BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BRANCH NEW DELHI

Original Application No. 1228 OF 2024

IN THE MATTER OF: -

News Item titled "Lancet study links alarming mortality rates to poor air quality 12 strategies to combat country's air pollution crisis" appearing in the Indian Express dated 13.09.2024

Index

(Filed by Adv. Rajkumar)
On behalf of Central Pollution Control Board

Place: Delhi
Dated: 04.11.2024

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REPLY ON BEHALF OF THE RESPONDENT NO. 2 CENTRAL POLLUTION CONTROL BOARD (CPCB)

REPLY

1. That Hon'ble NGT vide Order dated 15.10.2024 impleaded the Central Pollution Control Board (hereinafter referred as CPCB) as Respondent no. 2. Thereby, the reply is made in succeeding paragraphs.

2. The matter is related to a recent study published in Lancet Planetary Health, which has highlighted the severe impact of poor air quality on mortality rates in 10 major Indian cities. The study reveals that approximately 33,000 deaths annually are linked to air pollution levels that exceed the World Health Organization (WHO) guidelines. The cities examined include Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, Shimla, and Varanasi. It is alleged that this is largely due to emissions from vehicles, industrial activities, and construction dust.

3. 2a. That the article report "Ambient air pollution and daily mortality in ten cities of India: a causal modelling study" by Bont et. al. published in Lancet Planet Health examines the association between short-term exposure to $PM_{2.5}$ and daily mortality using causal approach that highlight the importance of

locally generated air pollution. Daily average $PM_{2.5}$ concentrations at 1 sq. km spatial resolution across India was calculated from 2008 to 2020. Mortality records from each municipal corporation of the cities were used for mortality data. The study concludes that short-term $PM_{2.5}$ exposure was associated with a high risk of death in India, even at concentrations below the current Indian $PM_{2.5}$ standard. These associations were stronger for locally generated air pollutants. However, the study has the following limitations:

a) Variability in the strength of death registration systems across different states and cities.

b) International Classification of diseases codes were not available for most cities. Thus, authors were unable to conduct analyses of cause-specific mortality.

2.b. With respect to health impact due to $PM_{2.5}$ and other pollutants, it is humbly submitted that:

2.b.1. air pollution is one of the factors affecting respiratory ailments and associated diseases. Health is impacted by a number of factors which include food habits, occupational habits, socio-economic status, medical history, immunity, heredity, etc., of the individuals apart from the environment.

2.b.2. As per report, the mortality data was acquired from mortality records from each municipal corporation. As International Classification of Diseases codes were not available for most cities, cause-specific mortality was not conducted. In absence of cause of death data, several extrapolations of data take place. **Therefore, the deaths cannot be attributed to air pollution alone and thereby may not portray correct comparison.**

2.b.3. Ground monitors based data and Satellite study based data has been used for $PM_{2.5}$ measurements using a generalized model. **It is further submitted that Satellite data and modelling techniques used for extrapolations may not necessarily represent the realistic Indian scenario.**

2.b.4. That such an analysis may not be absolute.

2.b.5. That the cities which have exceeded National Ambient Air Quality Standards (NAAQS-2009) annual standards for PM_{10} concentrations ($60\mu g/m^3$) for five consecutive years, are designated as Non- Attainment Cities (NACs). CPCB has identified 130 non-attainment and million plus cities in 24 States and Union Territories including **Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, and Varanasi.**

2.b.6 That the key objective of the NCAP is to reduce PM_{10} concentration in these 130 cities by 40% by the year 2025-26, in comparison to levels of 2019-20 or achievement of NAAQS-2009 annual standards for PM10. Copy of NAAQS-2009 attached as **ANNEXURE-I**.

2.b.6. That with the implementation of comprehensive NCAP and various policy interventions, out of 130 identified cities, decrease in PM_{10} concentration has been observed in 95 cities during 2023-24 as compared to levels during 2017-18. These 95 cities include the above mentioned nine cities i.e. Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, and Varanasi. Similar decreasing pattern is also observed in the city Shimla.

