

## BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

Principal Bench, New Delhi

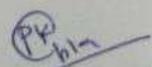
O.A. No. 663 of 2023

In the matter of

In re: News item published in Indian Express dated 07.10.2023 titled "GRAP Stage 1 kicks in as air quality dips to poor. condition likely to prevail till Sunday"

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2.	<b>Annexure- I</b> A copy of Hon'ble NGT order dated 08.11.2023.	
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(P.K. Gupta)Scientist - F,  
Central Pollution Control Board  
Delhi -110032

Place: Delhi

Date: 18.11.2023

**Report in respect of technical interventions and Action Taken Report in compliance to Hon'ble NGT order dated 08.11.2023 in O.A No. 663/2023, In re: News item published in Indian Express dated 07.10.2023 titled "GRAP Stage 1 kicks in as air quality dips to poor, condition likely to prevail till Sunday".**

1. It is submitted that Hon'ble NGT vide order dated 08.11.2023 in OA 663 of 2023 directed CPCB to submit report in respect of the technical interventions to regulate and control air pollution. The relevant extract of the order is reproduced as under:

*"Para 5. Though, the above technical interventions suggest ways to regulate and control pollution but no particulars have been disclosed as to how to what extent they have been made applicable and what is the end result.*

*Para 6. Let the report in respect of the same be placed on record on or before the next date of hearing by CPCB. "*

2. It is further submitted that Hon'ble NGT vide the said order also directed various concerned agencies to file fresh action taken report. The relevant extract of the order is reproduced as under:  
*"Para 11. Since no visible improvement in the air quality has been witnessed, therefore, the respondents are directed to take stringent measures so that the air quality index in Delhi and NCR improves. Hence, let the fresh action taken report be filed by the concerned agencies on or before the next date of hearing keeping in view the observations made above by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF."*

Copy of the order of the Hon'ble NGT dated 08.11.2023 is given at Annexure-I.

3. It is humbly submitted that trials of various new technologies for air pollution control have been carried out by CPCB for improvement of air quality in Delhi-NCR, details of which are submitted below:

### 3.1. Deployment and Evaluation of air purification units (WAYU Units) for traffic junction pollution abatement in Delhi

<b>Proponent</b>	CSIR-NEERI
<b>Technology and trial details</b>	<ul style="list-style-type: none"> <li>• Wind Augmentation and purifying Unit (WAYU) device uses high-speed wind generators, and filters to remove PM<sub>10</sub> and PM<sub>2.5</sub>. At the outlet of the device, the exit velocity of the discharged air helps in air mixing and turbulence, thereby bringing down the pollutant concentrations.</li> <li>• 54 Air Purification units were installed and operated at 5 traffic intersections in Delhi i.e. ITO (14 units), Anand Vihar (10 units), Shadipur (11 units), Wazirpur Chawk (06 units) and Bikaji Cama Place (13 units). These locations were selected for intended reduction in air pollution, caused due to heavy vehicular movement at these locations. The devices were available in two designs i.e. Mushroom (having flow rate of 2500m<sup>3</sup>/hr) and S-shape (having two flow rate options, i.e. 2500m<sup>3</sup>/hr and 1250m<sup>3</sup>/hr).</li> <li>• The trials were carried out during November- 2018 to June- 2019.</li> </ul>
<b>Findings</b>	<ul style="list-style-type: none"> <li>• The total PM collected from all WAYUs is 34.2 kg from 120551 operating hours (sum of all devices at five sites).</li> <li>• Efficiency of WAYU was observed as 32 - 49% for PM<sub>10</sub> and 16 - 25% for PM<sub>2.5</sub> at the outlet.</li> <li>• The reduction in concentration at ITO intersection was found to be 13% for PM<sub>10</sub> and 9% for PM<sub>2.5</sub> at 7 m from the device.</li> <li>• <b>It was observed that WAYU is designed for limited area air cleaning for places like traffic junction, and thus its application was not considered further.</b></li> </ul>

