



DEPARTMENT OF HOUSING & ENVIRONMENT
GOVERNMENT OF CHHATTISGARH
MANTRALAYA, MAHANADI BHAWAN
ATAL NAGAR, DISTRICT - RAIPUR



**Action Plan for Improvement of Ambient Air Quality
of Non-Attainment Cities of
Chhattisgarh**



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BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 681 of 2018

IN THE MATTER OF:

News Item Published In 'The Times of India' Authored by Shri. Vishwa Mohan
Titled
"NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around
August 15"

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE DR. JUSTICE JAWAD RAHIM, JUDICIAL MEMBER
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

Dated: 08th October, 2018.

ORDER

1. Proceedings in this matter have been initiated on the basis of a newspaper item dated 03.08.2018 in the Times of India under the heading "*NCAP with multiple timelines to clean air in 102 cities to be released around August 15*"¹. According to the news item, the National Clean Air Programme (NCAP) proposes to reduce pollution in 102 cities where standards of air pollution are in excess in the next 10 years- 35% in next 3 years, 50% in next 5 years and 70-80% in next 10 years.
2. The question that arises for consideration is whether the timeline of 10 years for bringing down pollution levels is in accordance with the mandate of law requiring pollution free environment especially when there is imminent threat to human health as a result of such pollution. According to a survey, 15,000 persons died prematurely in Delhi in the year 2016. Delhi was ranked as third in the list of cities reporting most deaths due to air pollution. Premature deaths in

¹ <https://timesofindia.indiatimes.com/india/ncap-with-multiple-timelines-to-clean-air-in-102-cities-to-be-released-around-august-15/articleshow/65254122.cms>

Mumbai, Kolkata, Bangalore and Chennai are reported to be between 5,000-10,000 in 2016.²

3. 102 cities have been identified as 'Non-attainment cities'. Non-attainment city is the one which does not meet the National Ambient Air Quality Standards (NAAQS). The said standards are prescribed under Section 16 (2) (h) of Air (Prevention and Control of Pollution) Act, 1981, (Air Act, 1981) vide Notification dated 18.11.2009 by the Central Pollution Control Board (CPCB).
4. Serious concerns have been expressed in the last four decades about the need to restore the standards of the air quality, in view of the adverse effect of air pollution on public health. Section 20 of the Air Act, 1981 provides for directions for ensuring standards for emission from automobiles by the State Pollution Control Boards. Section 21 of the Air Act, 1981 requires Consent to Establish (CTE) or operate an industrial plant in air pollution control areas. Conditions for such grant include installation of equipments for control of air pollution, use of specified chimneys and such other conditions as may be necessary. Section 22 provides for control of industrial pollution. State Boards can also seek injunction against air pollution from any source under Section 21-A. Section 31-A empowers a Pollution Board to give directions to close an industrial activity on the ground of pollution. It is, however, well known that the statutory mechanism under the Air Act, 1981 has not been successful in controlling air pollution. The result is that air pollution has been subject matter of consideration by the Hon'ble Supreme Court and other Courts as well as this Tribunal.

²<https://www.ndtv.com/delhi-news/delhis-air-pollution-has-caused-of-death-of-15-000-people-study-1883022>.

5. Directions have been issued by the Hon'ble Supreme Court for control of vehicular pollution³, industrial and construction sector pollution⁴, power sector pollution⁵ and agricultural sector pollution⁶. This Tribunal also dealt with some of such issues.⁷ CPCB has also issued directions under Section 18(1)(b) of the Air Act, 1981 vide letter dated 29.12.2015 regarding prevention, control or abatement of air pollution and improvement of ambient air quality⁸.
6. A Comprehensive Action Plan (CAP) for air pollution control for NCR was prepared in pursuance of order of the Hon'ble Supreme Court dated 06.2.2017 by the Environment Pollution (Prevention and Control) Authority (EPCA) in consultation with the CPCB and DPCC on 05.04.2017.⁹ The said plan also provides for enforcement of Graded Response Action Plan (GRAP) notified by the MoEF&CC on 12.01.2017¹⁰. The GRAP envisages specific steps for different levels of air quality such as improvement in emission and fuel quality and other measures for vehicles, strategies to reduce vehicle numbers, non-motorised transport network, parking policy, traffic management, closure of polluting power plants and industries including brick kilns,

³ M.C. Mehta v. Union of India (1985)2 SCC 431, M.C. Mehta v. Union of India (2001) 3 SCC 756, M.C. Mehta v. Union of India (1998) 6 SCC 63, M.C. Mehta v. Union of India (2002) 3 SCC 356, M.C. Mehta v. Union of India (1998) 6 SCC 60

⁴ M.C. Mehta v. Union of India (1997) 2 SCC 353, M.C. Mehta v. Union of India and Shriram Foods and Fertilizer Industries and Anr. (1986) 2 SCC 235, Rural Litigation and Entitlement Kendra, Dehradun v. State of U.P. (1985) 2SCC 431, Mohd. Haroon Ansari v. District Collector (1998) 6 SCC 60, Union of India v. Union Carbide Co. (1989) 1 SCC 674, M.C. Mehta v. Union of India (1992) 4 SCC 256, Sterlite Industries (India) Ltd. etc. v. Union of India & Ors.(2013) 4SCC 575 , M.C. Mehta v. Union of India (2004) 6 SCC 588, M.C. Mehta v. Kamal Nath (2000)6 SCC 213

⁵ Consumer Education and Research Centre v. Union of India (1995)3 SCC 42, Dahanu Taluka Environment Protection group and Ors. v. Bombay Suburban Electricity Supply Company Ltd. and Ors (1991) 2SCC 539

⁶ Arjun Gopal and Ors v. Union of India and Ors (2017) 16 SCC 280, Dr. B.L Wadhera v. Union of India and Ors (1996) 2 SCC 594

⁷ Vardhman Kaushik v. Union of India and Ors. O.A no. 21 of 2014, Vikrant Kumar Tongad v. Environment Pollution (Prevention and Control) Authority and Ors, O.A No. 118 of 2013, Satish Kumar v. Union of India and Ors, O.A. No. 56 (THC) OF 2013, Smt. Ganga Lalwani V. Union of India and Ors. O.A No. 451 of 2018

⁸ p. 38, <http://envfor.nic.in/sites/default/files/NCAP%20with%20annex-ilovepdf-compressed.pdf>

⁹ Report No.71, EPCA-R/2-17/L-21, Comprehensive Action Plan for air pollution control with the objective to meet ambient air quality standards in the National Capital Territory of Delhi and National Capital Region, including states of Haryana, Rajasthan and Uttar Pradesh.

¹⁰ S.O.118(E), Notification, Ministry of Environment, Forest and Climate Change

control of generator sets, open burning, open eateries, road dust, construction dust, etc.