The data of these 10 cities w.r.t. PM_{10} is attached at Table 1.

Table 1: Annual (F.Y.) average concentration of PM10 (µg/m3)

S.No.	City	Annual (F.Y.) average concentration of PM10 (µg/m3)						
		2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	% decrease (2017-18 vs 2022-23)
1	Ahmedabad	164	233	116	120	113	91	45
2	Bengaluru	92	92	73	62	67	68	26
3	Chennai	66	79	60	60	57	66	0
4	Delhi	241	226	192	193	196	209	13
5	Hyderabad	110	96	86	88	88	83	25
6	Kolkata	147	128	101	99	105	97	34
7	Mumbai	161	132	106	98	106	116	28
8	Pune	102	103	81	69	85	96	6
9	Varanasi	230	211	180	168	114	94	59
10	Shimla	-	64	58	50	50	42	34*

Compared with 2018-19

3.0 That with respect to air quality trends in these ten cities, it is humbly submitted that analysis of ambient air quality data of six years (2018-2023) reveals reduction of $PM_{2.5}$ levels in eight cities, and six cities are meeting NAAQS-2009 annual standards for $PM_{2.5}$ (40µg/m^3), as given in Table 2.

Table 2: $PM_{2.5}$ data analysis of ten Indian cities

S.No.	City	2018	2019	2020	2021	2022	2023	% change (2018 vs 2023)
1	Ahmedabad	73	37	28	46	41	39	47% (Decrease)
2	Bangalore	47	32	28	31	32	33	30%(Decrease)
3	Chennai	34	36	24	26	27	28	19%(Decrease)
4	Delhi	121	105	115	107	98	105	13%(Decrease)
5	Hyderabad	55	40	-	39	39	38	31%(Decrease)
6	Kolkata	86	56	52	48	44	48	44%(Decrease)
7	Mumbai	46	40	-	47	49	47	2%(Increase)
8	Pune	-	-	-	45	73	52	16%(Increase)*
9	Shimla	33	26	21	22	20	14	58%(Decrease)
10	Varanasi	-	-	-	60	38	27	55%(Decrease)*

** compared with 2021*

4. That it is further submitted that certain steps have been taken by Government to abate, control & for preventing air pollution in India. The same is annexed herewith as **ANNEXURE-II**.

5. That, answering respondent herein craves leave of the Hon'ble Tribunal to file additional reply, in future, if required.

6. That, in view of the submissions made above, the answering respondent herein shall abide by all the orders / directions passed by the Hon'ble Tribunal in the instant matter.

NOTARY PUBLIC
R.L. Chaudhary
N.C.T. of Delhi
Regd. No. 1513
GOVT. OF INDIA

(Aditya Sharma)
Scientist 'E'
Central Pollution Control Board

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

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IN THE MATTER OF:-

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AFFIDAVIT

I Aditya Sharma, working as Scientist 'E' in Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi, the Respondent No. 2, in the above matter, do hereby solemnly affirm, declare on oath and state as under :-

1. That I, the deponent herein is authorized representative to represent the Respondent CPCB in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent and authorized to verify, sign and swear this affidavit on behalf of the Respondent CPCB.

2. That the accompanying reply may be read part and parcel of the present affidavit as I am competent to swear this affidavit.

3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.

DEPONENT

NOTARY PUBLIC
R.L. Chaudhary
N.C.T. of Delhi
Regd. No. 1513
GOVT. OF INDIA

आदित्य शर्मा / Aditya Sharma
वैज्ञानिक "ई" /Scientist "E"
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
Central Pollution Control Board
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
M/o Envt. Forest & Climate Change, Govt. of India
परिवेश भवन, पूर्वी अर्जुन नगर
Parivesh Bhawan, East Arjun Nagar
दिल्ली / Delhi-110032

VERIFICATION

Verified at Delhi on this day of 04 NOV 2024 2024 that the contents of the above reply are correct and true on the basis of the record of the cases as mentioned in the day to day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

