

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

ORIGINAL APPLICATION NO. 680/2023

SHRI RAMAN

APPLICANT

VERSUS

UNION OF INDIA & ORS.

RESPONDENT(S)

INDEX

S. NO.	PARTICULARS	PG. NO.
1.	Reply Affidavit on behalf of Respondent No. 3 (CPCB) in compliance to Hon'ble NGT order dated 10.11.2023 in O.A. No. 680/2023, Shri Raman Vs. Union of India & Ors.	
2.	Annexure I – List of 12 air quality monitoring stations (6-continuous stations and 6- manual monitoring stations).	
3.	Annexure II –Information regarding available thematic area-wise total expenditure for the FY 2023-24 (upto 03-01-2024) provided by CPCB.	
4.	Annexure III –Information regarding the various components such as source apportionment study, public grievance redressal system, emergency response system etc., for Agra city under NCAP.	
5.	Annexure IV –Notification published by CPCB regarding Ambient Air Quality, 2009.	
6.	Annexure V – A copy of the Hon'ble NGT order dated 10.11.2023.	



(Aditya Sharma)

Scientist E

Central Pollution Control Board

Delhi-110032

Dated: 23.01.2024

Place: Delhi

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

ORIGINAL APPLICATION NO. 680/2023

SHRI RAMAN

APPLICANT

Vs

UNION OF INDIA & ORS.

RESPONDENT(S)

REPLY AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 3/4

(CPCB is Respondent No. 3 as per Notice dated 21.11.2023 and Respondent No. 4 as per the
Memo of Parties of the OA)

I, Aditya Sharma S/o Late Shri R.G. Sharma, aged about 57 years, working as Scientist E, Central Pollution Control Board (herein after referred as CPCB) office at Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032, do hereby solemnly affirm and declare as under:

1. That in reply to the contents of Para No.1 of the Original Application it is humbly submitted that, presently, the ambient air quality of Agra city is monitored through 12 air quality monitoring stations (6- continuous stations and 6- manual monitoring stations), list annexed at **Annexure-I**. These stations are operated by CPCB (04 Stations) and UPPCB (08 Stations). The annual average concentration of pollutants (PM_{2.5}, PM₁₀, NO₂ and SO₂) of Agra city (2021-2023) is presented in the table below:

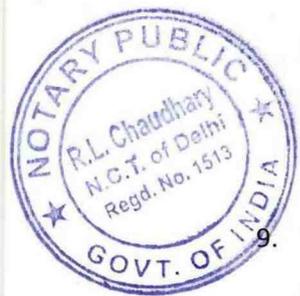
S.No.	Year	Pollutants, in $\mu\text{g}/\text{m}^3$			
		PM _{2.5}	PM ₁₀	NO ₂	SO ₂
	Annual Standard	40	60	30	20
1	2023	59	112	19	9
2	2022	66	129	21	14
3	2021	85	164	20	5

The data indicates improving trend in the air quality with respect to monitored pollutants.

①



2. That the contents of Para No.2 of the Original Application are matter of record, hence needs no comments.
3. That the contents of Para No.3 of the Original Application are matter of record, hence needs no comments.
4. That the contents of Para No.4 of the Original Application are matter of record, hence needs no comments.
5. That the contents of Para No.5 of the Original Application are matter of record, hence needs no comments.
6. That the contents of Para No.6 of the Original Application are matter of record, hence need no comments.
7. That the contents of Para No.7 of the Original Application are matter of records, hence need no comments.
8. That the contents of Para No.8 of the Original Application refer various orders of Hon'ble Supreme Court in the matter of *M.C. Mehta vs Union of India & Ors. W.P.(C) 13381/1984*. It is humbly submitted that in compliance to the order in this matter CPCB had installed 04 nos. of ambient air quality monitoring stations at Taj Mahal, Nunhai, Rambagh, and Itmad-ud-daullah in Agra city and these stations are operational till date. The Data (2002-2022) of these stations is regularly submitted to Hon'ble Supreme Court and uploaded onto CPCB website for public information & awareness. Further, at present air quality of Agra city is being monitored through 12 air quality monitoring stations as mentioned in Para No.1.
9. That the contents of Para No.9 of the Original Application are matter of record, hence need no comments.
10. That in reply to the contents of Para No.10 of the Original Application it is humbly submitted that City Action Plan for improvement in air quality have been rolled out for implementation in Agra city. The major significant work done for the improvement of Air Quality from Approved City Action Plan (CAP) of Agra are as follows:
 - End-to-end paving of roads along with black-topping and maintaining potholes free roads.
 - Greening of traffic corridors, open areas, gardens, community places, schools and housing societies.