## 3.2. Control of Dust Emissions using Dust Suppressant

<b>Proponent</b>	EPRI, Pune under supervision of CSIR-NEERI
<b>Technology and trial details</b>	<ul style="list-style-type: none"> <li>• There are various types of hygroscopic salts available which are more efficient in terms of controlling dust than traditional water sprinkling.</li> <li>• Dust Suppressant is added to water and sprayed through sprinklers. It increases the surface area of water droplet that helps to cover more area. It carries an ionic charge that helps to repel water droplets and attracts dust molecules, hence covering more area.</li> <li>• The dust suppressant used in the trial was developed with salts of Magnesium and Calcium with added bio-additives. It is a hygroscopic and deliquescent compound that resists evaporation.</li> <li>• Dust suppressant was applied at following 03 selected sites during Oct-Nov, 2018:             <ol style="list-style-type: none"> <li>1. Sarai Kale Khan Road (Road construction site)</li> <li>2. DDA Construction site at Narela (Building construction site)</li> <li>3. Dilshad Garden flyover to proposed Shahid Nagar Metro Station (Road construction site).</li> </ol> </li> </ul>
<b>Findings</b>	<ul style="list-style-type: none"> <li>• Application of dust suppressant was found to be effective for upto 6 hours.</li> <li>• About 50 - 60% initial reduction in dust concentration was observed at these sites after application of dust suppressant.</li> <li>• About 30% reduction in dust concentration was observed up to 6 hrs.</li> <li>• <b>Owing to the success of the trials, Advisory was issued to DPCC and NCR SPCBs, for use of Dust Suppressant by road owning agencies and Govt. construction agencies, at unpaved roads, roads with heavy traffic and construction sites.</b></li> <li>• <b>Use of dust suppressants has also been prescribed under Graded Response Action Plan by CAQM.</b></li> </ul>

## 3.3. Multiple antenna high density ion generator for pollution control in New Delhi

<b>Proponent</b>	S&T Park, Pune, and performance evaluation by IIT Delhi
<b>Technology and trial details</b>	<ul style="list-style-type: none"> <li>• A negative air ion is formed when a gaseous molecule or atom receives or gains an electron.</li> <li>• Ion generator consists of several antennas (consisting of small wires of conducting metal), which after applying DC voltage, start a point discharge process. On collision with the antennas, Oxygen molecules in the air acquire an electron.</li> <li>• As soon as negative ions are formed, they are repelled by negative antenna potential, and these ions enter the atmosphere. When suspended in atmosphere, these ions electrically charge the particulate matter (PM), and the electrically charged PM gets deposited faster as it can attach to nearby surfaces/attach to each other.</li> <li>• The technical specifications of the ion generator used in the trial are as follows: <ol style="list-style-type: none"> <li>1. Multiple antenna high power ion generators</li> <li>2. DC voltage used: 16 KV to 150 KV</li> <li>3. Power used: 250 Watts</li> </ol> </li> <li>• The ion generator was installed at IIT Delhi, Sonapat campus and trials were carried out during May- 2019 to October- 2019.</li> </ul>
<b>Findings</b>	<ul style="list-style-type: none"> <li>• Negligible or no impact was observed at upwind and downwind monitoring sites as compared to the background concentrations obtained prior to the use of ion generator at the site.</li> <li>• Decline of 90% in the number of negative air ions was observed till the length of 5m.</li> <li>• <b>It was observed that utility of ionisation technology for reduction in ambient air pollution cannot be established. The technology seems to be unfeasible in ambient conditions, owing to its negligible impact, and hence it does not seem reasonable to support it for any further applications.</b></li> </ul>