NOTARY PUBLIC
R.L. Chaudhary
N.C.T. of Delhi
Regd. No. 1513
GOVT. OF INDIA

ATTESTED
NOTARY PUBLIC
GOVT. OF INDIA
04 NOV 2024

DEPONENT

आदित्य शर्मा / Aditya Sharma
वैज्ञानिक "ई" /Scientist "E"
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
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रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

असाधारण
EXTRAORDINARY
भाग III—खण्ड 4
PART III—Section 4
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 217] नई दिल्ली, बुधवार, नवम्बर 18, 2009/कार्तिक 27, 1931
No. 217] NEW DELHI, WEDNESDAY, NOVEMBER 18, 2009/KARTIKA 27, 1931

राष्ट्रीय परिवेशी वायु गुणवत्ता मानक
केन्द्रीय प्रदूषण नियंत्रण बोर्ड
अधिसूचना

नई दिल्ली, 18 नवम्बर, 2009

सं. बी-29016/20/90/पी.सी.आई.-I.—वायु (प्रदूषण निवारण एवं नियंत्रण) अधिनियम, 1981 (1981 का 14) की धारा 16 की उपधारा (2) (एच) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए तथा अधिसूचना संख्या का.आ. 384(ई), दिनांक 11 अप्रैल, 1994 और का.आ. 935 (ई) दिनांक 14 अक्टूबर, 1998 के अधिक्रमण में केन्द्रीय प्रदूषण नियंत्रण बोर्ड इसके द्वारा तत्काल प्रभाव से राष्ट्रीय परिवेशी वायु गुणवत्ता मानक अधिसूचित करता है, जो इस प्रकार है:-

राष्ट्रीय परिवेशी वायु गुणवत्ता मानक

क्र. सं.	प्रदूषक	समय आधारित औसत	परिवेशी वायु में सान्द्रण		
			औद्योगिक, रिहायशी, ग्रामीण और अन्य क्षेत्र	पारिस्थितिकीय संवेदनशील क्षेत्र (केन्द्र सरकार द्वारा अधिसूचित)	प्रबोधन की पद्धति
(1)	(2)	(3)	(4)	(5)	(6)
1	सल्फर डाई आक्साइड (SO_2), $\mu g/m^3$	वार्षिक*	50	20	-उन्नत वेस्ट और गाईक
		24 घंटे**	80	80	-पराबैगनी परिदीप्ती
2	नाइट्रोजन डाई आक्साइड (NO_2), $\mu g/m^3$	वार्षिक*	40	30	-उपांतरित जैकब और हॉचाइजर (सोडियम-आर्सेनाईट)
		24 घंटे**	80	80	-रासायनिक संदीप्ति
3	विविक्त पदार्थ (10माइक्रान से कम आकार)या PM_{10}, $\mu g/m^3$	वार्षिक*	60	60	-हरात्मक विश्लेषण
		24 घंटे**	100	100	-टोयम
					-बीटा तनुकरण पद्धति

4	विविक्त पदार्थ (2.5 माइक्रान से कम आकार या $PM_{2.5}$, $\mu g/m^3$	वार्षिक* 24 घंटे**	40 60	40 60	-हरात्मक विश्लेषण -टोयम -बीटा तनुकरण पद्धति
5	ओजोन (O_3) $\mu g/m^3$	8 घंटे** 1 घंटा**	100 180	100 180	-पराबैगनी द्वीप्तिकाल -रासायनिक संदीप्ति -रासायनिक पद्धति
6	सीसा (Pb) $\mu g/m^3$	वार्षिक* 24 घंटे**	0.50 1.0	0.50 1.0	ई.पी.एम 2000 या समरूप फिल्टर पेपर का प्रयोग करके AAS/ICP पद्धति -टेफलॉन फिल्टर पेपर का प्रयोग करते हुए ED-XRF
7	कार्बन मोनोक्साइड (CO) mg/m^3	8 घंटे** 1 घंटा**	02 04	02 04	-अविपेक्षी अवरक्त (NDIR) स्पैक्ट्रम मापन
8	अमोनिया (NH_3) $\mu g/m^3$	वार्षिक* 24 घंटे**	100 400	100 400	-रासायनिक संदीप्ती -इण्डोफिनॉल ब्ल्यू पद्धति
9	बैन्जीन (C_6H_6) $\mu g/m^3$	वार्षिक*	05	05	- गैस क्रोमेटोग्राफी आधारित सतत् विश्लेषक -अधिशोषण तथा निशोषण के बाद गैस क्रोमेटोग्राफी
10	बैन्जो (ए) पाईरीन (BaP) केवल विविक्त कण, ng/m^3	वार्षिक*	01	01	-विलायक निष्कर्षण के बाद HPLC/GC द्वारा विश्लेषण
11	आर्सेनिक (As) ng/m^3	वार्षिक*	06	06	-असंवितरक अवरक्त स्पैक्ट्रामिती ई,पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके ICP/AAS पद्धति
12	निकिल (Ni) ng/m^3	वार्षिक*	20	20	ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके ICP/AAS पद्धति