- Creation of public awareness on pollution source and control measures.
- To create multiple separate space/zones to handle C&D waste in the city and specify waste collection capacity in TPD.
- Lifting of solid waste generated from desilting and cleaning of municipal drains for its disposal.
- Regular cleaning of street surfaces and spraying of water to suppress dust.
- Regular collection, segregation and scientific disposal of waste
- Removal of road dust/silt regularly by using mechanical sweepers.

Further, it is submitted that, status of ambient air quality (2021-2023) is as presented in Para No.1 above.

The amount released to Agra city under NCAP and Fifteenth Finance Commission (XV-FC) grants is Rs. 175.92 Cr out of which Rs.114.61 Cr is utilized in the activities of city action plan of Agra till December 2023. Also, as per the information available with CPCB for FY 2023-24 (upto 03-01-2024) the thematic area-wise total expenditure is Rs.58.91 Cr which is annexed as **Annexure-II**.

Further, "PRANA" – Portal for Regulation of Air-pollution in Non-Attainment cities, has been developed as a portal for monitoring implementation of National Clean Air Programme (NCAP) and city action plan (available on www.prana.cpcb.gov.in). PRANA endeavors to support tracking of physical as well as financial status of city air action plan implementation and disseminate information on air quality management efforts under NCAP to public.

Also, Public Grievance Redressal Portal (PGRP)/helpline for addressing air pollution complaints in time bound manner and Emergency Response System (ERS) to take action in case of air pollution emergencies have been developed for Agra city.

Further, status of physical progress of various components such as source apportionment study, public grievance redressal system, emergency response system etc., for Agra city under NCAP is annexed as **Annexure-III**.

11. That in reply to the contents of Para No.11 of the Original Application it is humbly submitted that reply is same as given in Para 10 mentioned above.
12. That the contents of Para No.12 of the Original Application are matter of record, hence need no comments.
13. That in reply to the contents of Para No. 13 of the Original Application it is humbly submitted that the city level air quality is also affected by regional & background



contributions of emission sources, topography, land use pattern and meteorology of the area. Poor air quality is normally observed in different seasons due to adverse meteorological conditions which prevent dispersion of pollutants. Based on the air quality data the Air Quality Index (AQI) is derived to give information for general public.

Days in different category of AQI during 2019-2023 in Agra are as follows :-

Agra AQI Status 2019-2023											
Category	Year	2019	2020	2021	2022	2023	No. of Good & Bad Days				
	No. of days	338	346	343	364	365	2019	2020	2021	2022	2023
Good (0-50)		38	15	44	88	55					
Satisfactory (51-100)		109	110	85	86	218	269	237	219	343	364
Moderate (101-200)		122	112	90	169	91					
Poor (201-300)		45	67	92	17	1					
Very Poor (301-400)		20	37	26	4	0	69	109	124	21	1
Severe (>401)		4	5	6	0	0					

14. That the contents of Para No.14 of the Original Application are matter of record, hence need no comments.
15. That in reply to the contents of Para No.15 of the Original Application it is humbly submitted that CPCB had notified ambient air quality standards in 2009, annexed as **Annexure-IV** and developed the criteria for declaring a city as non-attainment city (NAC). Based on this criteria Agra city was identified as NAC. City Action Plan for Agra city was prepared under NCAP.

Further, it is submitted that, out of 12 ambient air quality monitoring stations, four stations are being operated by CPCB and other eight stations are being operated by the UPPCB. The data of which indicates that concentration of PM₁₀ (less than 10 micrometre size) and PM_{2.5} (less then 2.5 micrometre size) is above the prescribed limits of air quality as presented in Para No.-1 above, while the data indicates improving trend in the air quality with respect to these pollutants.



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The percentage reduction of PM₁₀ with respect to financial year 2017-18 of respective years is shown below: -

Financial Year					Percentage reduction of PM ₁₀			
2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	%	%	%	%
Average concentration (F.Y.) of PM ₁₀ (µg/m ³)	Average concentration (F.Y.) of PM ₁₀ (µg/m ³)	Average concentration (F.Y.) of PM ₁₀ (µg/m ³)	Average concentration (F.Y.) of PM ₁₀ (µg/m ³)	Average concentration (F.Y.) of PM ₁₀ (µg/m ³)	reduction in 2018-2019 from 2017-2018	reduction in 2019-2020 from 2017-2018	reduction in 2020-2021 from 2017-2018	reduction in 2021-2022 from 2017-2018
202	196	163	188	146	3	19	7	28

