(b) if so, the details thereof; and

(c) whether Government has contemplated any plan to check the pollution and if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. MAHESH SHARMA): (a) and (b) The measures taken/being taken by the Government to check environmental pollution, *inter alia*, include; notification of National Ambient Air Quality Standards; setting up of monitoring network for assessment of ambient air quality; introduction of cleaner/alternate fuels like gaseous fuel (CNG, LPG etc.), ethanol blending; launching of National Air Quality index; universalisation of BS-IV from 2017; leapfrogging from BS- IV to BS-VI fuel standards since 1st April, 2018 in NCT of Delhi and from 1st April, 2020 in the rest of the country; notification of Construction and Demolition Waste Management Rules; banning of burning of biomass; notifications regarding mandatory implementation of dust mitigation measures for construction and demolition activities; notification of Construction and Demolition Waste Management Rules; promotion of public transport network; streamlining the issuance of Pollution Under Control Certificate; issuance of directions under Section 18(1) (b) of Air (Prevention and Control of Pollution) Act, 1981 and under Section 5 of Environment (Protection) Act, etc.

Also, industrial units falling under 17 categories of industries and grossly polluting industries in Ganga Basin have been directed to install OCEMS (Online Continues Effluent/Emission Monitoring System) to help track the discharges of pollutants from these units. 3527 industrial units have installed OCEMS till date.

(c) The Ministry of Environment, Forest and Climate Change has launched National Clean Air Programme (NCAP) to tackle the problem of air pollution across the country in a comprehensive manner. The overall objective is to augment and evolve effective ambient air quality monitoring network across the country besides ensuring comprehensive management plan for prevention, control and abatement of air pollution and enhancing public awareness and capacity building measures. 102 non-attainment cities have been identified. City Action Plans have to be prepared for non-attainment cities. Till date 47 action plans have been received.

Installation of VOCR system

†34. SHRI VISHAMBHAR PRASAD NISHAD:
    SHRIMATI CHHAYA VERMA:

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

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† Original notice of the question was received in Hindi.

(a) whether it is a fact that instructions were given by the Central Pollution Control Board in the year 2016, for installation of Volatile Organic Compound (Vapour) Recovery System (VOCR) to prevent emission of harmful elements while filling fuel in petrol-diesel vehicles;

(b) if so, the States where petrol pumps are not following this direction; and

(c) the names of diseases that are caused by this harmful element and the extent to which air gets polluted thereby?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (DR. MAHESH SHARMA): (a) and (b) Directions have been issued to Oil Marketing Companies by Central Pollution Control Board on 22nd Feb., 2016 under Section 5 of Environment (Protection) Act, 1986 to install Stage I and Stage II Vapour Recovery Systems (VRS) in petrol refuelling stations with capacity of 300 KLM and more, located in million plus cities by December, 2017. Further, all new retail outlets, with capacity more than 300 KLM to be commissioned after date of issue of above directions, have been directed to install modern dispensing units with in-built VRS facilities. Directions have been issued to install VRS in petrol pumps selling more than 300 KLM by 31st Oct., 2018 and less than 300 KLM by 31st December, 2018 in Delhi. Details of Status of VRS installed at Retail Outlets of different Oil Marketing Companies in 46 million plus population cities including Delhi is given in the Statement (*See* below).

(c) Volatile Organic Compounds (VOCs) are an important group of air pollutants, which are often referred to as toxic or hazardous air pollutants (HAPs). They play an important role in the formation of ozone and fine particulate matter by photochemical smog and also contribute to health-related impacts. They also cause acute symptoms such as irritations of the nose, throat and eyes, cause headaches, nausea, dizziness, allergic skin reactions and can also damage the internal organs such as the liver and kidneys. VOCs are also reported to cause adverse effects on pulmonary function in occupationally exposed workers. Exposure to VOCs may cause upper and lower respiratory symptoms and contribute to the worsening of asthma. Some organics can cause cancer in animals, some are suspected to cause cancer in humans.

Statement

Details of Status of VRS installed at Retail Outlets of Oil Marketing Companies in 46 cities with million plus population

