74	The Budget	[RАЈҮА SAВНА]	(General),	2012-13
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Sl.No	States	2007-08	2008-09	2009-10
11.	Andaman and Nicobar	3	0	2
12.	Chandigarh	Nil	Nil	Nil
13.	Lakshdweep	Nil	Nil	Nil
14.	Delhi	Nil	Nil	Nil

## Level of air pollution in Delhi

1417. DR. JANARDHAN WAGHMARE: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

- (a) whether Government has assessed the level of air pollution in Delhi in the aftermath of mass introduction of Compressed Natural Gas (CNG) and liquefied Petroleum Gas (LPG) driven public and private transport vehicles;
  - (b) if so, the details thereof; and
- (c) the steps taken by Government for improving the quality of air in the metropolitan cities?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRIMATI JAYANTHI NATARAJAN): (a) and (b) The ambient air quality is being monitored in 216 cities, towns and industrial area all over the country including Delhi under the National Ambient Air Monitoring Programme (NAMP). The parameters which are monitored are Sulphur Dioxides (SO<sub>2</sub>), Nitrogen Dioxide (NO2) and Particulate Matter (PM10). The details on ambient air quality parameters monitored in Delhi from 2001 to 2010 are given in Statement. (See below) The changes in the air quality of Delhi before and after the introduction of Compressed Natural Gas (CNG) / Liquefied Petroleum Gas (LPG) indicate decline in Sulphur Dioxides (SO<sub>2</sub>) levels whereas the levels of Nitrogen Dioxide (NO<sub>2</sub>) and Particulate Matter (PM<sub>10</sub>) indicate increasing trends. The change in air quality of Delhi, however, is attributable to a number of different factors.

- (c) The steps taken by Government for improving the quality of air in the metropolitan cities include:
  - (i) A Source Apportionment Study in six cities including Delhi has been carried out by CPCB in collaboration with Indian Institute of Technology, National Environmental Engineering Research Institute etc. which provides contribution of transport sector to ambient Particulate Matter PM<sub>10</sub> levels In Bangalore (11-23%). Chennai (35-48%), Delhi (9-21%), Kanpur (15-17%), Mumbai (8-26%) and Pune (2-10%).
  - (ii) Bharat Stage -IV emission norms for 4-wheelers have been implemented in 13 cities of the country from April, 2010, while Bharat Stage -III

- emission norms for 4-wheelers have been implemented in the rest of the country from April, 2010.
- (iii). Mass emission standards (Bharat Stage III) have been notified for 2/3wheelers and diesel driven agriculture tractors from April, 2010 throughout country.
- (vi) Public transportation systems in several major cities are now running on clean fuels like Compressed Natural Gas (CNG) and Liquefied Petroleum Gas (LPG).
- (v) Pollution under Control (PUC) norms for diesel vehicles have been revised and made stringent from the year 2010.
- (vi) Metro and the rapid mass transport systems have been introduced in major cities.
- (vii) Action plans have been prepared and are being implemented for 16 highly polluting cities apart from Delhi as per the directives of Hon'ble Supreme Court

Statement

The details of ambient air quality parameters monitoral in Delhi

(concertration in micrograms per cubic meter)

Year			
	(SO <sub>2</sub> )	$(NO_2)$	(PM <sub>10</sub> )
2001	14	29	120
2002	11	33	143
2003	10	38	127
2004	10	40	135
2005	10	44	115
2006	9	43	136
2007	4	36	159
2008	6	57	214
2009	6	50	252
2010	5	55	261

NB: Standards (annual average):

- 1. From 2001-Nov. 2009:  $SO_2$   $60\mu g/m3$  ();  $NO_x$   $60\mu g/m3$ ; RSPM/PM<sub>10</sub>- $60\mu g/m3$ .
- 2. From Nov. 2009 onwards in residential areas: SO $_2$  50µg/m3; NO $_x$  40µg/m3; RSPM/  $PM_{10}$  60µg/m3.