* वर्ष में एक समान अंतरालों पर सप्ताह में दो बार प्रति 24 घंटे तक किसी एक स्थान विशेष पर लिये गये न्यूनतम 104 मापों का वार्षिक अंकगणीतीय औसत ।

** वर्ष में 98 प्रतिशत समय पर 24 घंटे या 8 घंटे या 1 घंटा के मानीटर मापमान, जो लागू हो , अनुपालन कये जाएंगे । दो प्रतिशत समय पर यह मापमान अधिक हो सकता है, किन्तु क्रमिक दो मानीटर करने के दिनों पर नहीं ।

टिप्पणीः

1. जब कभी और जहां भी किसी अपने-अपने प्रवर्ग के लिये दो क्रमिक प्रबोधन दिनों पर मापित मूल्य, ऊपर विनिर्दिष्ट सीमा से अधिक हो तो इसे नियमित या निरंतर प्रबोधन तथा अतिरिक्त अन्वेषण करवाने के लिये पर्याप्त कारण समझा जायेगा ।

संत प्रसाद गौतम, अध्यक्ष

[विज्ञापन-III/4/184/09/असा.]

टिप्पणीः राष्ट्रीय परिवेशी वायु गुणवत्ता मानक संबंधी अधिसूचनाएँ, केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा भारत के राजपत्र आसाधरण में अधिसूचना संख्या का.आ. 384 (ई), दिनांक 11 अप्रैल, 1994 एवं का. आ. 935 (ई), दिनांक 14 अक्टूबर, 1998 द्वारा प्रकाशित की गयी थी ।

NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION

New Delhi, the 18th November, 2009

No. B-29016/20/90/PCI-I.—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 supersession 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		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO_2), $\mu g/m^3$	Annual*	50	20	- Improved West and Gaeke
		24 hours**	80	80	-Ultraviolet fluorescence
2	Nitrogen Dioxide (NO_2), $\mu g/m^3$	Annual*	40	30	- Modified Jacob & Hochheiser (Na-Arsenite)
		24 hours**	80	80	- Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM_{10} $\mu g/m^3$	Annual*	60	60	- Gravimetric - TOEM
		24 hours**	100	100	- Beta attenuation
4	Particulate Matter (size less than 2.5µm) or $PM_{2.5}$ $\mu g/m^3$	Annual*	40	40	- Gravimetric - TOEM
		24 hours**	60	60	- Beta attenuation
5	Ozone (O_3) $\mu g/m^3$	8 hours**	100	100	- UV photometric - Chemilminescence
		1 hour**	180	180	- Chemical Method
6	Lead (Pb) $\mu g/m^3$	Annual*	0.50	0.50	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
		24 hours**	1.0	1.0	
7	Carbon Monoxide (CO) mg/m^3	8 hours**	02	02	- Non Dispersive Infra Red (NDIR) spectroscopy
		1 hour**	04	04	
8	Ammonia (NH_3) $\mu g/m^3$	Annual*	100	100	-Chemiluminescence
		24 hours**	400	400	-Indophenol blue method

(1)	(2)	(3)	(4)	(5)	(6)
9	Benzene (C_6H_6) $\mu g/m^3$	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m^3	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m^3	Annual*	06	06	- 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 08 hourly or 01 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.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/184/09/Exty.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.