Sl. No.	State	Sl. No.	City	Bharat Petroleum Corporation Limited						Hindustan Petroleum Corporation Limited					
				No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed	
				Outlets> 300 KLM	I	II	Outlets 100- 300 KLM	I	II	Outlets> 300 KLM	I	II	Outlets 100- 300 KLM	I	II
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.	Andhra Pradesh	1.	Vishakhapatanam	1	-	-	4	-	-	1	-	-	3	-	-
		2.	Vijayawada	0	-	-	3	-	-	0	-	-	6	-	-
2.	Bihar	3.	Patna	1	-	-	8	-	-	0	-	-	5	-	-
3.	Chhattisgarh	4.	Raipur	1	-	-	5	-	-	1	-	-	2	-	-
4.	Delhi	5.	Delhi	47	-	47	43	-	-	27	-	3	56	-	-
5.	Gujarat	6.	Ahmedabad	3	-	-	18	-	-	6	-	-	12	-	-
		7.	Rajkot	2	-	-	3	-	-	0	-	-	6	-	-
		8.	Surat	4	-	-	11	-	-	4	-	-	5	-	-
		9.	Vadodara	4	-	-	6	-	-	1	-	-	4	-	-
6.	Haryana	10.	Faridabad	0	-	-	5	-	-	0	-	-	6	-	-

7.	Jammu and Kashmir	11.	Srinagar	0			6			0			1
8.	Jharkhand	12.	Dhanbad	0	-	-	0	-	-	0	-	-	0	-	-
		13.	Ranchi	1	-	-	2	-	-	0	-	-	3	-	-
9.	Karnataka	14.	Bangalore (BBMP)	12	-	-	36	-	-	6	-	-	38	-	-
10.	Madhya Pradesh	15.	Bhopal	0	-	-	11	-	-	0	-	-	15	-	-
		16.	Gwalior	0	-	-	7	-	-	0	-	-	0	-	-
		17.	Indore	2	-	-	9	-	-	0	-	-	7	-	-
		18.	Jabalpur	1	-	-	3	-	-	0	-	-	3	-	-
11.	Maharashtra	19.	Aurangabad	0	-	-	7	-	-	1	-	-	2	-	-
		20.	Mumbai	15	-	-	2	-	-	13	-	-	34	-	-
		21.	Nagpur	0	-	-	14	-	-	0	-	-	12	-	-
		22.	Nashik	1	-	-	8	-	-	0	-	-	7	-	-
		23.	Pune	19	-	-	12	-	-	11	-	-	17	-	-
		24.	Vasai-Virar	0	-	-	0	-	-	1	-	-	4	-	-
		25.	Thane	2	-	-	0	-	-	3	-	-	2	-	-
		26.	Navi Mumbai	4	-	-	0	-	-	2	-	-	6	-	-
		27.	Kalyan Dombivali	0	-	-	2	-	-	0	-	-	2	-	-
		28.	Pimpri Chinchwad	0	-	-	8	-	-	3	-	-	7	-	-
12.	Punjab	29.	Amritsar	0	-	-	0	-	-	0	-	-	3	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		30.	Ludhiana	0	-	-	12	-	-	0	-	-	7	-	-
13.	Rajasthan	31.	Jaipur	3	-	-	15	-	-	1	-	-	30	-	-
		32.	Jodhpur	0	-	-	11	-	-	5	-	-	12	-	-
		33.	Kota	1	-	-	5	-	-	4	-	-	3	-	-
14.	Tamil Nadu	34.	Chennai	8	-	-	42	-	-	4	-	-	33	-	-
		35.	Coimbatore	0	-	-	14	-	-	0	-	-	7	-	-
		36.	Madurai	0	-	-	6	-	-	0	-	-	2	-	-
15.	Telangana	37.	Hyderabad	8	-	-	11	-	-	4	-	-	55	-	-
16.	Uttar Pradesh	38.	Agra	0	-	-	6	-	-	0	-	-	3	-	-
		39.	Allahabad	0	-	-	8	-	-	0	-	-	5	-	-
		40.	Ghaziabad	1	-	-	6	-	-	1	-	-	7	-	-
		41.	Kanpur	0	-	-	10	-	-	0	-	-	7	-	-
		42.	Lucknow	0	-	-	17	-	-	0	-	-	11	-	-
		43.	Varanasi	0	-	-	4	-	-	0	-	-	5	-	-
		44.	Meerut	0	-	-	5	-	-	0	-	-	4	-	-
17.	West Bengal	45.	Kolkata	0	-	-	21	-	-	1	-	-	7	-	-
		46.	Howrah	0	-	-	6	-	-	0	-	-	1	-	-
	TOTAL			141		47	432	-	-	100	-	3	467	-	-

Details of Status of VRS installed at Retail Outlets of Oil Marketing Companies in 46 cities with million plus population