### 3.4. Pilot project to demonstrate the effectiveness of air pollution mitigation by Pariyayantra filtration

<b>Proponent</b>	Manav Rachna International Institute of Research and Studies, Faridabad, with Computational Fluid Dynamics (CFD) analysis by IIT Delhi
<b>Technology and trial details</b>	<ul style="list-style-type: none"> <li>• Rooftops of buses were fitted with a module of six cylindrical filters. The principle was to filter the inlet (polluted) air which is forced into the filters due to movement of bus.</li> <li>• Filter specifications are given below:             <ol style="list-style-type: none"> <li>1. Filter design: Cylindrical shape, nominal outside diameter 180 mm, length 960 mm, open in front, closed on back, made of filter cloth all over.</li> <li>2. The bags are made of filter cloth (3 micron nominal openings) of suitable permeability.</li> <li>3. Six filters are arranged in a horizontal row mounted on top of bus, facing forward; pitch between filters 205 mm.</li> <li>4. Assembly of filters is surrounded by a thin metallic shroud all around and along full length; shroud is provided with plate in front with openings for filter bags and fully open on rear end.</li> <li>5. The shroud protrudes 140 mm in front of the plate.</li> </ol> </li> <li>• 30 buses were fitted with Pariyayantra Filtration Units and dust filtered by these buses in Delhi-NCR for about 50 days of operation was recorded.</li> <li>• Out of 30 buses, 17 buses operated in Faridabad, 12 buses in Gurugram and 01 bus in Delhi, during December- 2018 to May- 2019</li> </ul>
<b>Findings</b>	<ul style="list-style-type: none"> <li>• Average dust (PM) collected per 100 km bus of travel are:             <ol style="list-style-type: none"> <li>1. Faridabad - 3.69 grams</li> <li>2. Gurugram - 4.30 grams</li> <li>3. Delhi - 4.45 grams</li> </ol> </li> <li>• Computational Fluid Dynamics (CFD) analysis found that only 50% of the air will pass through the filter in case of buses having top half front face inclined at 9 degrees' angle. For flat front bases, there won't be any air flowing through air filter.</li> <li>• <b>It was expressed that the overall efficiency in terms of dust collection is not significant, and that the efficacy of the technology is doubtful, and thus it was suggested that the technology's results and practical applications are not encouraging, and hence any further application may not be useful.</b></li> </ul>

3.5. **Pilot study for assessment of reducing air pollution in urban areas by using outdoor cleaning system (sometimes called as Smog Tower)**

<b>Proponent</b>	Installation and Commissioning by Tata Projects Limited, Performance Evaluation by IIT Bombay and IIT Delhi, and Project Management Consultancy by NBCC India Ltd.
<b>Technology and trial details</b>	<ul style="list-style-type: none"> <li>• Smog towers are structures designed as medium/large-scale air purifiers to reduce particulate air pollution. The concept behind these air cleaning systems is to generate airflow in a tall chimney using any means of power/energy available and remove particulate matter in the atmosphere by forcing the air through filters.</li> <li>• The experimental smog tower was commissioned at Anand Vihar ISBT, Delhi in August 2021, in compliance to the Supreme Court orders dated 13.01.2020 and 31.08.2020 in Writ Petition (Civil) 13029/1985: MC Mehta V/s Union of India &amp; Ors.</li> <li>• Technical details of the pilot smog tower are given below:             <ol style="list-style-type: none"> <li>1. The present tower is of downdraft (polluted air comes in from the top of the tower and clean air comes out of the bottom) type and aims to reduce PM<sub>2.5</sub> and PM<sub>10</sub>.</li> <li>2. The tower has a land area coverage of 40m x 40m including shroud and safety area and a height of about 24m.</li> <li>3. The filtration system called as Novel Geometry Filtration System (NGFS), used in the tower, has been designed by University of Minnesota (UoM). NGFS is a patented development of UoM, and uses two types of filters, mainly pre-filter (MERV-2) and fine filter (MERV-13). The filters are supplied by M/s 3M, USA.</li> <li>4. 40 fan units have been installed to provide a design airflow rate of 1000m<sup>3</sup>/sec.</li> </ol> </li> <li>• Performance of the experimental smog tower is still under evaluation.</li> </ul>
<b>Findings</b>	<b>A draft report has recently been received from IIT Bombay and the same is under review by a group of Experts from IIT Delhi, IIT Kanpur, CSIR, CSIR-NPL and Engineers India Ltd.</b>