Printed by the Manager, Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

Annexure - II

Steps taken by Government to abate, control & prevent of air pollution

1.0 National Clean Air Programme:

- Ministry of Environment, Forest and Climate Change, Govt of India launched the National Clean Air Programme (hereinafter referred to as NCAP) in January 2019, as a multi-sectoral initiative aimed at improving air quality across various levels, i.e, City, Regional and National.
- NCAP focuses on multi-sectoral sources of pollution including industries, power plants, vehicles, Road dust, open burning of waste, construction & demolition activities, etc.; NCAP also focuses on Inter-Ministerial co-ordination for convergence of actions and interventions; and partnership with Institutes of National repute and International Agencies as Knowledge Partners.
- CPCB has identified 130 non-attainment and million plus cities in 24 States and Union Territories including **Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, and Varanasi**. The cities which have exceeded PM_{10} concentrations of $60\mu g/m^3$ for five consecutive years, are designated as Non- Attainment Cities (NACs).
- The key objective of the NCAP is to reduce PM_{10} concentration in these 130 cities by 40% by the year 2025-26, in comparison to levels of 2019-20 or achievement of national standards ($60\mu g/m^3$).
- City Action Plans (CAPs) have been prepared by all 130 cities and being implemented by Urban Local Bodies.
- The city specific clean air action plans target city specific air polluting sources like Soil & Road Dust, Vehicles, Domestic Fuel, MSW Burning, Construction Material and **Industries**
- Performance based financial support is being provided to these131 cities for implementation of activities of City Action Plan under NCAP and 15th Finance Commission Grants.
- Further, funding for implementation of CAPs is being mobilised through convergence of resources from various schemes of Central Government such as Swachh Bharat Mission SBM (Urban), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart City Mission, Sustainable Alternative towards Affordable Transportation (SATAT), Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME-II), Nagar Van Yojna, etc. and resources from State/UT Governments and its agencies such as Municipal Corporation, Urban Development authorities and Industrial development authorities etc.
- Public Grievance Redressal Portal (PGRP)/helpline have been developed by all 130 cities to address public complaints of air pollution in timely manner.
- Emergency Response System (ERS/ GRAP) have been developed by all 130 cities for taking action in air emergencies.
- District, State and Central level committees have been constituted for overseeing implementation of NCAP.
- A web based interactive portalPRANA has been launched to monitor progress under NCAP.
- 95 cities out of 130 cities have shown improvement in air quality in terms of annual PM10 concentrations in FY 2023-24 in comparison to levels of FY 2017-18. These 95 cities include the above mentioned nine cities i.e. **Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, and Varanasi**.

2.0 Measures for control of vehicular emissions:

- Leapfrogging from BS-IV to BS-VI fuel standards since 1st April, 2018 in NCT of Delhi and from 1st April, 2020 for the rest of the country.
- Introduction of BS VI compliant vehicles across the country since April, 2020.
- Department of Heavy Industry is providing subsidy on e-vehicles under Faster Adoption and Manufacture of (Hybrid &) Electric Vehicles in India (FAME -II India) scheme.
- Sustainable Alternative Towards Affordable Transportation (SATAT) has been launched as an initiative to set up Compressed Bio-Gas (CBG) production plants and make CBG available in the market for use in automotive fuels.
- Installation of Vapour Recovery System (VRS) in new and existing petrol pumps selling gasoline >100kl per month in million plus cities and those selling >300kl per month in cities with population between 1 lakh to 1 million to control vehicular refuelling emissions.
- Environment Compensation Charges introduced for commercial vehicles entering Delhi in compliance of Hon'ble Supreme Court order
- Operationalization of Eastern and Western Peripheral Expressways to divert non-destined traffic from entering Delhi
- Directions issued by CAQM to Government of NCT of Delhi and State Governments of Haryana, Rajasthan and Uttar Pradesh for migration of public transport services, especially buses in NCR to cleaner modes. All State government bus services between Delhi and any city/town in the states of Haryana, Rajasthan and Uttar Pradesh to be operated only through EV /CNG/BS-VI diesel w.e.f. 01.11.2023.
- Ban on 15-year-old petrol and 10-year-old diesel vehicles in Delhi-NCR.
- Installation of VRS system at 3256 petrol pumps in Delhi-NCR in compliance with orders of Hon'ble Supreme Court and Hon'ble NGT.