Sl. No.	State	Sl. No.	City	Indian Oil Corporation Limited						RELIANCE						Nayara Energy	
				No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed		No. of Retail Outlets	VRS installed
				Outlets>300 KLM	I	II	Outlets 100-300 KLM	I	II	Outlets>300 KLM	I	II	Outlets 100-300 KLM	I	II	Outlets 100-300 KLM	
1	2	3	4	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1.	Andhra Pradesh	1.	Visakhapatanam	1	-	-	5			0	-	-	0	-	-	-	-
		2.	Vijayawada	0	-	-	11			0	-	-	0	-	-	-	-
2.	Bihar	3.	Patna	3	-	-	8			0	-	-	0	-	-	-	-
3.	Chhattishgarh	4.	Raipur	1	-	-	3			0	-	-	0	-	-	-	-
4.	Delhi	5.	Delhi	77	-	77	89			0	-	-	2	2	1	-	
5.	Gujarat	6.	Ahmedabad	8	-	-	31			1	1	0			-	-	
		7.	Rajkot	1	-	-	4			0	-	-	0		-	-	
		8.	Surat	10	-	-	13			2	2	0			-	-	
		9.	Vadodara	0	-	-	13			0	-	-	0		-	-	
6.	Haryana	10.	Faridabad	0	-	-	12			0	-	-	0		-	-	
7.	Jammu and Kashmir	11.	Srinagar	2			6			0			0		-	-	

1	2	3	4	17	18	19	20	21	22	23	24	25	26	27	28	29	30
8.	Jharkhand	12.	Dhanbad	1	-	-	5	-	-	0	-	-	0	-	-	-	
		13.	Ranchi	2	-	-	7	-	-	0	-	-	0	-	-	-	
9.	Karnataka	14.	Bangalore (BBMP)	12	-	-	84	-	-	0	-	-	0	-	-	-	
10.	Madhya Pradesh	15.	Bhopal	4	-	-	6	-	-	1	1	0		-	-		
		16.	Gwalior	1	-	-	5	-	-	0	-	-	0	-	-	-	
		17.	Indore	3	-	-	10	-	-	0	-	-	0	-	-	-	
		18.	Jabalpur	1	-	-	7	-	-	0	-	-	0	-	-	-	
11.	Maharashtra	19.	Aurangabad	1	-	-	4	-	-	0	-	-	0	-	-	-	
		20.	Mumbai	7	-	-	24	-	-	0	-	-	0	-	-	-	
		21.	Nagpur	1	-	-	17	-	-	1	1	0		-	-		
		22.	Nashik	1	-	-	2	-	-	0	-	-	0	-	-	-	
		23.	Pune	3	-	-	8	-	-	0	-	-	0	-	-	-	
		24.	Vasai-Virar	0	-	-	10	-	-	0	-	-	0	-	-	-	
		25.	Thane	1	-	-	6	-	-	1	1	0		-	-		
		26.	Navi Mumbai	0	-	-	11	-	-	0	-	-	0	-	-	-	
		27.	Kalyan Dombivali	2	-	-	2	-	-	1	1	0		-	-		
		28.	Pimpri Chinchwad	1	-	-	3	-	-	0	-	-	0	-	-	-	
12.	Punjab	29.	Amritsar	0	-	-	7	-	-	0	-	-	0	-	-	-	

State	City													
	30. Ludhiana	1	-	-	10	-	-	0	-	-	0	-	-	-
13. Rajasthan	31. Jaipur	1	-	-	28	-	-	0	-	-	0	-	-	-
	32. Jodhpur	0	-	-	5	-	-	0	-	-	0	-	-	-
	33. Kota	1	-	-	6	-	-	0	-	-	0	-	-	-
14. Tamil Nadu	34. Chennai	3	-	-	46	-	-	0	-	-	0	-	-	-
	35. Coimbatore	2	-	-	16	-	-	0	-	-	0	-	-	-
	36. Madurai	0	-	-	12	-	-	0	-	-	0	-	-	-
15. Telangana	37. Hyderabad	10	-	-	61	-	-	0	-	-	0	-	-	-
16. Uttar Pradesh	38. Agra	1	-	-	5	-	-	0	-	-	0	-	-	-
	39. Allahabad	0	-	-	3	-	-	0	-	-	0	-	-	-
	40. Ghaziabad	1	-	-	6	-	-	1	1	0		-	-	
	41. Kanpur	0	-	-	10	-	-	0	-	-	0	-	-	-
	42. Lucknow	5	-	-	29	-	-	1	1	0		-	-	
	43. Varanasi	0	-	-	8	-	-	0	-	-	0	-	-	-
	44. Meerut	0	-	-	10	-	-	0	-	-	0	-	-	-
17. West Bengal	45. Kolkata	1	-	-	13	-	-	0	-	-	0	-	-	-
	46. Howrah	0	-	-	4	-	-	0	-	-	0	-	-	-
TOTAL		170	-	77	685	-	-	9	9	2	2	-		

• ONGC/ MRPL have No Retail Outlets of Petrol in 46 cities.