

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 922**  
TO BE ANSWERED ON 08.02.2019

**Level of Particulate Matter in Air**

922. SHRI CHANDRA PRAKASH JOSHI:

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

- (a) the level of Particulate Matter (PM) in air in different parts of our country at present along with the limit of Particulate Matter in air necessary for healthy environment;
- (b) the details of cities which have higher Particulate Matter level at present;
- (c) whether the Government has launched National Clean Air Programme for tackling air pollution;
- (d) if so, the details thereof; and
- (e) the manner in which it is likely to be implemented across the country?

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**  
**(DR. MAHESH SHARMA)**

- (a) & (b) Ambient air quality is monitored at 731 locations covering 312 cities/towns in 29 States and 6 Union Territories across the country under National Air Quality Monitoring Programme (NAMP). Ambient air quality data for PM<sub>2.5</sub> and PM<sub>10</sub> for 2017 is given at **Annexure**. Analysis of data reveals that 212 cities for PM<sub>10</sub> and 31 cities for PM<sub>2.5</sub> exceed National Ambient Air Quality Standards (NAAQS) in the residential/industrial/rural area. NAAQS (Annual) for PM<sub>10</sub> and PM<sub>2.5</sub> are 60 µg/m<sup>3</sup> and 40 µg/m<sup>3</sup> respectively.
- (c) to (e) 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 63 action plans have been received.

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**Annexure referred to in reply to Lok Sabha Unstarred Question No. 922 due for reply on 08.02.2019 regarding 'Level of Particulate Matter in Air' By Shri Chandra Prakash Joshi, Hon'ble Member of Lok Sabha**

## Annexure

### Ambient air quality in cities of the country during 2017

Sl. No.	State / Union territory	Sl. No.	City	Average No. of monitoring days	Annual average concentration of PM <sub>10</sub> in µg/m <sup>3</sup>
1.	Andhra Pradesh	1.	Anantapur	111	78*
		2.	Chittoor	107	69*
		3.	Eluru	112	74*
		4.	Guntur	113	69*
		5.	Kadapa	111	74*
		6.	Kakinada	107	66*
		7.	Kurnool	112	82*
		8.	Nellore	112	65*
		9.	Prakasam	110	65*
		10.	Rajahmundry	103	65*
		11.	Srikakulam	111	70*
		12.	Tirupati	107	63*
		13.	Vijaywada	109	99*
		14.	Vishakhapatnam	110	73*
		15.	Vizianagaram	107	72*
2.	Arunachal Pradesh	16.	Itanagar	47	63
		17.	Naharlagun	49	76
3.	Assam	18.	Bongaigaon	90	59
		19.	Daranga	84	69*
		20.	Dibrugarh	92	58
		21.	Golaghat	90	56
		22.	Guwahati	135	106*
		23.	Lakhimpur	92	62*
		24.	Margherita	80	60
		25.	Nagaon	82	75*
		26.	Nalbari	94	95*
		27.	Sibsagar	97	81*
		28.	Silchar	84	49
		29.	Tezpur	100	108*
		30.	Tinsukia	92	70*
4.	Bihar	31.	Begusarai	104	126*
		32.	Bodhgaya	95	77*
		33.	Darbhanga	104	72*
		34.	Muzaffarpur	103	167*
		35.	Patna	76	156*
		36.	Rajgir	103	84*
		37.	Sasaram	113	87*
5.	Chandigarh	38.	Chandigarh	142	109*
6.	Chattisgarh	39.	Bhillai	39	97
		40.	Bilaspur	95	75*
		41.	Korba	70	58
		42.	Raigarh	12	80
		43.	Raipur	58	103*
7.	Dadra & Nagar Haveli	44.	Silvassa	95	111*
8.	Daman & Diu	45.	Daman	95	106*
9.	Delhi	46.	Delhi	93	241*
10.	Goa	47.	Amona	105	67*
		48.	Assanora	105	52
		49.	Bicholim	105	62*
		50.	Codli	105	66*
		51.	Cuncoim	104	84*
		52.	Curcholem	104	58
		53.	Honda	105	86*
		54.	Kundaim	105	56
		55.	Mapusa	41	87
		56.	Margao	105	58
		57.	Mormugao	7	103
		58.	Panaji	88	105*
		59.	Ponda	105	73*
		60.	Sanguem	103	59
		61.	Tilamol	104	63*
		62.	Tuem	105	58
		63.	Usgao	105	74*

