(c) The Environment clearances have been granted to five hydro electric projects on the Alaknanda river and six such projects on the Bhagirathi river under the Environment Impact Assessment Notifications, of 1994 and 2006.

Green vehicles in the country

4043. SHRI SANJAY RAUT:

SHRI GOVINDRAO WAMANRAO ADIK:

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

- (a) whether it is a fact that pollution level and energy bill are increasing day by day due to growth in various types of vehicles in the country;
 - (b) if so, Government's response to overcome such unwanted situation;
- (c) whether Government is considering to issue guidelines / rules for Automobile industry to produce more fuel efficient and green vehicles in the country to reduce fuel bill and pollution level in the country;
 - (d) if so, the details thereof; and
 - (e) if not, the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH): (a) and (b) Growth in the number of vehicles in metro cities has been a major contributory factor of vehicular pollution in the country. The Central Pollution Control Board (CPCB) is monitoring ambient air quality at 365 locations (including 35 metro-cities) in respect of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) and Respirable Suspended Particulate Matter (RSPM). The ambient air quality data in respect of RSPM in 35 cities indicate increasing trends during 2007-09 is given in Statement (See below).

(c) to (e) The Government, under the Auto Fuel Policy 2003, has provided a road map for emission regulations up to 1st April, 2010. As per the road map, BS IV emission regulations in 13 cities have been implemented from 1st April 2010. These emission norms are very stringent and the emission from the vehicles will be reduced by up to 80-90% in comparison to the vehicles produced prior to April 2000. The Ministry of Petroleum and Natural Gas has set up a Review Committee to review the Auto Fuel Policy. The Standing Committee on Emission under the Ministry of Road Transport and Highways had set up a sub-committee to study the fuel efficiency regulations of the vehicles and have submitted its report. In addition, the following steps have been taken to contain vehicular pollution as well as to reduce the fuel capacity:

- Introduction of Compressed Natural Gas (CNG) as an automotive fuel in major cities including Delhi and Mumbai.
- ii. Pilot scale studies have been completed on utilization of Bio-fuels (Ethanol and Bio-diesel).
- iii. Introduction of vehicle operating on LPG and the same are available commercially.
- iv. The auto industry has also introduced electric vehicles, battery operated vehicles and hybrid vehicles.

Statement

Ambient Air Quality in Metro Cities

(Concentrations in Microgramme per Cubic Meter)

(Annual averages of residential, Industrial, Rural and other areas)

City Name	2007			2008			2009		
	SO_2	NO_2	RSPM	SO_2	NO_2	RSPM	SO_2	NO_2	RSPM
1	2	3	4	5	6	7	8	9	10
Agra	5	28	212	6	23	198	6	21	185
Ahmedabad	13	22	97	12	20	88	16	21	95
Allahabad	20	40	159	8	37	181	BDL	24	160
Amritsar	14	33	98	15	35	-	16*	36*	166 *
Asansol	7	57	112	9	74	135	13*	83*	256*
Bangalore	17	39	83	15	41	107	16	40	122
Bhopal	8	14	64	6	20	102	7	18	115
Chennai	11	16	60	9	15	63	9	17	70
Coimbatore	7	29	63	6	30	75	6	29	74
Dhanbad	20	52	107	19	44	131	17 *	41 *	168*
Delhi	6	50	170	5	57	214	6	49	243
Faridabad	12	25	159	13	25	150	50	<u></u>	ā
Hyderabad	5	25	78	6	27	88	5	22	80
Jaipur	5	28	111	6	35	127	6	36	151

1	2	3	4	5	6	7	8	9	10
Jabalpur	BDL	24	107	BDL	25	136	BDL	24	136
Jamshedpur	38	52	166	37	51	172	36	49	172
Indore	9	17	120	10	19	196	9*	17 *	183*
Kanpur	7	24	196	7	24	212	8	31	211
Kochi	10	13	45	BDL	12	43	BDL	12	40
Kolkata	9	60	99	8	64	103	16	56	187
Lucknow	9	31	189	8	36	190	8	36	197
Ludhiana	10	62	212	10	41	282	9	37	254
Madurai	9	22	42	10	24	42	10	25	42
Meerut	11	44	117	10	42	115	8*	43 *	118*
Mumbai	10	39	92	9	40	127	6	42	109
Nagpur	8	26	111	8	33	114	6	30	99
Nashik	43	35	45	30	25	79	23	29	89
Patna	10	50	123	7	39	120	BDL*	40 *	105 *
Pune	20	45	109	22	37	103	23	40	82
Rajkot	13	18	100	11	14	105	11	15	105
Surat	19	28	92	17	24	87	19	26	91
Vadodara	17	29	109	14	28	77	16	30	86
Varanasi	16	19	114	16	19	106	16 *	19*	118*
Vijayawada	8	37	89	5	28	96	5	14	80
Visakhapatnam	9	30	91	10	30	83	13	32	97

Source: Data as reported by CPCB/SPCBs/PCCs/NEERI

Note:- '- 'Data not available. '*, inadequate data. BDL – Below Detection Limit (i.e.) less than 4 micrograms per cubic meter for SO_2 and less than 9 micrograms per cubic meter for SO_2). Data of Agra is of sensitive area and data of Jamshedpur and Asansol is of Industrial Area. Data as reported in monthly summary sheet of Environmental Data Bank available as on date. Data for 2009 is average of data available as on date. National Ambient Air Quality Standard Nov. 2009 for Residential, Industrial, Rural & other areas (Annual average) for $SO_2 = 50 \text{ ug/m}^3$, $NO_2 = 40 \text{ ug/m}^3$ and RSPM = 60 ug/m^3 .