3.0 Measures for control of industrial emission:

- For strengthening monitoring mechanism and effective compliance through self-regulatory mechanism, CPCB directed all 17 categories of highly polluting industries to install Online Continuous Emission Monitoring System (OCEMS). There are 4,315 units under 17 categories of industries, out of which 3,734 units have installed OCEMS and closure directions are still in-force for 581 units.
- The Ministry of Environment Forest and Climate Change (MoEF&CC), Government of India notifies industry specific discharge standards under Schedule-I: 'Standards for Emission or Discharge of Environmental Pollutants from various Industries' of Environment Protection Act, 1986. So far, industry specific environmental standards, for 79 industrial sectors (including emission standards for 56 sectors) have been notified. Industrial sectors, for which specific standards are not available, general standards as notified under Schedule-VI of Environment Protection Rules, 1986 shall be applicable.
- Ban on use of imported pet coke in the country since July 26, 2018, with exception for use in permitted processes.
- CPCB has come out with System and Procedure for Emission Compliance Testing of Retro-fit Emission Control Devices (RECD) for Diesel Power Generating Set Engines up to Gross Mechanical Power 800 kW.
- Directions issued for conversion of brick kilns to zig-zag technology in Delhi and NCR. A total of 3003 out of 4608 brick kilns have converted to zig-zag technology including 1762 kilns in

Haryana, 1024 kilns in U.P. and 217 kilns in Rajasthan. Brick kilns not converted to zig-zag technology are not permitted to operate.

- An approved fuel list is in force in Delhi-NCR w.e.f. 01.01.2023. Industries operating on only PNG or biomass are permitted in NCR, except for specific requirement of other fuels by specific industries owing to technical, technological and process requirements. Out of 7759 fuel based industries in NCR, 7449 have been shifted to approved fuels, with the balance 310 industries under closure.
- Stringent PM emission norms for biomass based boilers have been prescribed for compliance in NCR.

4.0 Measures for control of emission from Construction & Demolition (C&D) Waste

- CPCB published guidelines
    1. Environmental Management of Construction & Demolition (C & D) Waste in March, 2017
    2. 'Guidelines on Dust Mitigation Measures in Handling Construction Material & C&D Wastes' in November 2017.
- CPCB has issued direction to all SPCBs/ PCCs for deployment of Anti-Smog Gun and implementation of adequate dust mitigation measures at construction projects/ sites having area more than 20,000 sq. meters. CPCB has issued guidelines/ mechanism for use of anti-smog guns in Construction and Demolition projects.
- Directions issued for setting up of a "Dust Control and Management Cell" by road owning/ maintaining/ construction agencies for monitoring and effective implementation of dust control measures in the NCR.
- Online monitoring mechanism (through web portal) introduced for monitoring compliance of dust mitigation measures for construction sites.

5.0 Measures for control of emission from other type of Wastes

In order to manage wastes rules have been notified under solid waste management

1. Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016
2. E-waste (Management) Rules, 2016
3. Plastic Waste (Management and Handling) Rules, 2011
4. Battery (Management and Handling) Rules, 2000

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Annexure - III

Item No. 04 Court No. 1

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

Original Application No. 1228/2024

News Item titled "Lancet study links alarming mortality rates to poor air quality 12 strategies to combat country's air pollution crisis" appearing in the Indian Express dated 13.09.2024

Date of hearing: 15.10.2024

CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE MR. JUSTICE ARUN KUMAR TYAGI, JUDICIAL MEMBER
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER

ORDER

1. This original application is registered *suo motu* based on the news item titled "Lancet study links alarming mortality rates to poor air quality 12 strategies to combat country's air pollution crisis" appearing in 'the Indian Express' dated 13.09.2024.