7. The GRAP categorises levels of pollution as severe plus, severe, very poor, moderate to poor. The action to be taken in such situations includes stopping entry of trucks, stopping construction activities, odd and even scheme of private vehicles, shutting of schools, closing of brick kilns, stone crushers, hot mix plants, power plants, intensifying public transport services, mechanised cleaning of road, and sprinkling of water, stopping the use of diesel generator sets, enhancing parking fees, etc. Implementation of prescribed norms in the light of legal provisions and court directions remains a challenge. The consequence is that India is being ranked high in terms of level of pollution compared to many other countries with enormous adverse impact on public health. Most victims are children, senior citizens and the poor.¹¹
8. A chamber meeting was held in this Tribunal on 05.09.2018 to review the situation. The same was attended by all the Members of the Tribunal, representatives of CPCB, Ministry of Road Transport and Highways (MoRTH), Ministry of Petroleum and Natural Gas, Ministry of Environment, Forest and Climate Change (MoEF&CC), Ministry of Agriculture, Cooperation and Farmers Welfare, Ministry of Heavy Industries, States of Haryana, Punjab, Uttar Pradesh and Rajasthan, NCT of Delhi, IIT Delhi, IIT Kanpur and NEERI. In the said meeting, presentation was given by CPCB to the effect that 102 cities have been declared as "non-attainment" cities based on study of data from 2011-2015 and directions were issued by the CPCB to concerned States to

¹¹ <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranks-177-out-of-180-in-environmental-performance-index/article22513016.ece>
<https://www.ndtv.com/delhi-news/delhis-air-pollution-has-caused-of-death-of-15-000-people-study-1883022>

frame city specific action plans. 73 such plans were received. 36 were finalized. 37 are pending. 29 are yet to be submitted.

9. Under the National Ambient Air Quality Monitoring Programme (NAAQM) of the CPCB, renamed as National Air Quality Monitoring Programme (NAMP), air quality data is compiled with reference to notified air standards. Four air pollutants viz. Sulphur Dioxide (SO₂), Oxides of Nitrogen as NO₂, Suspended Particulate Matter (PM₁₀) and fine Particulate Matter (PM_{2.5}) have been identified for regular monitoring at all the locations.¹² In addition to this, there are hundred and one (101) real-time Continuous Ambient Air Quality Monitoring stations (CAAQMS) in 57 cities monitoring 08 pollutants viz. PM₁₀, PM_{2.5}, SO₂, NO_x, Ammonia (NH₃), Carbon Monoxide (CO), Ozone (O₃) and Benzene. PM₁₀ are inhalable coarse particles, which are particles with a diameter between PM_{2.5} and 10 micrometers (µm) and PM_{2.5} are fine particles with a diameter of 2.5 µm or less. Particulates are the deadliest form of air pollutant due to their ability to penetrate deep into the lungs and blood streams unfiltered. The smaller PM_{2.5} are particularly deadly as they can penetrate deeper into the lungs.
10. As already noted, there are 102 non-attainment cities where the air quality is worse than National Ambient Air Quality Standards consecutively in the last five years. The number of cities has increased from 94 identified earlier under the National Air Quality Monitoring Programme (2011-15). The highest number of cities are in Maharashtra (17) followed by Uttar Pradesh (15), Punjab (9), Himachal Pradesh (7), Odisha and Madhya Pradesh (6 each), Assam, Andhra Pradesh and Rajasthan (5 each), Karnataka (4), Bihar, Chhattisgarh and Telangana (3 each), Gujarat, Jammu and Kashmir, Nagaland and Uttarakhand (2 each) and Jharkhand, Delhi, Chandigarh, Meghalaya, Tamil Nadu and West Bengal (1 each).

¹² <http://envfor.nic.in/sites/default/files/NCAP%20with%20annex-ilovepdf-compressed.pdf>

11. The list of 102 cities identified by CPCB with status of parameters exceeded and major sources of pollution are as follows:

State Sl. No	State	Cities Sl. No	Cities	Status	Major Sources of Pollution
1	Andhra Pradesh	1	Guntur	PM10	i. Vehicular Emissions. ii. Road Dust/Re-suspension of dust and other fugitive emission. iii. Air Pollution from Bio-Mass Burning iv. Industrial Air Pollution. v. Air Pollution from Construction and Demolition Activities. vi. DG sets vii. LPG instead of coal in restaurants/dhabas/ road side eateries.
		2	Kurnool	PM10	
		3	Nellore	PM10	
		4	Vijaywada	PM10	
		5	Vishakhapatnam	PM10	
		6	Guwahati	PM10	
		7	Nagaon	PM10	
2	Assam	8	Nalbari	PM10	
		9	Sibsagar	PM10	
		10	Silchar	PM10	
	Bihar	11	Gaya	N.A	
		12	Patna	N.A	
		13	Muzzafarpur	N.A	
3	Chandigarh	14	Chandigarh	PM10	
4	Chhattisgarh	15	Bhillai	PM10	
		16	Korba	PM10	
		17	Raipur	N.A	
5	Delhi	18	Delhi	PM10, NO2	
6	Gujarat	19	Surat	PM10	
		20	Amedabad	N.A	
		21	Baddi	PM10	
		22	Damtal	PM10	
		23	Kala Amb	PM10	
7	Himachal Pradesh	24	Nalagarh	PM10	
		25	Paonta-Sahib	PM10	
		26	Parwanoo	PM10	
		27	Sunder Nagar	PM10	
8	Jammu & Kashmir	28	Jammu	PM10	
		29	Srinagar	N.A	
9	Jharkhand	30	Dhanbad	PM10	
10	Karnataka	31	Bangalore	PM10	
		32	Devanagere	PM10	
		33	Gulburga	PM10	
		34	Hubli-Dharwad	PM10	
		35	Bhopal	PM10	
		36	Dewas	PM10	

State Sl. No	State	Cities Sl. No	Cities	Status	Major Sources of Pollution
11	Madhya Pradesh	37	Indore	PM10	i. Vehicular Emissions. ii. Road Dust/Re-suspension of dust and other fugitive emission. iii. Air Pollution from Bio-Mass Burning iv. Industrial Air Pollution. v. Air Pollution from Construction and Demolition Activities. vi. DG sets. vii. LPG instead of coal in restaurants/dhabas/ road side eateries.
		38	Sagar	PM10	
		39	Ujjain	PM10	
		40	Gwalior	N.A	
		41	Akola	PM10	
		42	Amravati	PM10	
		43	Aurangabad	PM10	
		44	Badlapur	PM10, NO2	
		45	Chandrapur	PM10	
		46	Jalgaon	PM10	
		47	Jalna	PM10	
12	Maharashtra	48	Kolhapur	PM10	
		49	Latur	PM10	
		50	Mumbai	PM10	
		51	Nagpur	PM10	
		52	Nashik	PM10	
		53	Navi Mumbai	PM10	
		54	Pune	PM10, NO2	
		55	Sangli	PM10	
		56	Solapur	PM10	
		57	Ulhasnagar	PM10, NO2	
13	Meghalaya	58	Byrnihat	PM10	
14	Nagaland	59	Dimapur	PM10	
		60	Kohima	PM10	
15	Orissa	61	Angul	PM10	
		62	Balasore	PM10	
		63	Bhubneshwar	PM10	
		64	Cuttack	PM10	
		65	Rourkela	PM10	
		66	Talcher	PM10	
		67	Amritsar	N.A	
		68	DeraBassi	PM10	
		69	Gobindgarh	PM10	
		70	Jalandhar	PM10	

