
<i>Three Wheelers ( Spark Ignition)</i>	2010 BSIII	1.25	-	-	1.25	1.2

The emission limits of CO in case of gasoline powered BS-III 3 wheelers have reduced around 90% as compared to 1991 limits. The combined limits of HC+ NOx in case of gasoline powered BS-III 3 wheelers have also reduced by 84.4 % in comparison with 1991 limits .

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