2. The news item relates to a recent study published in Lancet Planetary Health, which has highlighted the severe impact of poor air quality on mortality rates in 10 major Indian cities. The study reveals that approximately 33,000 deaths annually are linked to air pollution levels that exceed the World Health Organization (WHO) guidelines. The cities examined include Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune, Shimla, and Varanasi. As per the news item, the study's findings show that even cities previously considered less polluted, such as Mumbai, Bengaluru, Kolkata, and Chennai, are significantly affected. It is alleged that this is largely due to emissions from vehicles, industrial activities, and construction dust. Furthermore, it states that children, the elderly, and individuals with pre-

existing health conditions are particularly susceptible to the adverse effects of air pollution. It is also alleged that exposure to high levels of PM2.5 and other pollutants leads to "male and/or female infertility." Air pollution can lead to diminished sperm quality, hormonal disruptions, and higher miscarriage risk.

3. The news item raises substantial issues relating to compliance of environmental norms.

4. The power of the Tribunal to take up the matter *suo-motu* has been recognized by the Hon'ble Supreme Court in the matter of *"Municipal Corporation of Greater Mumbai vs. Ankita Sinha & Ors." reported in 2021 SCC Online SC 897*.

5. Hence, we implead the following as respondents in the matter:

(1). Ministry of Environment, Forest and Climate Change (MOEFCC), Through its Secretary, Indira Paryavaran Bhawan, Jorbagh Road, New Delhi – 110003.

(2). Member Secretary, Central Pollution Control Board (CPCB), Parivesh Bhawan, East Arjun Nagar, Delhi-110032.

(3). Member Secretary, Gujarat Pollution Control Board (GPCB), Paryavaran Bhavan, Opp. Bij Nigam, CHH Road, Sector 10A, Gandhinagar, Ahmedabad – 382010.

(4). Member Secretary, Karnataka Pollution Control Board (KSPCB), "Parisara Bhavan", #49, Church Street, Bengaluru-560001.

(5). Member Secretary, Tamil Nadu Pollution Control Board (TNPCB), 76, Mount Salai, Guindy, Chennai-600032.

(6). Member Secretary, Delhi Pollution Control Committee (DPCC), 4th Floor, ISBT Building, Kashmere Gate, Delhi-110006.

(7). Member Secretary, Telangana State Pollution Control Board (TSPCB), Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad 500018.

(8). Member Secretary, West Bengal Pollution Control Board (WBPCB), Paribesh Bhawan, 10A, Block-LA, Sector-III, Salt Lake, Kolkata-700106.

(9). Member Secretary, Maharashtra Pollution Control Board (MPCB), Kalpataru Point, 3rd and 4th Floor, Sion Circle, Mumbai-400022.

(10). Member Secretary, Himachal Pradesh State Pollution Control Board (HPPCB), Phase-III, New Shimla-171009.

(11). Member Secretary, Uttar Pradesh Pollution Control Board (UPPCB), Building No. TC-12 V, Vibhuti Khand, Gomti Nagar, Lucknow-226010.

6. Issue notice to the above respondents for filing their response/reply by way of affidavit before the Tribunal at least one week before the next date of hearing. If any respondent directly files the reply without routing it through his advocate, then the said respondent will remain virtually present to assist the Tribunal.

7. It has been pointed out that a similar issue is coming up for consideration on 23.10.2024 in OA No. 687/2023.

8. List along with OA No. 687/2023 on 23.10.2024.

Prakash Shrivastava, CP

Arun Kumar Tyagi, JM

Dr. A. Senthil Vel, EM

October 15, 2024
Original Application No. 1228/2024
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