State Sl. No	State	Cities Sl. No	Cities	Status	Major Sources of Pollution
16	Punjab	71	Khanna	PM10	i. Vehicular Emissions. ii. Road Dust/Re-suspension of dust and other fugitive emission. iii. Air Pollution from Bio-Mass Burning iv. Industrial Air Pollution. v. Air Pollution from Construction and Demolition Activities. vi. DG sets. vii. LPG instead of coal in restaurants/dhabas/ road side eateries.
		72	Ludhiana	PM10	
		73	NayaNangal	PM10	
		74	Pathankot/Dera Baba	PM10	
		75	Patiala	PM10	
		76	Alwar	PM10	
		77	Jaipur	PM10	
17	Rajasthan	78	Jodhpur	PM10	
		79	Kota	PM10	
		80	Udaipur	PM10	
18	Tamil Nadu	81	Tuticorin	PM10	
19	Telangana	82	Hydrabad	PM10	
		83	Nalgonda	PM10	
		84	Patencheru	PM10	
		85	Agra	PM10	
		86	Allahabad	PM10	
		87	Anpara	PM10	
		88	Bareilly	PM10	
		89	Firozabad	PM10	
		90	Gajraula	PM10	
20	Uttar Pradesh	91	Ghaziabad	PM10	
		92	Jhansi	PM10	
		93	Kanpur	PM10	
		94	Khurja	PM10	
		95	Lucknow	PM10	
		96	Muradabad	PM10	
		97	Noida	PM10	
		98	Raebareli	PM10	
		99	Varanasi	PM10	
21	Uttarakhand	100	Kashipur	PM10	
		101	Rishikesh	PM10	
22	West Bengal	102	Kolkata	PM10, NO2	

12. The above chart shows that major violation of standard is of "PM₁₀" and identified sources are vehicular, industrial, biomass burning, road dust, construction and demolition, DG sets and road side eateries. The action plan proposed by the CPCB¹³ with the timeline is as follows:

Action Plan:				
	Action	Implementati on period (Short/ Mid /Long-term)	Time target for Implement ation	Responsible agency (ies)
Source group	1. Restriction on plying and phasing out of 15 years old commercial diesel driven vehicles.	Mid	Dec. 18	Transport Department
Vehicles	2. Introduction of cleaner fuels (CNG/LPG) for vehicles.	Mid	June, 18	Transport Department & Oil companies
	3. Regular checking of vehicular emission and issue of Pollution under Control Certificate (PUC).	Short	March, 18	Transport Department & Traffic Police
	4. Good traffic management including re-direction of traffic movement to avoid.	Mid	July, 18	Traffic Police
	5. Ban on registration of Diesel driven auto-rickshaw /Tempo.	Short	April, 18	Transport Department
	6. Promotion and operationalization of E-rickshaw.	Mid	June, 18	Transport Department
	7. Development of Multi-layer parking.	Long	Dec. 18,	MC, UD&HD & District Adm
	8. Retrofitting of particulate filters in diesel driven vehicle.	Mid	Dec. 18	Transport Department
	9. Checking of fuel adulteration	Short	April, 18	District Adm & Oil Company
	10. Monitoring on vehicle fitness.	Short	April, 18	Transport Department & Traffic Police
	11. Periodic calibration test of vehicular emission monitoring instrument	Short	April, 18	SPCB & Transport Department
Road Dust	1. Regular cleaning of road dust.	Short	April, 18	MC

¹³presented by CPCB in chamber meeting at NGT on 05.09.2018

	2. Water spraying on road through tankers	Mid	April, 18	MC
	3. Construction of pucca pavement along the roads.	Long	Dec. 18	MC and Road Construction Department
	4. Tree plantation along the roads.	Long	Aug. 19	Department of Environment and Forest
	5. Development of green belt in open areas, gardens, parks/ community places, schools & housing societies.	Long	Aug. 19	Department of Environment and Forest
	6. Introduction of water fountains at major traffic intersection/ Golambar/circle.	Long	Aug. 19	MC
Constructi on activities	1. Covering of construction site.	Short	April, 18	Building Construction Department and MC.
	2. Transporation of construction materials like sand, soil, stone chips etc. in covered system.	Short	April, 18	Transport Department District Adm. & Traffic Police.
	3. Restriction on storage of construction materials along the road.	Short	April, 18	MC
Biomass and garbage burning	1. Restriction on open burning of municipal solid waste, Biomass, plastic horticulture waste etc.	Short	March, 18	MC
	2. Immediate lifting of solid wastes generated from de-silting and cleaning of municipal drains for its disposal.	Short	April, 18	MC
	3. Transportation of municipal solid wastes, construction materials and debris in covered system.	Short	April, 18	MC
	4. Ensuring promotion & use of cleaner fuel for commercial purposes like local Dhaba/eateries	Long	Dec. 19	District Adm. & Oil Company
Industries	1. Ensuring installation and operation of air pollution control devices in industries	short	April, 18	SPCB
	2. Ensuring emission standards in industries	short	April, 18	SPCB

	3. Adoption of cleaner technology in brick kilns at five blocks of City Name Viz. city Name Sadar, Danapur, Phulwarisharif, Maner and Fatuha by 31.08.2018	Mid	Aug. 18	SPCB
	4. Shifting of polluting industries,	Long	Dec. 19	SPCB & Industry Department
	5. ban on polluting industries	Short	April, 18	SPCB & Industry Department
Strengthening of AAQ monitoring	1. Installation of four CAAQMS at City Name A. Two CAAQMS stations under CSR funds of CPSU through Central Pollution Control Board at Eco-Park and IGIMS, City Name premise. b. Two CAAQM stations under State Govt. financial assistance	Mid	Aug. 18	SPCB
	2. Source appointment study	Mid	Dec. 18	SPCB
Public Awareness	1. Issue of advisory to public for prevention and control of air pollution	Short	April, 18	SPCB & SDMA
	2. Involvement of school and other academic institution in awareness program	Mid	Aug. 18	SPCB
Others	1. Compliance of guidelines on D.G. sets and action against violation	Short	April, 18	SPCB & MC
	2. Help line to oversee non compliances on aforesaid issues.	Short	April, 18	SPCB & MC

13. The data of non-attainment cities is a matter of concern. Though, the MoEF&CC has announced NCAP, as noted earlier, the timeline for bringing down the pollution by 70-80% in next 10 years does not meet the mandate of law. The time line has to be revised. As per some studies, India ranks 177 out of 180 countries in Environmental Performance Index.¹⁴

¹⁴ <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranks-177-out-of-180-in-environmental-performance-index/article22513016.ece>

14. We are thus of the view that emergent measures are required to check sources of air pollution. Once the standards have been laid down in the statutory provisions of the Air Act, 1981, all the authorities as well as citizens are statutorily bound to follow the said standards.
15. Accordingly, we consider it appropriate to take cognizance of the alarming situation and issue directions as follows:
- i. All the States and Union Territories with non-attainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans.
 - ii. The Action Plans may be prepared by six-member committee comprising of Directors of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board or Committee of the concerned State. The Committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring intra-sectoral co-ordination.
 - iii. The Action Plans may take into account the GRAP, the CAP and the action plan prepared by CPCB as well as all other relevant factors. The Action Plans may be forwarded to the CPCB by 31.12.2018. The same may be placed before the Committee as directed in direction no. vi. The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning, agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc. The action plan

shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes.