4. It is humbly submitted that in addition to various actions submitted by this Respondent Number 4 vide its Action Taken Report dated 07.11.2023 to the Hon'ble NGT, following is the fresh action taken:

4.1. From 10.11.2023 onwards, 33 scientists of CPCB were deployed as flying squads for assisting the Commission for Air Quality Management in National Capital Region and Adjoining Areas (CAQM) for intensifying monitoring and enforcement actions towards prevention of paddy stubble burning incidents in 22 districts of Punjab and 11 districts of Haryana. Copy of the letter dated 09.11.2023 issued in this regard is given at Annexure-II.

The flying squads are coordinating with the state Government/ nodal officers/ officers from respective Pollution Control Boards towards prevention and control of stubble burning in their respective districts and sending their daily reports to CAQM.

4.2. Another 15 teams (other than the aforesaid 33 teams for Punjab and Haryana) have also been provided to CAQM as Flying Squads for carrying out incognito inspections of units/activities in various sectors contributing to air pollution such as Industrial activities, Construction and Demolition projects, Unpaved roads, DG Sets etc. Copy of the letter dated 09.11.2023 issued in this regard is given at Annexure-III.

It is submitted that the aforesaid flying squads are sending their reports to CAQM, and these reports are considered by the Enforcement Task Force, constituted by CAQM, for suitable action.

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Item No.14

Court No. 1

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

Original Application No. 663/2023

In re: News item published in Indian Express dated 07.10.2023 titled  
**“GRAP Stage 1 kicks in as air quality dips to poor, condition  
likely to prevail till Sunday”**

Date of hearing: 08.11.2023

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

Respondent: Dr. Abhishek Atrey & Mr. Vaibhav Kandpal, Advs. for Commission for Air  
Quality Management for NCR & Adjoining Areas  
Ms. Suman Arora, Adv. for CPCB  
Mr. Narender Pal Singh, Adv. for DPCC  
Ms. Puja Kalra, Adv. for MCD

**ORDER**

1. This OA relates to the worsening air quality in Delhi. The OA was registered *suo motu* considering the various newspaper reports depicting serious air pollution.

2. The Tribunal by order dated 20.10.2023 had impleaded the respondents and had called for the action taken report for measures undertaken to control air pollution from different sources in Delhi in accordance with Graded Response Action Plan (GRAP) to maintain Air Quality Index (AQI) in acceptable range to safeguard public health in view of winter season ahead.

3. The action taken report has been filed at the instance of the Commission for Air Quality Management in NCR and Adjoining Areas (CAQM). The report contains the details of different stages of GRAP as last revised in October 2023 and it is stated that month of October 2023 saw “very poor” average air quality (AQI more than 300) mainly towards end of

the month in the wake of highly unfavourable, meteorological and climatic conditions and that GRAP -II were invoked proactively on 21.10.2023.

4. The report on behalf of the Central Pollution Control Board (CPCB) mentions about the various heads under which steps are to be taken to comprehensively manage the ambient air quality in Delhi - NCR which include air quality response system for Delhi – NCR, close monitoring and ground level implementation, measures to control industrial pollution, measures to control pollution from DG sets, measures for control of stubble burning, measures for control of dust emissions from C&D sites and roads, AQI and public awareness and media outreach. In respect of the technical interventions, the report reads as under:

**“2.7. Technical Interventions**

*a) Research projects are being carried out by CPCB in collaboration with premier institutions like IIT, NEERI, etc which provide scientific inputs for taking focused action towards improvement in air quality of Delhi NCR. Trials of various new technologies for air pollution control have been carried out such as WAYU air purification units developed by NEERI for pollution abatement at traffic junctions. Pariyantra bus roof top filtration system for PM reduction in ambient environment developed by MRIIRS. Faridabad. negative ion generator for PM reduction in ambient environment developed by Science & Technology Park. Pune. dust suppressant for construction sites and road dust control developed by EPRI, Pune. Out of these, results of dust suppressant were found encouraging and accordingly Advisory have been issued for use of dust suppressant by road owning and construction agencies.*

*b) A pilot Smog tower has been commissioned at Anand Vihar. ISBT and its performance is being evaluated by IIT Bombay.”*

5. Though, the above technical interventions suggest ways to regulate and control pollution but no particulars have been disclosed as to how to what extent they have been made applicable and what is the end result.