Sl. No.	State / Union territory	Sl. No.	City	Average No. of monitoring days	Annual average concentration of PM <sub>10</sub> in µg/m <sup>3</sup>
11.	Gujarat	64.	Vasco	90	89*
		65.	Ahmedabad	95	120*
		66.	Anklesvar	104	108*
		67.	Jamnagar	99	104*
		68.	Rajkot	95	106*
		69.	Surat	104	106*
		70.	Vadodara	99	108*
12.	Haryana	71.	Vapi	90	114*
		72.	Hissar	43	220
13.	Himachal Pradesh	73.	Yamunanagar	13	104
		74.	Baddi	88	173*
		75.	Damtal	130	62*
		76.	Dharamshala	121	36
		77.	Gulaba	17	28
		78.	Kala Amb	153	119*
		79.	Manali	111	44
		80.	Marhi	16	21
		81.	Nalagarh	122	147*
		82.	Paonta Sahib	135	84*
		83.	Parwanoo	126	65*
		84.	Shimla	128	50
		85.	Sunder Nagar	129	73*
86.	Una	131	66*		
87.	Vashisht	34	35		
14.	Jammu & Kashmir	88.	Jammu	87	149*
15.	Jharkhand	89.	Dhanbad	26	238
		90.	Jamshedpur	65	131*
		91.	Jharia	29	295
		92.	Ranchi	101	142*
		93.	SaraikelaKharsawan	68	131*
		94.	Sindri	25	158
		95.	West Singhbhum	64	77*
16.	Karnataka	96.	Bagalkote	82	54
		97.	Bangalore	86	92*
		98.	Belgaum	90	95*
		99.	Bidar	77	127*
		100.	Bijapur	77	94*
		101.	Chitradurga	97	46
		102.	Devanagere	80	87*
		103.	Gulburga	89	54
		104.	Hassan	108	31
		105.	Hubli-Dharwad	107	79*
		106.	Karwar	25	73
		107.	Kolar	58	68*
		108.	Mandya	97	45
109.	Mangalore	95	75*		
110.	Mysore	98	52		
111.	Raichur	115	92*		
112.	Shimoga	87	36		
113.	Timukuru	94	125*		
17.	Kerala	114.	Alappuzha	120	58
		115.	Kochi	108	51
		116.	Kollam	120	43
		117.	Kottayam	120	50
		118.	Kozhikode	120	47
		119.	Malapuram	119	32
		120.	Palakkad	120	44
		121.	Pathanamthitta	120	28
		122.	Thiruvananthapuram	106	49
		123.	Thissur	119	56
		124.	Wayanad	120	43
18.	Lakshwadeep	125.	Kavaratti	35	33
19.	Madhya Pradesh	126.	Amlai	90	82*
		127.	Bhopal	86	93*
		128.	Chhindwara	100	65*
		129.	Dewas	94	75*
		130.	Gwalior	96	110*
		131.	Indore	91	80*
132.	Jabalpur	100	74*		