- iv. The Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.
- v. The Action Plan should be consistent with the carrying capacity assessment of the non-attainment cities in terms of vehicular pollution, industrial emissions and population density, extent of construction and construction activities etc. The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating number of vehicles and their parking and plying, population density, extent of construction and construction activities etc. Guidelines may accordingly be framed to regulate vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment.
- vi. The Committee comprising of (a) Shri. Prashant Gargava, Member Secretary, CPCB, (b) Dr. Mukesh Khare, Professor, IIT Delhi, and (c) Dr. Mukesh Sharma, Professor, IIT Kanpur shall examine the Action Plans and on the recommendations of the said Committee, the Chairman, CPCB shall approve the same by 31.01.2019.
- vii. The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate Action Plans, as directed.
- viii. The CPCB, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public

complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS.

- ix. The CPCB and all the State Pollution Control Boards and Pollution Control Committees shall collectively workout and design a robust nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities/towns. The scope of monitoring should be expanded to include all twelve (12) notified parameters as per Notification No B-29016/20/90/PCI-L dated 18th November, 2009 of CPCB. The continuous Ambient Air Quality Monitoring Stations (AAQMS) should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite action plan with timelines for its execution which shall not be more than three months. It is expected that all such AAQMS shall be connected to central server of CPCB for reporting analysis of results in a form of Air Quality Bulletin for general public at regular intervals atleast on weekly basis and ambient air quality on continuous basis on e-portal. MoEF&CC will provide requisite funds for the purpose. MoEF&CC in consultation with Ministry of Housing and Urban Affairs, MoRTH, Ministry of Petroleum and Natural Gas, Ministry of Agriculture, Cooperation and Farmers Welfare or any other Ministry to lay down such guidelines as may be considered necessary for improvement of air quality in the country.
16. A copy of this be sent by e-mail to all the concerned i.e. Ministries of Environment, Forest & Climate Change, Housing and Urban Affairs, Road Transport and Highway, Agriculture, Petroleum and the Chief Secretaries of all the States and Union Territories for compliance.

17. We understand that some of the Zonal Benches of the National Green Tribunal have also passed directions on the subject of Ambient Air Quality and the States in those Zones are in the process of implementation of such directions. Specific reference may be made in this regard to judgement dated 11.08.2016 in O.A No. 33/2018/EZ in the matter of *Subhas Datta v. State of West Bengal & Ors.* We make it clear that this order shall not be considered as an impediment to those actions but as an addition or supplement thereto for achieving the object of this order at the macro level and of the said order at the micro level in the concerned cities.
18. Needless to say, that order of National Green Tribunal is binding as a decree of Court and non-compliance is actionable by way of punitive action including prosecution, in terms of the National Green Tribunal Act, 2010.
19. The CPCB may compile the data and furnish the same to this Tribunal by email at filing.ngt@gmail.com on or before 15.2.2019.
20. Put up for consideration in the last week of February, 2019.

....., CP
(Adarsh Kumar Goel)

....., JM
(Dr. Jawad Rahim)

....., JM
(S.P. Wangdi)

....., EM
(Dr. Nagin Nanda)

New Delhi
October, 08, 2018

छत्तीसगढ़ शासन
आवास एवं पर्यावरण विभाग
:: मंत्रालय ::
महानदी भवन, अटल नगर, जिला रायपुर
—0000—

// आदेश //

अटल नगर, दिनांक 28/11/2018

क्रमांक एफ 4-3/2018/32 :: माननीय राष्ट्रीय हरित अधिकरण, प्रमुख पीठ, नई दिल्ली द्वारा ओ.ए. क्रमांक 681/2018 में दिनांक 08.10.2018 को पारित आदेश के पालन में प्रदेश की "Non-attainment Cities." कमशः रायपुर, भिलाई एवं कोरबा में वायु की गुणवत्ता में सुधार हेतु कार्य योजना तैयार करने हेतु राज्य शासन निम्नानुसार छः सदस्यीय समिति का गठन करता है:-

1. प्रमुख सचिव, छत्तीसगढ़ शासन, विज्ञान एवं प्रौद्योगिकी विभाग तथा विशेष कर्तव्यस्थ अधिकारी, आवास एवं पर्यावरण विभाग
2. आयुक्त/अतिरिक्त परिवहन आयुक्त
3. संचालक, उद्योग, उद्योग संचालनालय
4. संचालक, नगरीय प्रशासन एवं विकास
5. संचालक, कृषि, कृषि संचालनालय
6. सदस्य सचिव, छत्तीसगढ़ पर्यावरण संरक्षण मण्डल

2/ उक्त समिति "वायु गुणवत्ता निगरानी समिति" भी होगी। समिति प्रमुख सचिव, छत्तीसगढ़ शासन, आवास एवं पर्यावरण विभाग की सम्पूर्ण निगरानी एवं समन्वय से कार्य करेगी।

3/ वायु गुणवत्ता निगरानी समिति के कार्यों की समीक्षा/देखरेख प्रदेश के मुख्य सचिव द्वारा भी की जा सकेगी।

4/ उपरोक्तानुसार समिति के गठन हेतु सामान्य प्रशासन विभाग ने यू.ओ. क्रमांक 235, दिनांक 27.11.2018 द्वारा सहमति दी है।

छत्तीसगढ़ के राज्यपाल के नाम से
तथा आदेशानुसार,

(जी.एल. सांकला)
उप सचिव

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पृ.क्रमांक एफ 4-3/2018/32

अटल नगर, दिनांक २६/11/2018

प्रतिलिपि:-

1. प्रमुख सचिव, छत्तीसगढ़ शासन, आवास एवं पर्यावरण विभाग, मंत्रालय, महानदी भवन,
2. प्रमुख सचिव, छत्तीसगढ़ शासन, विज्ञान एवं प्रौद्योगिकी विभाग तथा विशेष कर्तव्यस्थ अधिकारी, आवास एवं पर्यावरण विभाग, मंत्रालय, महानदी भवन,
3. आयुक्त/अतिरिक्त परिवहन आयुक्त, इन्द्रावती भवन, अटल नगर
4. संचालक, उद्योग, उद्योग संचालनालय, रायपुर
5. संचालक, नगरीय प्रशासन एवं विकास, इन्द्रावती भवन, अटल नगर,
6. संचालक, कृषि, कृषि संचालनालय, रायपुर,
7. सदस्य सचिव, छत्तीसगढ़ पर्यावरण संरक्षण मण्डल, पर्यावास भवन,
8. उप सचिव, मुख्य सचिव कार्यालय, मंत्रालय, महानदी भवन,



की ओर माननीय राष्ट्रीय हरित अधिकरण, प्रमुख पीठ, नई दिल्ली द्वारा ओ.ए. क्रमांक 681/2018 में पारित आदेश दिनांक 08.10.2018 की छायाप्रति सहित सूचना एवं आवश्यक कार्यवाही हेतु अग्रेषित।