16. That in reply to the contents of Para No.16 of the Original Application it is humbly submitted that reply is same as given in Para 15 mentioned above.
17. That in reply to the contents of Para No.17 of the Original Application it is humbly submitted that the major emission sources identified in IIT Kanpur report entitled as, "Air Quality Assessment, Trend Analysis, Emission Inventory and Source Apportionment Study in the City of Agra", Dec 2021 are vehicles, construction, soil and road dust, MSW burning, industrial, coal and fly ash, biomass burning and secondary inorganic aerosols (SIA). The city action plan for Agra city is being implemented focusing all major pollution sources. Action plan consists of source specific, short, medium and long term actions with time targets to be implemented by various stakeholders for improving the ambient air quality of Agra.
18. That the contents of Para No.18 of the Original Application refer to vehicle pollution at Agra. It is humbly submitted that Agra is a non-attainment city of Uttar Pradesh, which is funded under grants of Fifteenth Finance Commission (XV-FC). City Action Plans for improvement in air quality have been rolled out for implementation in Agra and as per the Annual Action Plan and latest quarterly progress report (QPR, Q4) submitted during FY 2022-23 by Agra Municipal Corporation on PRANA portal for Vehicle Pollution Action Points are as follows:

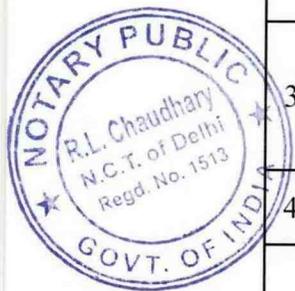
S. L.	Code	Action Point	Annual Target for FY 2022-23	Progress as per QPR (Q4) FY 2022-23
1	VE1.1	Number of PUC Centres	109 Nos.	127 Nos.
2	VE3.1	Number of field inspections (Monthly) have been done to restrict entry of heavy vehicles into cities during the day	12	12
3	VE3.2	Number of rest areas at National Highways (NH) and State Highways	10 at NH and 10 at SH	8 at NH and 7 at SH

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		(SH) are created to prevent entry of trucks into cities during peak hours		
4	VE3.4	Number of field inspection to Check overloading of trucks	360	360
5	VE5.2	Multi-layer parking	1	1
6	VE6.2	ETVMs (Electronic Ticket Vending Machines) for fare collection and Passenger Information Systems	100	100
7	VE6.5	Number of electric buses and CNG buses deployed for public transport which will reduce plying of private vehicles on road and help to curb tail-pipe emissions	100 Electric, 100 CNG	100 Electric, 50 CNG
8	VE6.8	Charging infrastructure for E-vehicles	1	1
9	VE7.1	Number of audit of traffic intersections for functional traffic signals at all major intersections	63	63

Also, as per the Annual Action Plan submitted for FY 2023-24, work going on for control of Vehicle Pollution Action Points are as follows:

S. L.	Code	Action Point	Annual Target for FY 2023-24
1	VE1.2	Number of registered vehicles with PUC certificates	130000 Vehicles (already registered 650000)
2	VE1.3	Linking of PUC centres with remote server and elimination of manual intervention in PUC testing	Additional 1 no. of PUC centre to be linked with remote server (108 already linked)
3	VE3.1	Use of off-peak passenger travel time to move freight and restrict entry of heavy vehicles into cities during the day	All 11 existing locations will be monitored
4	VE5.1	Prevent parking of vehicles in the non-designated areas	47 Locations
5	VE6.2	Introduction of new electric buses (with proper infrastructure facilities such as charging stations) and CNG buses for public transport which will reduce plying of private vehicles on road and help to curb tail-pipe emissions	100 electric Bus and 100 CNG Bus
6	VE6.3	CNG infrastructure for auto gas supply in the city and transition of public transport vehicles to CNG mode	12000 no. of vehicles for which incentives is being planned (650000 vehicles are already incentivised)



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7	VE6.5	Charging infrastructure for E-vehicles	1
8	VE7.2	Prepare plan for improvement of infrastructure for de-congestion of road	10 Number of identified traffic congestion points for intervention, out of 16 identified
9	VE8.1	Phase out old vehicles and vehicle scrappage policy	1200000

The quarterly progress report on the above mentioned action points for FY 2023-24, is awaited from Agra Municipal Corporation.