Sl. No.	State / Union territory	Sl. No.	City	Average No. of monitoring days	Annual average concentration of PM <sub>10</sub> in µg/m <sup>3</sup>
		133.	Katni	101	86*
		134.	Nagda	101	71*
		135.	Prithampur	82	85*
		136.	Sagar	59	69*
		137.	Satna	101	80*
		138.	Singrauli	94	109*
		139.	Ujjain	89	75*
20.	Maharashtra	140.	Akola	97	127*
		141.	Amravati	84	106*
		142.	Aurangabad	97	83*
		143.	Badlapur	75	159*
		144.	Bhiwandi	101	68*
		145.	Chandrapur	133	146*
		146.	Dombivali/Ambarnath	84	176*
		147.	Jalgaon	103	77*
		148.	Jalna	93	101*
		149.	Kolhapur	91	90*
		150.	Latur	92	81*
		151.	Mumbai	88	151*
		152.	Nagpur	122	102*
		153.	Nanded	77	42
		154.	Nashik	143	81*
		155.	Navi Mumbai	103	105*
		156.	Pimpri-Chinchwad	272	82*
		157.	Pune	87	102*
		158.	Sangli	100	76*
		159.	Solapur	97	64*
		160.	Thane	89	125*
		161.	Ulhasnagar	72	149*
21.	Manipur	162.	Imphal	104	29
22.	Meghalaya	163.	Byrnihat	104	174*
		164.	Dawki	103	28
		165.	Khliehriat	89	44
		166.	Nongstoin	105	36
		167.	Shillong	82	40
		168.	Tura	106	38
		169.	Umiam / Umsning	104	110*
23.	Mizoram	170.	Aizawl	100	52
		171.	Champhai	103	25
		172.	Kolasib	104	29
		173.	Lunglei	97	25
24.	Nagaland	174.	Dimapur	92	138*
		175.	Kohima	96	114*
25.		176.	Angul	100	94*
		177.	Balasore	103	83*
		178.	Berhampur	101	61*
		179.	Bhubneshwar	83	91*
		180.	Cuttack	105	86*
		181.	Jharsuguda	69	90*
		182.	Kalinga Nagar	84	126*
		183.	Konark	84	94*
		184.	Paradeep	97	106*
		185.	Puri	66	77*
		186.	Rayagada	105	58
		187.	Rourkela	72	117*
		188.	Sambalpur	107	82*
		189.	Talcher	100	96*
26.	Puducherry	190.	Karaikal	96	43
		191.	Puducherry	85	41
27.	Punjab	192.	Amritsar	62	168*
		193.	Bhatinda	74	131*
		194.	DeraBassi	130	93*
		195.	Faridkot	45	124
		196.	Gobindgarh	129	136*
		197.	Hoshiarpur	54	111*
		198.	Jalandhar	71	223*
		199.	Khanna	133	139*
		200.	Ludhiana	136	162*
		201.	NayaNangal	123	90*

Sl. No.	State / Union territory	Sl. No.	City	Average No. of monitoring days	Annual average concentration of PM <sub>10</sub> in µg/m <sup>3</sup>
		202.	Pathankot/Dera Baba	79	90*
		203.	Patiala	59	101*
		204.	Sangrur	103	95*
28.	Rajasthan	205.	Alwar	86	134*
		206.	Bharatpur	100	164*
		207.	Bhiwadi	93	200*
		208.	Jaipur	100	177*
		209.	Jodhpur	79	180*
		210.	Kota	82	130*
		211.	Udaipur	104	126*
29.	Sikkim	212.	Chungthang	55	23
		213.	Gangtok	63	40
		214.	Mangan	61	28
		215.	Namchi	60	24
		216.	Pelling	66	22
		217.	Rangpo	90	53
		218.	Ravangla	63	23
		219.	Singtam	90	51
30.	Tamilnadu	220.	Chennai	90	62*
		221.	Coimbatore	97	49
		222.	Cuddalore	100	51
		223.	Madurai	95	67*
		224.	Mettur	108	42
		225.	Salem	136	52
		226.	Trichy	96	86*
		227.	Tuticorin	98	132*
31.	Telangana	228.	Adilabad	91	65*
		229.	Hyderabad	99	108*
		230.	Karimnagar	89	72*
		231.	Khammam	87	55
		232.	Kothur	96	80*
		233.	Nalgonda	86	60
		234.	Nizamabad	86	62*
		235.	Patencheru	104	78*
		236.	Ramagundam	84	76*
		237.	Sangareddy	98	79*
		238.	Warangal	98	70*
32.	Tripura	239.	Agartala	69	62*
33.	Uttar Pradesh	240.	Agra	110	185*
		241.	Allahabad	109	140*
		242.	Anpara	81	153*
		243.	Bareilly	52	195*
		244.	Firozabad	61	221*
		245.	Gajraula	95	206*
		246.	Ghaziabad	61	280*
		247.	Gorakpur	50	186*
		248.	Jhansi	103	113*
		249.	Kanpur	82	224*
		250.	Khurja	92	208*
		251.	Lucknow	64	246*
		252.	Mathura	36	154
		253.	Meerut	54	153*
		254.	Moradabad	86	217*
		255.	Noida	86	216*
		256.	Raebareli	75	141*
		257.	Saharanpur	64	174*
		258.	Unnao	95	125*
		259.	Varanasi	72	244*
		34.	Uttarakhand	260.	Dehradun
261.	Haldwani			99	129*
262.	Haridwar			86	106*
263.	Kashipur			96	111*
264.	Rishikesh			85	128*
265.	Rudrapur			100	126*
35.	West Bengal	266.	Asansol	104	163*
		267.	Baharampur	104	109*
		268.	Balurghat	104	46
		269.	Bankura	104	92*
		270.	Barasat	104	103*