उप सचिव

छत्तीसगढ़ शासन
आवास एवं पर्यावरण विभाग

CE
27/11

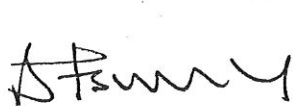
विषय:- छत्तीसगढ़ राज्य में "Non-attainment Cities" के वायु गुणवत्ता में सुधार हेतु कार्य योजना तैयार करने के लिए समिति की दिनांक 01.12.2018 को सम्पन्न बैठक का कार्यवाही विवरण।

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माननीय राष्ट्रीय हरित अधिकरण, प्रमुख पीठ, नई दिल्ली द्वारा ओ.ए. क्रमांक 681/2018 में दिनांक 08.10.2018 को पारित आदेश के पालन में प्रदेश की "Non-attainment Cities" क्रमशः रायपुर, भिलाई एवं कोरबा में वायु की गुणवत्ता में सुधार हेतु कार्य योजना तैयार करने हेतु गठित छः सदस्यीय समिति की बैठक दिनांक 01.12.2018 को सम्पन्न हुई। उक्त बैठक में निम्नलिखित अधिकारी उपस्थित हुये :-

1. श्री संजय शुक्ला, प्रमुख सचिव, छत्तीसगढ़ शासन, विज्ञान एवं प्रौद्योगिकी विभाग एवं विशेष कर्तव्यस्थ अधिकारी, आवास एवं पर्यावरण विभाग,
2. श्री निरंजन दास, संचालक, नगरीय प्रशासन एवं विकास विभाग
3. श्री अनुराग पांडे, संचालक, उद्योग संचालनालय,
4. श्री सुनील मिश्रा, सदस्य सचिव, छत्तीसगढ़ पर्यावरण संरक्षण मंडल,
5. श्री एस.एस. केरकेट्टा, संचालक, कृषि,
6. श्री ओ.पी. पाल, अतिरिक्त आयुक्त परिवहन,

2/ समिति द्वारा माननीय राष्ट्रीय हरित अधिकरण द्वारा पारित आदेश दिनांक 08.10.2018 का अवलोकन किया। अवलोकन के पश्चात् समिति द्वारा प्रदेश की "Non-attainment Cities" क्रमशः रायपुर, भिलाई एवं कोरबा में वायु की गुणवत्ता में सुधार हेतु संलग्न तैयार की गई कार्य योजना का अनुमोदन किया गया।



(संजय शुक्ला)
प्रमुख सचिव,
छत्तीसगढ़ शासन,
विज्ञान एवं प्रौद्योगिकी
विभाग एवं विशेष
कर्तव्यस्थ अधिकारी
आवास एवं पर्यावरण
विभाग,
(सदस्य)



(निरंजन दास)
संचालक,
नगरीय प्रशासन
एवं विकास विभाग
(सदस्य)



(अनुराग पांडे)
संचालक
उद्योग
संचालनालय
(सदस्य)



(सुनील मिश्रा)
सदस्य सचिव
छत्तीसगढ़
पर्यावरण संरक्षण
मंडल
(सदस्य)



(एस.एस.
केरकेट्टा)
संचालक
कृषि
(सदस्य)



(ओ.पी. पाल)
अतिरिक्त
आयुक्त परिवहन
(सदस्य)

Action Plan for Improvement of Ambient Air Quality of Non-Attainment Cities of Chhattisgarh

In compliance of the order dated 20/09/2018 of Hon'ble National Green Tribunal, Principal Bench, New Delhi, Government of Chhattisgarh, Department of Housing and Environment has constituted a six member committee known as "Air Quality Monitoring Committee" (AQMC) for preparation of Action Plan for Improvement of Ambient Air Quality of Non-Attainment Cities of Chhattisgarh.

Status of Ambient Air Quality of Non-Attainment Cities of Raipur, Korba and Bhilai :-

Central Pollution Control Board has identified 102 cities as 'Non-attainment cities' which does not meet the National Ambient Air Quality Standards (NAAQS). The said standards are prescribed under Section 16 (2) (h) of Air (Prevention and Control of Pollution) Act, 1981, (Air Act, 1981) vide Notification dated 18/11/2009 by the Central Pollution Control Board (CPCB). The list includes 03 cities namely Raipur, Korba and Bhilai of Chhattisgarh State. The main pollutant is particulate matter in these cities. The last 03 year data of Ambient Air Quality of these cities is enclosed as **Annexure-A**.

Major Sources of Air Pollution:-

Major sources responsible for degradation in ambient air quality are industrial air pollution, vehicular emission, road dust/re-suspension of dust and other fugitive emission, air pollution from construction and demolition activities, burning of municipal solid waste and plastic waste etc.

Action Plan:-

The action plan includes components like control of industrial pollution, vehicular emission, road dust/re-suspension of dust and other fugitive emission, air pollution from construction and demolition activities, burning of municipal solid waste and plastic waste etc. The action plan has speedy and specific timelines for execution of steps. Provision will be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/Committee and out of Central Schemes.

The main objective of the action plan is to bring ambient air quality of cities of Raipur, Korba and Bhilai within prescribed standards.

A. Raipur

Chhattisgarh State which was formed in the year 2000 has attracted a large number of metallurgical and power industries. Other economic activities have also grown at a faster pace in the State. Raipur, being the capital city, has witnessed exponential development and economic growth. Number of vehicles plying on Raipur roads have also increased manifold. It has been recognized that Raipur is facing tremendous environmental pollution problems, mainly air pollution caused by number of air polluting industries viz. Sponge iron, ferro alloys, power plants and rolling mills. The problem is further aggravated due to increased vehicular movement, bad condition of roads, poorly maintained vehicles, and increased construction activities.

As per 2011 census, Raipur had a population of more than one million. It is the largest city and the capital of Chhattisgarh. It was formerly a part of Madhya Pradesh before the state of Chhattisgarh was formed on 1 November 2000. The traditional face of city has changed with Raipur becoming an important regional commercial and industrial destination for the coal, power, plywood, steel and aluminium industries. Raipur is the largest market of steel in India. Raipur is among the richest cities and India's biggest iron market.

There are eight designated industrial areas in and around Raipur City namely Urla, Borjhara, Gogaon, Rawabhata, Bhanpuri, Amaseoni, Metal Park Near Urla and Siltara.

B. Korba

Korba city is situated on the bank of Hasdev River. It is located in Korba district of Chhattisgarh. It is about 200 kilometers north to Raipur. Korba City is Power Hub of Chhattisgarh. Most of biggest Power Plant like NTPC, CSEB, Lanco, Balco is situated in Korba. Korba region is known as the land of black diamond, kosa silk and thermal power in the State of Chhattisgarh. At the same time, Korba has also been declared as one of the critically polluted areas in India by CPCB and ranked 5th in the list of critically polluted areas in 2009. Korba District has a huge reservoir of coal over 520 sq. km known as Korba coalfield. Easy availability of coal as raw material has led to establishment of power plants, coal related industries such as coal washeries and mines. There are only one designated Industrial Area i.e. Industrial Area, Rajgamar Road, Korba. In Korba Region 19 nos. of Large/Medium Scale Power Plant and 06 nos. of big Open Cast Coal mines are working.