19. That the contents of Para No.19 of the Original Application, no comments from this respondent.
20. That in reply to the contents of Para No.20 of the Original Application, it is humbly submitted that reply is same as given in Para 15 mentioned above.
21. That the contents of Para No.21 of the Original Application are matter of record, hence need no comments.
22. That the contents of Para No.22 of the Original Application are matter of record, hence need no comments.
23. That the contents of Para No.23 of the Original Application are matter of record, hence need no comments.
24. That the contents of Para No.24 of the Original Application are matter of record, hence need no comments.
25. That in reply to the contents of Para No.25 of the Original Application it is humbly submitted that reply is already given in Para 10 and Para 18 mentioned above.
26. That in reply to the contents of Para No.26 of the Original Application it is humbly submitted that reply is already given in Para 13 and Para 15 mentioned above.
27. That in reply to the contents of Para No.27 of the Original Application it is humbly submitted that as per O.A., the Divisional Commissioner/Chairman, TTZA is respondent no.3 and CPCB is respondent no.4. The matter refers to Respondent No. 3.
28. That the contents of Para No.28 of the Original Application, relates to certain facts made by the Applicant. Hence need no comments from this Respondent.



29. That in reply to the contents of Para No.29 of the Original Application it is humbly submitted that the ambient air quality of Agra city is presented in the Para 1, Para 13 and Para 15 mentioned above. The city action plan (CAP) of Agra targeting various sources of pollution is being implemented by various concerned stakeholders. The implementation of the city action plan is monitored by City Level Implementation Committee headed by Municipal Commissioner and by State Level Monitoring Committee headed by Additional Chief Secretary, Environment. In view of the above submission Hon'ble Tribunal may pass any order, in the interest of justice



DEPONENT

आदित्य शर्मा/Aditya Sharma
वैज्ञानिक "B"/Scientist "B"
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, भारत सरकार
Mo Env't Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर
Parivesh Bhawan, East Arjun Nagar
110032/Delhi-110032



VERIFICATION

23 JAN 2024

Verified at New Delhi on this 23rd January of 2024 that the contents of the foregoing affidavit are true and correct to my knowledge, no part of it is false and nothing material has been concealed therefrom.



DEPONENT

आदित्य शर्मा/Aditya Sharma
वैज्ञानिक "B"/Scientist "B"
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन विभाग, भारत सरकार
Mo Env't Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर
Parivesh Bhawan, East Arjun Nagar
110032/Delhi-110032

ATTESTED


NOTARY PUBLIC
GOVT. OF INDIA

23 JAN

23 JAN 2024



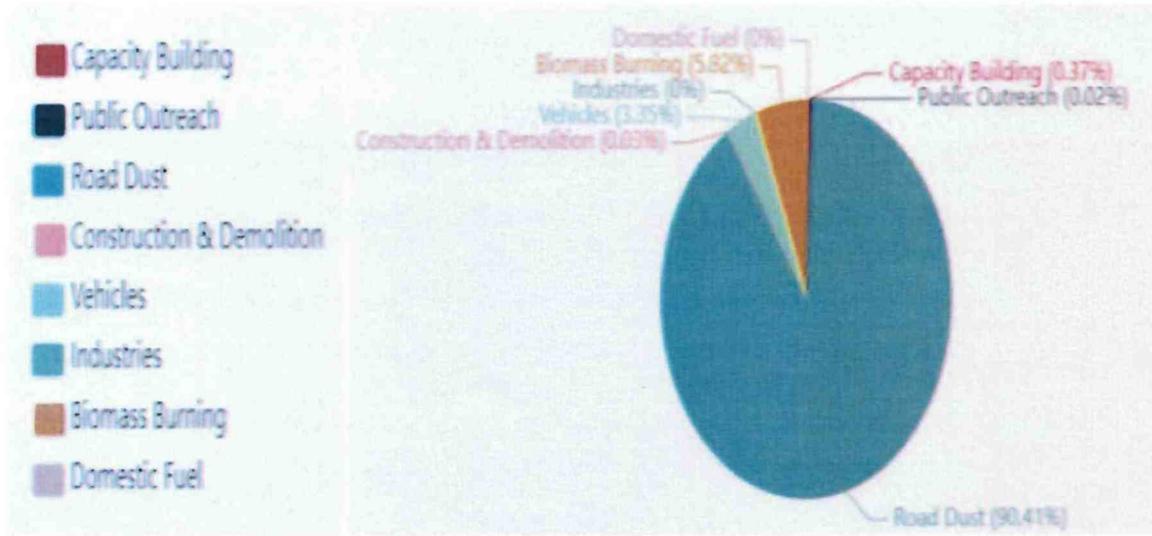
Annexure-I

Details of Monitoring Agency in Agra

S. No.	Agency	Location	Type of Monitoring Station
1.	PO Office, CPCB, Agra	Taj Mahal, Agra	Manual
2.	PO Office, CPCB, Agra	DIC Nunhai, Agra	Manual
3.	PO Office, CPCB, Agra	Etmad-uddaulah, Agra	Manual
4.	PO Office, CPCB, Agra	Rambagh, Agra	Manual
5.	UPPCB	Regional Office, Bodla, Agra	Manual
6.	UPPCB	Nunhai, Agra	Manual
7.	UPPCB	Sanjay Palace, Agra	Continuous
8.	UPPCB	Manoharpur, Agra	Continuous
9.	UPPCB	Sector-3B Avas Vikas Colony, Agra	Continuous
10.	UPPCB	Shastripuram, Agra	Continuous
11.	UPPCB	Rohta, Agra	Continuous
12.	UPPCB	Shahjahan Garden, Agra	Continuous