Sl. No.	State / Union territory	Sl. No.	City	Average No. of monitoring days	Annual average concentration of PM <sub>10</sub> in µg/m <sup>3</sup>
		271.	Bardhaman	102	97*
		272.	Barrackpore	104	90*
		273.	Bolpur	104	92*
		274.	Chinsura	104	83*
		275.	Coochbehar	104	56
		276.	Dankuni	104	77*
		277.	Darjeeling	54	56
		278.	Durgapur	104	154*
		279.	Ghatal	104	96*
		280.	Haldia	104	97*
		281.	Howrah	104	110*
		282.	Jalpaiguri	104	53
		283.	Kalyani	104	85*
		284.	Kharagpur	104	129*
		285.	Kolkata	104	120*
		286.	Krishnanagar	104	93*
		287.	Malda	103	62*
		288.	Medinipur	104	86*
		289.	Purulia	104	86*
		290.	Raigunj	104	47
		291.	Rampurhat	104	92*
		292.	Ranaghat	104	103*
		293.	Raniganj	104	163*
		294.	Rishra	104	91*
		295.	Sankrail	104	78*
		296.	Siliguri	103	59
		297.	South Suburban	105	104*
		298.	Suri	104	92*
		299.	Tamluk	104	112*
		300.	Tribeni	104	79*
		301.	Uluberia	104	79*

*NB. No. of monitoring days  $\geq$  50 have been considered as adequate, “\*” cities exceeding NAAQS w.r.t PM<sub>10</sub>, Alwar in Rajasthan (Aravali Hills), Agra, Firozabad, Mathura in Uttar Pradesh (Taj-Trapezium), Dehradun in Uttarakhand (Doon valley) are cities in Ecologically sensitive area. The rest fall under Residential / industrial / rural / other areas NAAQS (annual): PM<sub>10</sub>=60 µg/m<sup>3</sup>, (Residential / industrial / rural / other areas and Ecologically sensitive area)*