C. Bhilai

Bhilai city is located in the District of Durg, Chhattisgarh. It is about 22 kilometers west of Raipur, the capital of Chhattisgarh, on the main Howrah-Mumbai rail line and National Highway no. 6. The history of Bhilai city is inevitably linked to the history of the Bhilai Steel Plant. The Steel Plant was established during India's Second Five-Year Plan (1956-61) with the assistance of the Russian Government. Over a period of time in addition to Bhilai Township, urbanization and commercial activities have expanded in this area. Light Industrial Area, Heavy Industrial Area near Jamul and Hathkhaj Village are the main industrial areas in Bhilai region.

Action plan for Raipur, Korba and Bhilai are respectively attached at **Annexure-I, II and III** respectively.

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REPORT OF NAMP STATIONS - YEAR 2016**Regional Office - Raipur****1. Station - New H.I.G. 9, Hirapur, Raipur**

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	138.90	11.58	31.95
February	130.66	11.17	31.52
March	128.00	10.52	31.00
April	121.33	10.50	29.41
May	120.55	10.02	28.42
June	117.50	10.51	29.29
July	103.93	10.10	25.64
August	103.75	8.93	24.50
September	100.45	8.68	24.31
October	120.84	9.68	27.73
November	149.08	12.35	33.97
December	130.55	24.19	38.61
Average	122.13	11.52	29.70
Standard	100	80	80

2. Station - Wool Worth (I) Ltd.-Sarora, Raipur

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	185.92	12.69	34.59
February	177.93	12.24	33.16
March	175.72	12.00	32.10
April	168.00	11.94	32.66
May	162.85	12.10	32.43
June	162.04	11.85	32.09
July	150.17	11.31	27.28
August	150.43	11.25	28.62
September	145.45	10.86	28.27
October	151.60	11.40	34.05
November	179.75	14.33	37.33
December	-	-	-
Average	164.53	12.00	32.05
Standard	100	80	80

REPORT OF CAAQMS - YEAR 2016

1. Collectorate Parisar, Raipur

Month	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM 2.5 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	123.92	59.09	20.67	56.74
February	75.12	31.99	10.50	55.78
March	68.87	38.47	21.13	16.29
April	62.63	50.11	20.88	09.25
May	96.28	49.48	21.32	7.61
June	111.64	49.81	23.73	7.62
July	40.18	19.59	19.96	3.58
August	65.34	22.73	10.12	18.39
September	58.37	20.43	18.28	12.47
October	170.22	59.58	31.79	23.82
November	197.21	83.53	42.92	36.15
December	-	-	-	-
Average	97.25	44.07	21.94	22.52
Standard	100	100	80	80

2. NIT Raipur

Month	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM 2.5 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
November	77.91	0	4.39	45.95
December	110.25	64.11	2.72	13.57
Standard	100	60	80	80

* CAAQMS at N.I.T., Raipur became operational from October 2016.

REPORT OF NAMP STATIONS - YEAR 2017

Regional Office - Raipur

1. Station - Housing Board Complex, Kabir Nagar, Raipur.

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	174.88	12.50	33.75
February	169.52	11.75	32.24
March	160.48	11.65	30.57
April	111.99	9.71	26.40
May	66.05	8.94	24.11
June	48.22	7.69	21.03
July	31.82	6.28	17.25
August	29.50	5.90	15.77
September	34.11	7.75	16.62
October	47.41	9.23	19.32
November	75.87	13.05	18.33
December	82.92	-	-
Average	86.06	9.50	23.22
Standard	100	80	80

2. Station - Wool Worth (I) Ltd.-Sarora, Raipur.

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	191.62	13.97	36.68
February	188.20	13.36	34.66
March	184.08	12.95	34.00
April	136.19	11.71	31.61
May	70.88	10.40	27.84
June	54.78	9.02	25.81
July	36.00	8.09	20.48
August	34.66	8.00	19.88
September	38.87	8.65	18.87
October	60.55	12.65	22.11
November	88.96	15.11	21.66
December	96.33	-	-
Average	98.43	11.02	25.78
Standard	100	120	120

REPORT OF CAAQMS - YEAR 2017

1. Collectorate Parisar, Raipur

Month	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)
January	99.98	52.33	38.54	33.14
February	91.04	42.16	34.92	45.11
March	80.63	45.45	34.32	39.78
April	62.42	45.55	21.45	25.99
May	70.25	47.77	20.55	22.45
June	48.05	24.62	13.68	17.86
July	36.56	18.80	13.39	17.49
August	33.86	19.68	11.92	12.95
September	38.71	17.15	12.02	12.29
October	57.35	31.56	22.95	14.96
November	84.93	38.66	30.83	23.99
December	87.73	41.42	32.23	23.96
Average	65.96	35.43	23.90	24.16
Standard	100	100	80	80

2. NIT, Raipur

Month	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)
January	93.96	51.60	20.36	21.80
February	84.63	38.42	30.56	39.61
March	76.81	42.38	31.24	36.92
April	59.65	40.22	18.86	22.74
May	57.44	36.83	12.38	13.58
June	54.81	23.45	8.10	12.82
July	31.91	15.19	8.19	13.06
August	34.22	19.28	8.94	12.50
September	35.96	17.10	12.10	12.70
October	52.88	26.47	19.10	16.80
November	73.89	32.74	20.10	16.65
December	75.74	36.40	25.63	14.14
Average	60.99	31.67	17.96	19.44
Standard	100	60	80	80

REPORT OF NAMP STATIONS - YEAR 2018

Regional Office - Raipur

1. Station - Housing Board Complex, Kabir Nagar, Raipur.

Month	PM 10 ($\mu\text{g}/\text{m}^3$)	PM 2.5 (Avg.) ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	86.58	-	-	-
February	80.43	-	13.58	20.91
March	77.55	-	13.25	13.80
April	78.61	-	12.17	14.17
May	62.50	-	11.16	14.33
June	44.20	-	10.18	14.00
July	39.10	-	9.72	15.21
August	37.15	-	9.23	13.66
September	41.56	-	10.59	15.31
October	47.95	-	12.78	19.31
Average	59.56	-	11.41	15.63
Standard	100		80	80

2. Station - Wool Worth (I) Ltd.-Sarora, Raipur

Month	PM 10 ($\mu\text{g}/\text{m}^3$)	PM 2.5 (Avg.) ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	93.23	-	-	-
February	90.21	-	18.41	25.33
March	84.59	-	16.04	22.06
April	78.61	-	14.42	21.73
May	69.50	-	13.48	19.73
June	53.05		12.29	18.50
July	52.00		12.66	16.41
August	-	-	-	-
September	44.60	-	12.67	17.60
October	57.40	-	14.18	21.47
Average	69.24	-	14.27	20.35
Standard	100		80	80

REPORT OF CAAQMS - YEAR 2018

1. Collectorate Parisar, Raipur

Month	PM10 ($\mu\text{g}/\text{m}^3$)	PM 2.5 ($\mu\text{g}/\text{m}^3$)	SO2 ($\mu\text{g}/\text{m}^3$)	NO2 ($\mu\text{g}/\text{m}^3$)
January	87.37	40.38	30.29	20.53
February	78.17	35.00	28.28	23.35
March	74.42	36.29	27.28	19.94
April	54.34	29.97	16.03	11.79
May	61.04	37.74	19.11	20.19
June	49.04	26.89	12.85	16.77
July	35.47	18.23	13.03	16.89
August	31.72	19.15	11.10	12.22
September	35.04	16.53	12.01	12.44
October	40.63	23.49	19.02	14.29
Average	54.72	28.36	18.90	16.84
Standard	100	60	80	80