6. Let the report in respect of the same be placed on record on or before the next date of hearing by CPCB.

7. Action taken report on behalf of Govt. of NCT of Delhi has been filed which refers to the source of pollution identified in a study conducted by the Department of Environment, Govt. of Delhi through IIT Kanpur as under:

- a. *Vehicular pollution.*
- b. *Dust from road and construction and demolition activities.*
- c. *Open burning of dry leaves/emissions.*
- e. *Burning of crop residue.”*

8. The report mentions about the steps which have been taken to control the pollution.

9. Though, the above agencies in their reports have taken the stand that they are taking steps to control air pollution in Delhi but the ground result is not satisfactory. This matter was taken up *suo motu* by the Tribunal on 20.10.2023 and it was expected that effective steps will be taken so that the air quality in Delhi and NCR does not worsen, but the AQI of Delhi and NCR as reflected in chart below shows that instead of improving, the situation is gone from bad to worse:

**Status of Air Quality Index in Delhi**

<b>S. No.</b>	<b>Date</b>	<b>Air Quality</b>	<b>Index Value</b>
1.	20.10.2023	Moderate	195
2.	21.10.2023	Poor	248
3.	22.10.2023	Very Poor	313
4.	23.10.2023	Poor	263
5.	24.10.2023	Poor	220
6.	25.10.2023	Poor	243
7.	26.10.2023	Poor	256
8.	27.10.2023	Poor	261
9.	28.10.2023	Very Poor	304
10.	29.10.2023	Very Poor	325
11.	30.10.2023	Very Poor	347

12.	31.10.2023	Very Poor	359
13.	01.11.2023	Very Poor	364
14.	02.11.2023	Very Poor	392
15.	03.11.2023	Severe	468
16.	04.11.2023	Severe	415
17.	05.11.2023	Severe	454
18.	06.11.2023	Severe	421
19.	07.11.2023	Very Poor	395

10. Hence, we are of the opinion that the concerned agencies are required to review their strategy and come out with effective solution to ensure that the AQI in Delhi and NCR is maintained within the permissible limits. In this regard during the course of arguments, following suggestions have been made by Counsel for the parties:

- i. Under GRAP, all kinds of Government constructions have been permitted, whereas at the stage of invoking GRAP-IV only the urgent and timebound government construction activities should be allowed and other should be deferred till the air quality improves.
- ii. There are lapses on the part of implementing agencies in implementation of GRAP, therefore, effective steps should be taken to ensure its proper and full implementation.
- iii. The Ministry of Petroleum should consider imposing ban on supply to petrol and diesel to unregistered and non-compliant vehicles by the petrol pumps.

11. Since no visible improvement in the air quality has been witnessed, therefore, the respondents are directed to take stringent measures so that the air quality index in Delhi and NCR improves. Hence, let the fresh action taken report be filed by the concerned agencies on or before the next date of hearing keeping in view the observations made above by e-

mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

12. List on 20.11.2023.

Prakash Shrivastava, CP

Sudhir Agarwal, JM

Dr. A. Senthil Vel, EM

November 08, 2023  
Original Application No. 663/2023  
DV



EQ-11099/15/2022-AQM-HO-CPCB-HO

November 09, 2023

**OFFICE ORDER**

**Sub: Intensified monitoring towards prevention and control of paddy stubble burning incidents in the States of Punjab and Haryana- reg.**

With reference to CAQM's letter no: A-110014/10/2020/CAQM-SB/927 DT dated 09.11.2023 (copy enclosed), 33 scientists of CPCB are hereby nominated as flying squads for assisting the Commission for monitoring and enforcement actions towards prevention of paddy stubble burning incidents in the States of Punjab and Haryana, where paddy harvesting is still going on.