## Ambient air quality in cities with respect to PM<sub>2.5</sub> during 2017

Sl. No.	State / UT	Sl. No.	City	Average No. of monitoring days	Annual average of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$
1.	Bihar	1.	Begusarai	104	68*
		2.	Muzaffarpur	103	89*
2.	Chandigarh	3.	Chandigarh	135	64*
3.	Chattisgarh	4.	Raigarh	12	45
4.	Dadra & Nagar Haveli	5.	Silvassa	95	33
5.	Daman & Diu	6.	Daman	95	32
6.	Delhi	7.	Delhi	71	106*
7.	Goa	8.	Amona	105	22
		9.	Assanora	105	17
		10.	Bicholim	105	20
		11.	Codli	105	21
		12.	Cuncolim	104	45*
		13.	Curcholem	104	28
		14.	Honda	105	27
		15.	Kundaim	105	18
		16.	Margao	105	19
		17.	Panaji	28	47
		18.	Ponda	105	23
		19.	Sanguem	103	29
		20.	Tilamol	104	32
		21.	Tuem	105	18
22.	Usgao	105	24		
8.	Gujarat	23.	Ahmedabad	95	38
		24.	Anklesvar	104	35
		25.	Jamnagar	99	36
		26.	Rajkot	95	37
		27.	Surat	104	36
		28.	Vadodara	99	36
		29.	Vapi	89	36
9.	Himachal Pradesh	30.	Manali	88	23
		31.	Parwanoo	95	20
		32.	Sunder Nagar	96	41*
10.	Karnataka	33.	Bagalkote	78	37
		34.	Bangalore	66	46*
		35.	Belgaum	64	53*
		36.	Bijapur	65	39
		37.	Chitradurga	46	20
		38.	Devanagere	35	22
		39.	Hassan	50	29
		40.	Hubli-Dharwad	95	35
		41.	Karwar	10	28
		42.	Kolar	18	42
		43.	Mandya	29	25
		44.	Mangalore	47	50
		45.	Mysore	31	27
		46.	Raichur	115	39
		47.	Shimoga	75	17
		48.	Timukuru	25	58
11.	Madhya Pradesh	49.	Amlai	88	30
		50.	Bhopal	70	41*
		51.	Chhindwara	98	41*
		52.	Gwalior	96	47*
		53.	Indore	64	43*
		54.	Jabalpur	99	23
		55.	Katni	100	41*
		56.	Nagda	82	33
		57.	Prithampur	62	44*
		58.	Sagar	99	25
		59.	Satna	81	31
		60.	Singrauli	94	50*
		61.	Ujjain	66	37
12.	Maharashtra	62.	Mumbai	83	40
13.	Odisha	63.	Angul	100	45*
		64.	Balasore	103	45*
		65.	Berhampur	101	35
		66.	Bhubneshwar	51	36

Sl. No.	State / UT	Sl. No	City	Average No. of monitoring days	Annual average of PM <sub>2.5</sub> in $\mu\text{g}/\text{m}^3$
		67.	Cuttack	103	43*
		68.	Jharsuguda	69	47*
		69.	Kalinga Nagar	71	57*
		70.	Konark	69	36
		71.	Paradeep	86	40
		72.	Puri	26	25
		73.	Rayagada	105	34
		74.	Rourkela	67	42*
		75.	Sambalpur	107	46*
		76.	Talcher	100	45*
14.	Tamilnadu	77.	Chennai	83	32
		78.	Coimbatore	94	34
		79.	Madurai	38	30
15.	Telangana	80.	Adilabad	91	31
		81.	Hyderabad	85	54*
		82.	Khammam	27	27
		83.	Nalgonda	87	36
		84.	Nizamabad	86	29
		85.	Patencheru	68	31
		86.	Sangareddy	94	37
16.	Tripura	87.	Agartala	69	40
17.	Uttar Pradesh	88.	Agra	106	124*
		89.	Lucknow	74	102*
18.	West Bengal	90.	Asansol	104	67*
		91.	Barrackpore	104	44*
		92.	Darjeeling	54	21
		93.	Durgapur	103	69*
		94.	Haldia	104	35
		95.	Howrah	104	64*
		96.	Kalyani	103	46*
		97.	Kolkata	105	71*
		98.	Siliguri	103	24

*NB:No. of monitoring days  $\geq$  50 have been considered as adequate. "\*" cities exceeding NAAQS w.r.t PM<sub>2.5</sub>, Alwar in Rajasthan (Aravali Hills), Agra, Firozabad, Mathura in Uttar Pradesh (Taj-Trapezium), Dehradun in Uttarakhand (Doon valley) are cities in Ecologically sensitive area. The rest fall under Residential / industrial / rural / other areas, NAAQS (annual): PM<sub>2.5</sub>=40  $\mu\text{g}/\text{m}^3$ , (Residential / industrial / rural / other areas and Ecologically sensitive area)*