2. NIT, Raipur

Month	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)
January	76.90	35.61	24.07	13.45
February	72.77	32.50	25.56	13.40
March	69.70	33.06	22.27	11.76
April	59.31	37.35	20.06	21.76
May	50.73	26.46	13.02	11.44
June	45.86	23.42	9.23	12.10
July	30.79	14.59	08.47	12.80
August	29.93	16.20	07.95	10.39
September	31.70	14.56	10.26	10.80
October	36.62	20.23	16.06	12.35
Average	50.43	25.39	15.69	13.02
Standard	100	60	80	80

REPORT OF NAMP STATIONS - YEAR 2016

Regional Office – Korba

1. Near Tehsil Office, Rampur, Korba

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	-	12.81	20.44
February	-	12.85	20.20
March	-	12.83	20.38
April	-	12.88	20.78
May	-	12.79	20.35
June	-	12.64	20.30
July	-	11.76	18.36
August	-	10.75	17.17
September	-	11.30	18.59
October	-	11.90	19.17
November	-	12.40	19.63
December	-	12.32	19.75
Annual Avg.		12.27	19.59
Standards/Limits	100	80	80

2. Pragati Nagar, Jamanipali, Korba

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	57.81	11.33	18.75
February	57.20	11.59	19.31
March	85.31	11.45	18.95
April	60.26	11.96	19.00
May	62.93	11.49	18.88
June	58.05	11.53	18.81
July	47.70	10.84	17.50
August	41.16	9.90	15.91
September	49.50	10.53	17.59
October	62.46	10.87	18.55
November	59.66	11.46	19.40
December	59.60	11.92	19.13
Annual Avg.	58.47	11.24	18.48
Standards/Limits	100	80	80

REPORT OF NAMP STATIONS - YEAR 2017

Regional Office – Korba

1. Near Tehsil Office, Rampur, Korba

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	-	12.90	20.56
February	-	12.76	20.05
March	86.00	12.23	19.87
April	68.89	12.27	20.15
May	67.35	12.43	20.20
June	65.16	11.54	18.12
July	45.3	10.86	17.54
August	56.3	11.16	18.07
September	55.00	10.69	18.20
October	58.35	12.66	20.54
November	61.05	11.27	20.80
December	63.26	11.64	21.33
Annual Avg.	62.67	11.87	19.62
Standards/Limits	100	80	80

2. Pragati Nagar, Jamanipali, Korba

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	77.60	12.00	19.84
February	70.66	11.63	19.45
March	56.05	11.57	18.80
April	67.50	11.45	18.65
May	53.41	11.80	18.57
June	48.33	10.87	17.77
July	35.62	9.32	15.80
August	42.30	9.91	16.87
September	43.40	9.58	16.97
October	47.50	10.27	18.03
November	53.25	9.91	19.45
December	50.29	9.32	18.46
Annual Avg.	53.83	10.64	18.22
Standards/Limits	100	80	80

REPORT OF NAMP STATIONS - YEAR 2018

Regional Office – Korba

1. Near Tehsil Office, Rampur, Korba

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	69.08	11.71	21.08
February	70.45	10.67	20.61
March	69.64	10.77	20.73
April	71.9	11.52	20.97
May	74.68	10.95	21.02
June	54.72	10.21	20.36
July	49.31	8.53	16.73
August	52.25	8.41	19.06
September	52.67	9.35	17.88
October	53.63	9.87	19.74
Annual Avg.	61.83	10.2	19.82
Standards/Limits	100	80	80

2. Pragati Nagar, Jamanipali, Korba

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	56.34	9.93	19.79
February	55.40	9.70	19.48
March	55.40	9.50	19.51
April	57.80	9.25	19.36
May	59.52	9.17	19.31
June	54.38	9.01	19.07
July	38.37	7.56	16.10
August	41.77	7.35	15.08
September	44.10	8.17	17.09
October	47.81	8.80	18.88
Annual Avg.	51.09	8.84	18.37
Standards/Limits	100	80	80

REPORT OF NAMP STATIONS - YEAR 2016

Regional Office - Bhilai

1. Regional Office, 5/32 Bunglow, Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	76.70	5.48	15.41
February	77.05	5.84	16.30
March	75.32	5.27	14.73
April	71.36	5.58	14.85
May	71.19	5.46	14.62
June	76.85	5.60	15.00
July	62.69	5.29	14.71
August	67.14	5.50	14.06
September	69.17	4.90	14.33
October	72.11	5.05	15.20
November	74.38	5.33	15.38
December	74.97	5.57	15.54
Annual Avg.	72.41	5.41	15.01
Standard	100	80	80

2. Vishak Hostel, Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	97.29	10.48	22.38
February	95.68	9.98	22.45
March	96.28	9.52	21.64
April	95.81	10.26	21.34
May	93.70	9.70	21.12
June	91.75	9.75	21.42
July	91.33	9.69	21.59
August	84.41	8.69	19.78
September	85.59	9.71	20.79
October	87.68	8.70	21.28
November	93.57	9.55	21.66
December	94.01	9.88	22.00
Annual Avg.	92.26	9.66	21.45
Standard	100	80	80

3. Laghu Udyog Nigam (I.A.) Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	173.25	11.63	31.08
February	173.21	11.50	31.93
March	170.87	11.22	31.08
April	168.50	11.29	31.71
May	159.83	11.00	31.63
June	154.87	10.76	30.38
July	157.31	10.59	30.59
August	152.30	10.69	30.69
September	152.94	10.79	30.68
October	158.66	10.97	30.87
November	164.78	11.14	30.88
December	167.49	11.41	31.79
Annual Avg.	162.83	11.08	31.11
Standard	100	80	80

REPORT OF NAMP STATIONS - YEAR 2017

Regional Office - Bhilai

1. Regional Office, 5/32 Bunglow, Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	77.03	5.62	15.86
February	77.03	5.76	16.09
March	72.74	5.43	15.16
April	71.56	5.48	15.81
May	71.33	5.50	14.43
June	71.53	5.55	15.07
July	65.57	5.53	14.41
August	64.13	5.38	14.05
September	64.36	5.19	14.81
October	64.04	4.23	14.38
November	62.83	4.39	14.56
December	70.32	5.33	14.65
Annual Avg.	69.37	5.28	14.94
Standard	100	80	80

2. Bokaro Hostel, Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	95.66	10.24	22.26
February	96.82	10.11	23.08
March	94.97	9.58	21.63
April	90.76	9.75	21.33
May	92.28	9.54	21.10
June	90.98	9.76	21.43
July	86.88	9.82	21.54
August	85.72	9.31	20.46
September	86.59	9.53	21.00
October	83.88	8.50	18.83
November	82.23	7.38	18.04
December	82.27	7.76	18.20
Annual Avg.	89.09	9.27	20.74
Standard	100	80	80