The flying squads shall immediately report at their respective districts in Punjab and Haryana by 10 AM, 10.11.2023, and coordinate with the state Government/ nodal officers/ officers from respective Pollution Control Boards towards prevention and control of stubble burning. The list of flying squads and the assigned districts is given below:

S. No.	Name of District	Name and designation of CPCB scientist	Contact details
1.	Ambala, Haryana	Sh. V. K. Upadhyay, Sc. 'C'	+918745073839
2.	Fatehabad, Haryana	Sh. Syed Bilal, Sc. 'C'	+918089567922
3.	Hisar, Haryana	Sh. Sahil Patel, Sc. 'C'	+919818381248
4.	Karnal, Haryana	Sh. Vinay Prabhakar, Sc. 'C'	+919910460029
5.	Kaithal, Haryana	Sh. Akhilesh Kumar Tyagi, Sc. 'B'	+919868850323
6.	Jind, Haryana	Sh. Abdul Muteen, Sc. 'B'	+918743945964
7.	Kurukshetra, Haryana	Sh. Danish Meena, Sc. 'C'	+917209720117
8.	Palwal, Haryana	Sh. Saubhagya Dixit, Sc. 'C'	+919716685665
9.	Sirsa, Haryana	Sh. Deepak Gautam, Sc. 'B'	+917838898139
10.	Sonapat, Haryana	Sh. Rishabh Srivastava, Sc. 'C'	+917982250879
11.	Yamunanagar, Haryana	Sh. Fasiur Rehman, Sc. 'C'	+919718922189
12.	Amritsar, Punjab	Sh. Anurag Sharma, Sc. 'C'	+919425627366
13.	Barnala, Punjab	Sh. Harshit Patel, Sc. 'B'	+917487031411
14.	Bathinda, Punjab	Sh. Ashbir Singh, Sc. 'D'	+918178280927
15.	Faridkot, Punjab	Sh. B. K. Jena, Sc. 'C'	+919717460998
16.	Fatehgarh Sahib, Punjab	Sh. Yashpal Yadav, Sc. 'C'	+919527623120
17.	Fazilka, Punjab	Sh. G. Rambabu, Sc. 'D'	+919310032928
18.	Firozpur, Punjab	Sh. Bhupinder Kumar, Sc. 'E'	+919212135238
19.	Gurdaspur, Punjab	Sh. Rishabh Bhatgare, Sc. 'B'	+919990246744
20.	Kapurthala, Punjab	Sh. Amit Kumar Tiwari, Sc. 'B'	+918802316002
21.	Jalandhar, Punjab	Sh. Mayank Raj Purbey, Sc. 'B'	+918619664685
22.	Sangrur, Punjab	Sh. Ankur Tiwari, Sc. 'D'	+919911706629

**‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032**

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel : 43102030, 22305792, वेबसाईट/Website : www.cpcb.nic.in

23.	Ludhiana, Punjab	Sh. Madnesh kumar Dubey, Sc. 'B'	+918700564213
24.	Malerkotla, Punjab	Sh. Neeraj Katiyar, Sc. 'B'	+919810388964
25.	Mansa, Punjab	Sh. Chanderkant Dixit, Sc. 'C'	+919140622063
26.	Moga, Punjab	Sh. Y.N.Mishra, Sc. 'C'	+919810065441
27.	Muktsar, Punjab	Sh. Tarun Darbari, Sc. 'E'	+919999969389
28.	Patiala, Punjab	Sh. Vishal Gandhi, Sc. 'E'	+919891254423
29.	Tarn Taran, Punjab	Sh. Abhas Kumar Maharana, Sc. 'B'	+919438488844
30.	Hoshiarpur, Punjab	Sh. Narendra Sharma, Sc. 'E'	+919814004377
31.	SAS Nagar, Punjab	Sh. Ratnesh Kumar, Sc. 'B'	+919870171189
32.	SBS Nagar, Punjab	Sh. Virendra Kumar Verma, Sc. 'B'	+918770842186
33.	Rupnagar, Punjab	Sh. J.P.Meena, Sc. 'D'	+916393115414

The flying squads, as above, shall assess the situation, and report to CAQM and CPCB on daily basis, including the steps taken to prevent further incidents of paddy stubble burning in the allocated district. The daily report in this regard shall be sent to CAQM, under intimation to AQM division, CPCB.