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Annexure-II



Annexure-III

Physical Progress: Agra

S. No.	Non-attainment City	AAP & QPR (FY 2022-23)		AAP & QPR (FY 2023-24)		Physical						
		AAP	QPR	AAP	QPR	SA Study	PGRS	ERS	Hotspots		MoU	MoM
									Identified	Action Plan		
1	Agra	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓

AAP – Annual Action Plan; QPR – Quarterly Progress Report; SA – Source Apportionment Study; PGRS – Public Grievance Redressal System; ERS – Emergency Response System

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**NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION**

New Delhi, the 18th November, 2009

No.B-29016/20/90/PCI-L—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No. 14 of 1981), and in super session of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted average	Concentration in Ambient Air		Methods of Measurement
			Industrial, Residential, Rural and Other Area	Ecologically sensitive area (notified by Central Govt.)	
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20	<ul style="list-style-type: none"> • Improved West and Geake • Ultraviolet fluorescence
		24 hours**	80	80	
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual*	40	30	<ul style="list-style-type: none"> • Modified Jacob & Hochheiser (Na-Arsenite) • Chemiluminescence
		24 hours**	80	80	
3	Particulate Matter (size less than 10 µm) or PM ₁₀ µg/m ³	Annual*	60	60	<ul style="list-style-type: none"> • Gravimetric • TOEM • Beta attenuation
		24 hours**	100	100	
4	Particulate Matter (size less than 2.5 microns) or PM _{2.5} µg/m ³	Annual*	40	40	<ul style="list-style-type: none"> • Gravimetric • TOEM • Beta attenuation
		24 hours**	60	60	
5	Ozone (O ₃) µg/m ³	8 hours **	100	100	<ul style="list-style-type: none"> • UV photometric • Chemiluminescence • Chemical method
		1 hour **	180	180	
6	Lead (Pb) µg/m ³	Annual*	0.5	0.5	<ul style="list-style-type: none"> • ASS / ICP method after sampling on EPM 2000 or equivalent filter paper • ED - XRF using Teflon filter
		24 hours**	1.0	1.0	

(11)

(1)	(2)	(3)	(4)	(5)	(6)
7	Carbon Monoxide (CO) mg/m ³	8 hours**	2	2	Non Dispersive Infra RED (NDIR) Spectroscopy
		1 hour**	4	4	
8	Ammonia (NH ₃) µg/m ³	Annual*	100	100	<ul style="list-style-type: none"> • Chemiluminescence • Indophenol blue method
		24 hours**	400	400	
9	Benzene (C ₆ H ₆) µg/m ³	Annual*	5	5	<ul style="list-style-type: none"> • Gas chromatography based continuous analyser • Adsorption and desorption followed by GC analysis
10	Benzo (a) Pyrene (BaP) – particulate phase only ng/m ³	Annual*	1	1	Solvent extraction followed by HPLC / GC analysis
11	Arsenic (As) ng/m ³	Annual*	6	6	AAS / ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni) ng/m ³	Annual*	20	20	AAS / ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

Item No. 12

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 680/2023

Shri Raman

Applicant

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 10.11.2023

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: Ms. Eisha Krishn, Ms. Gitanjali Sanyal & Mr. Surya Gupta, Advs.

Respondent(s): Ms. Priyanka Swami, Adv. for the State of UP

ORDER

1. The Learned Counsel for the applicant submits that she will serve a copy of the original application to the Counsel appearing for State of UP during the course of the day.
2. A submission has been made by the Counsel for the applicant that in this original application, the applicant only wants a direction to implement the action plan for control of air pollution in Agra City 2019.
3. The Counsel for State of UP is directed to obtain instructions in this regard.
4. Let notice be issued to the other respondents who are not represented today.

5. The applicant is directed to serve the respondents and file affidavit of service on or before the next date of hearing.
6. List the matter on 24.01.2024.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

November 10, 2023
Original Application No. 680/2023
JG

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