3. Laghu Udyog Nigam (I.A.) Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	169.78	11.56	31.38
February	172.66	11.38	31.66
March	156.11	11.16	31.16
April	153.73	11.29	29.55
May	156.73	10.97	30.53
June	153.28	10.71	30.18
July	135.76	10.03	29.19
August	102.81	10.71	30.56
September	100.04	10.73	30.95
October	128.67	10.95	28.67
November	117.71	9.56	28.33
December	102.16	10.02	25.24
Annual Avg.	137.45	10.76	29.78
Standard	100	80	80

REPORT OF NAMP STATIONS - YEAR 2018

Regional Office – Bhilai

1. Regional Office, 5/32 Bunglow, Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	70.77	5.26	14.33
February	67.58	4.77	13.71
March	63.07	4.39	13.28
April	60.09	3.94	12.07
May	58.50	3.59	10.74
June	55.97	3.35	11.09
July	57.88	3.33	10.59
August	52.50	3.18	10.04
September	56.31	3.38	10.24
October	59.8	3.9	10.3
Annual Avg.	60.25	3.91	11.64
Standard	100	80	80

2. Bokaro Hostel, Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	88.43	8.56	18.88
February	82.08	8.54	18.67
March	81.80	8.43	18.69
April	79.07	9.33	18.54
May	80.09	9.41	18.15
June	71.55	9.70	18.00
July	79.08	10.11	18.28
August	79.09	9.73	17.64
September	80.69	9.86	17.97
October	83.8	10.1	17.9
Annual Avg.	80.57	9.38	18.27
Standard	100	80	80

3. Laghu Udyog Nigam (I.A.) Bhilai

Month	PM10 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)
January	101.08	10.35	24.80
February	99.56	9.96	24.35
March	100.68	9.70	24.30
April	98.29	9.88	22.27
May	97.33	10.33	21.24
June	92.81	9.96	20.93
July	97.07	10.26	21.66
August	91.14	9.64	20.68
September	96.25	10.33	21.48
October	98.00	10.1	21.6
Annual Avg.	97.22	10.05	22.33
Standard	100	80	80

Action Plan for Raipur City

SOURCE GROUP	ACTION	IMPLEMENTATION PERIOD (SHORT/MID/LONG TERM)	TIME TARGET FOR IMPLEMENTATION	RESPONSIBLE AGENCY	Remark
VEHICLES	Restriction on plying and phasing out of 15 years old commercial diesel driven vehicles.	MID	-	Transport Department	<p>1. The Power to fix life of a vehicle lies with Central Government only under section 59 of CMV Act. It is in process of deliberation on a scrapping policy for vehicles.</p> <p>2. State Government laid down age limit for permit condition for buses (12 years) and trucks (15 years). The CG Motor Vehicle Rule 70A contained provision related to age limit for permit of buses. It is been struck down by Hon'ble High Court of CG in its order in WPC No. 2004/2017 on 26-07-2018.</p>
	Regular checking of vehicular emission and issue of Pollution under Control Certificate (PUC).	SHORT	January 2019	Transport Department and Police Department	-
	Periodic calibration test of vehicular emission monitoring instrument.	SHORT	April 2019	Transport Department	As per MoRTH direction, computerized and networked system of pollution checking has to be introduced from 1 st April 2019.
	Good traffic management including redirection of traffic movement to avoid traffic congestion.	SHORT	January 2019	Transport Department and Police Department	-

SOURCE GROUP	ACTION	IMPLEMENTATION PERIOD (SHORT/MID/LONG TERM)	TIME TARGET FOR IMPLEMENTATION	RESPONSIBLE AGENCY	Remark
	Promotion and operationalization of E-rickshaw.	MID	February 2019	Transport Department and Urban administration and Development	-
	Monitoring on vehicle fitness.	SHORT	March 2019	Transport Department	-
	Checking of fuel adulteration.	IMMEDIATE	IMMEDIATE	Food and Civil Supply Department/Oil Companies	-
	Restriction on overloading of vehicles.	IMMEDIATE	IMMEDIATE	Transport Department	-
ROAD DUST	Regular cleaning of road dust. 1. Washing of road 2. Mechanized road sweeping	SHORT MID	February 2019 June 2019	Urban administration and Development	-
	Regular cleaning of road dust in industrial area.	SHORT	January 2019	CSIDC	-
	Water spraying on roads through tankers.	SHORT	February 2019	Urban administration and Development	-
	Water spraying on roads through tankers in industrial area.	SHORT	January 2019	CSIDC	-
	Maintenance of roads to avoid dust emission.	MID	June 20 19	CGPWD/Urban administration and Development/NHAI	-
	Maintenance of roads to avoid dust emission in industrial area.	MID	March 2019	CSIDC	-
	Development of green belt in open areas, gardens, parks/ community places, schools & housing societies.	MID	Coming Monsoon	CECB/Concern Government Department/ Urban administration and Development	-

SOURCE GROUP	ACTION	IMPLEMENTATION PERIOD (SHORT/MID/LONG TERM)	TIME TARGET FOR IMPLEMENTATION	RESPONSIBLE AGENCY	Remark
CONSTRUCTION ACTIVITIES	Introduction of water fountains at major traffic intersection / circle.	MID	June 2019	Urban administration and Development	-
	Covering of construction site.	SHORT	February 2019	Urban administration and Development / Town and Country Planning Department	-
	Transportation of construction materials like sand, soil, stone chips etc. in covered system.	IMMEDIATE	January 2019	Transport Department and Police Department	-
	Restriction on storage of construction materials along the road.	SHORT	February 2019	Urban administration and Development	-
BIOMASS AND GARBAGE BURNING	Restriction on open burning of municipal solid waste, Biomass, plastic horticulture waste etc.	IMMEDIATE	IMMEDIATE	Urban administration and Development	-
	Transportation of Municipal Solid Wastes, construction materials and debris in covered system.	IMMEDIATE	IMMEDIATE	Urban administration and Development	-
	Ensuring promotion and use of cleaner fuel for commercial purposes like local dhabas/eateries.	LONG TERM	April 2019	District Administration/Oil Companies	-
INDUSTRIES	Ensuring installation and operation of air pollution control devices in industries.	IMMEDIATE	IMMEDIATE	CECB	-
	Ensuring emission standards in industries.	IMMEDIATE	IMMEDIATE	CECB	-

SOURCE C OUP	ACTION	IMPLEMENT ATION PERIOD (SHORT/ MID/LONG TERM)	TIME TARGET FOR IMPLEMENTATI ON	RESPONSIBLE AGENCY	Remark
STRENGTHENING AAQ MONITORING	Installation of CAAQMS in Raipur city:- A. Two CAAQMS stations under CSR funds of CPSU through Central Pollution Control Board at RDA Building, New Rajendra Nagar and Indoor Stadium near Buda Talab in Raipur.	SHORT	January 2019	CPCB	-
	B. Installation of six additional Ambient Air Quality Monitoring Stations under NAMP.	MID	March 2019	CECB	-
PUBLIC AWARENESS	Issue of advisory to public for prevention and control of air pollution.	SHORT	February 2019	CECB	-
	Involvement of school and other academic institution in awareness program.	SHORT	February 2019	CECB	-
OTHERS	Providing web portal for redressal of public complaints.	SHORT	March 2019	CECB	-