Each of the flying squads shall be provided a vehicle and TA/DA as admissible.

This is issued with the approval of Chairman, CPCB.

(Bharat Kumar Sharma)

Member Secretary

To

All the 33 Flying Squad Scientists, as above

## Copy to:

1. PS to Secretary,  
Ministry of Environment, Forest & Climate  
Change, Govt. of India : *for kind information of  
Secretary, MEF&CC,  
please.*
2. PS to Chairperson, CAQM : *for kind information of  
Chairperson, CAQM,  
please.*
3. PS to Chairman, CPCB : *for kind information of  
Chairman, CPCB, please.*
4. PS to Additional Secretary (CP)  
Ministry of Environment, Forest & Climate  
Change, Govt. of India : *for kind information of AS,  
MoEF&CC, please.*
5. The Director (CP)  
Ministry of Environment, Forest & Climate  
Change, Govt. of India : *for kind information, please.*
6. The Member Secretary  
Punjab Pollution Control Board : *with a request to facilitate  
the flying squads and  
provide all necessary  
support, please.*
7. The Member Secretary  
Haryana State Pollution Control Board : *with a request to facilitate  
the flying squads and  
provide all necessary  
support, please.*
8. Concerned Divisional Heads (IPC-I, IPC-II, IPC-III,  
IPC-IV, IPC-V, IPC-VI, IPC-VII, Water Lab, WM-II,  
UPC-I, AQMN, IT, Instrumentation Lab, Bio lab,  
Trace Organic Lab, CE cell, UPC-II, WM-III, WQM-  
I, WQM-II), CPCB, Delhi : *with a request to relieve the  
officers immediately for  
reporting to the assigned  
district, please.*

9. Regional Director- Chandigarh,  
CPCB, Regional Directorate, Chandigarh : *with a request to relieve the officers immediately and coordinate with respective agencies in your jurisdiction, please.*
10. DH- Building division, CPCB : *with a request to provide vehicles to the flying squads, please.*
11. Incharge, F&A division, CPCB : *for reimbursement of TA/DA as admissible, please.*

  
09/11/2022  
(Bharat Kumar Sharma)  
Member Secretary



केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT FOREST & CLIMATE CHANGE GOVT OF INDIA

EQ-11099/15/2022-AQM-HO-CPCB-HO

November 09, 2023

OFFICE ORDER

As per CAQM Order numbers A-110018/01/2021-CAQM/1710 and A-110018/01/2021-CAQM/1736-58, dated 2<sup>nd</sup> and 3<sup>rd</sup> December, 2021, 40 inspection teams/ flying squads comprising Scientists of CPCB were constituted for carrying out incognito inspections of units/activities in various sectors contributing to air pollution such as Industrial activities/ Construction and Demolition projects, Unpaved roads, DG Sets etc.

CPCB has constituted 33 flying squads for deployment in 33 districts of Punjab and Haryana for assisting CAQM vide office order of even number dated 09.11.2023. In continuation to the above and CPCB office order no. EQ-11099/15/2022-AQM-HO-CPCB-HO/1247 dated March 03, 2023, and subsequent orders issued thereafter, 15 teams (other than the aforesaid 33 teams for Punjab and Haryana) are hereby provided to CAQM as Flying Squads for carrying out the aforesaid incognito inspections of units/activities in various sectors contributing to air pollution. Details of the said 15 teams and respective officers & area assigned are as follows:

S. No.	Team No.	Name and designation of the Scientist	Name of Area
1	7	Smt. Dolly Kulshreshtha, Sc. 'B' – CPCB, Delhi	Ballabharh
2	12	Ms. Vineeta, Sc. 'B' – CPCB, Delhi	Faridabad
3	17	Smt. Medha Sharma, Sc. 'C' – CPCB, Delhi	Ghaziabad
4	21	Ms. Vijay Laxmi, Sc. 'B' – CPCB, Delhi	Noida
5	29	Smt. Alka Srivastava, Sc. 'B' – CPCB, Delhi	Faridabad
6	30	Smt. Charu Sharma, Sc. 'B' – CPCB, Delhi	Noida
7	31	Smt. Yogita Kharayat, Sc. 'C' – CPCB, Delhi	Greater Noida
8	32	Smt. Alpna Narula, Sc. 'B' – CPCB, Delhi	Ghaziabad
9	33	Smt. V. Hima Jwala Sc. 'B' – CPCB, Delhi	Ghaziabad
10	37	Smt. Niralee Verma, Sc. 'C' – CPCB, Delhi	Noida
11	41	Sh. Arnab Mandal, Sc. 'B' – Shillong	Meerut
12	42	Sh. S N Lokhande, Sc. 'E' – Pune	Ballabharh
13	43	Sh. Praveen Kumar Jain, Sc. 'B' – Bhopal	Meerut
14	44	Sh. Avdesh Kumar Tripathi, Sc. 'C' - Lucknow	Greater Noida
15	45	Sh. B.D. Pandey, Sc. 'B' - Vadodara	Ghaziabad

**‘परिवेश भवन’ पर्वी अर्जुन नगर, दिल्ली-110032**

Parivesh Bhawan, East Arjun Nagar, Delhi-110032

दूरभाष/Tel : 43102030, 22305792, वेबसाइट/Website : [www.cpcb.nic.in](http://www.cpcb.nic.in)

All the above Scientists shall conduct inspections in their respective areas w.e.f. 10.11.2023 and send report to CAQM with copy to CPCB. AQM division, CPCB shall coordinate and provide necessary orientation to the above scientists.

(Bharat Kumar Sharma)  
Member Secretary

To

All 15 Flying squad officers, as above

Copy to:

1. PS to Secretary,  
Ministry of Environment, Forest & Climate  
Change, Govt. of India : for kind information of  
Secretary, MEF&CC,  
please.
2. PS to Chairperson, CAQM : for kind information of  
Chairperson, CAQM,  
please.
3. PS to Chairman, CPCB : for kind information of  
Chairman, CPCB, please.
4. PS to Additional Secretary (CP)  
Ministry of Environment, Forest & Climate  
Change, Govt. of India : for kind information of AS,  
MoEF&CC, please.
5. The Director (CP)  
Ministry of Environment, Forest & Climate  
Change, Govt. of India : for kind information, please.
6. Concerned Divisional Heads (Air Lab, Water Lab,  
WM-I, WM-II, IPC-V, Trace Organic Lab,  
Instrumentation Lab, WQM-I, Bio Lab), CPCB,  
Delhi : with a request to relieve the  
officers immediately for  
reporting to the assigned  
district, please.

7. Regional Director- Shillong,  
CPCB, Regional Directorate, Shillong : *with a request to relieve the officer immediately, please.*
8. Regional Director- Pune,  
CPCB, Regional Directorate, Pune : *with a request to relieve the officer immediately, please.*
9. Regional Director- Bhopal,  
CPCB, Regional Directorate, Bhopal : *with a request to relieve the officer immediately, please.*
10. Regional Director- Lucknow,  
CPCB, Regional Directorate, Lucknow : *with a request to relieve the officer immediately, please.*
11. Regional Director- Vadodara,  
CPCB, Regional Directorate, Vadodara : *with a request to relieve the officer immediately, please.*
12. DH- Building division, CPCB : *with a request to provide vehicles to the flying squads, please.*
13. Incharge, F&A division, CPCB : *for reimbursement of TA/DA as admissible, please.*

**(Bharat Kumar Sharma)**  
**Member Secretary**