

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

Original Application No.663 OF 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" VS

I N D E X

S. No.	Particular	Pages
1.	Action taken report on behalf of Commission for Air Quality Management in NCR and Adjoining Areas	1 - 18

New Delhi
Dated: 03.11.2023

FILED BY

DIRECTOR
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Through



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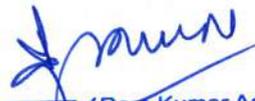
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NEWS ITEM PUBLISHED IN INDIAN EXPRESS DATED 07.10.2023
TITLED "GRAP STAGE 1 KICKS IN AS AIR QUALITY DIPS TO POOR
CONDITION LIKELY TO PREVAIL TILL SUNDAY" VS

ACTION TAKEN REPORT

1. The Hon'ble NGT(PB), New Delhi vide its order dated 20.10.2023 in Original Application No. 663 of 2023 titled as 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" *inter alia*, amongst other, directed the Commission for Air Quality Management in National Capital Region and Adjoining Areas (hereinafter referred to as the 'Commission) as under:

"...The above respondents are expected to file their action taken report on controlling air pollution from different sources in Delhi in accordance with GRAP to maintain AQI in acceptable range to safeguard public health in view of winter season ahead, on or before the next date of hearing..."


राम कुमार अग्रवाल / Ram Kumar Agrawal
निदेशक / Director
राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्रों में वायु गुणवत्ता प्रबंधन आयोग
Commission for Air Quality Management in NCR & Adjoining Areas
भारत सरकार / Government of India
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2. The present Report is being filed in respectful compliance of the Directions of this Hon'ble Tribunal to apprise Hon'ble Court of the steps being taken and the progress of the measures initiated to prevent control and abate the levels of air pollution in Delhi-NCR.
3. The Commission has been trying to comprehensively address the issue of air pollution in NCR and adjoining areas in a collective, collaborative and participative mode involving all the major stakeholders. In this respect, the commission has held long ranging deliberations and discussions, in addition to various progress review meetings with the concerned Ministries in the Central Government, States, authorities / agencies and other stakeholders.
4. In specific reference to the Graded Response Action Plan (GRAP), it is submitted that the GRAP is a comprehensive action plan to control air pollution in winter months and provides for specific set of preventive / restrictive emergency measures to be initiated / implemented by identified agencies across NCR, depending on the severity of air pollution level particularly during the critical winter months, for minimizing the effect.
5. While the GRAP has been in force since 2017 when it was first notified by the MoEFCC, the Commission felt a need to comprehensively review the

Schedule of preventive / restrictive activities under various Stages of GRAP, keeping in view the developments and actions initiated over last few years to abate air pollution in Delhi-NCR, technological advancements and the trend of air quality parameters as recorded for Delhi.

6. Till 2021, various stages under GRAP were invoked reactively on reaching a particular threshold air quality. It was envisaged that invoking GRAP proactively would be a better approach to control the severity of air pollution and accordingly invoke appropriate stages of GRAP much earlier than the threshold levels are likely to be reached. To this end, development of a Decision Support System (DSS) and refinements in the Air Quality Early Warning System (AQEWS) modelling were coordinated by the Commission through IMD / IITM, to enable reasonably accurate prediction of air quality index for Delhi, for at least 3 days in advance.
7. The schedule of the GRAP to be implemented in the entire NCR, as comprehensively reviewed and revised in 2022, was classified under 4 different stages of Avg. air quality in Delhi viz.:

Stage – I 'Poor' (AQI of Delhi between 201 – 300)

Stage – II 'Very Poor' (AQI of Delhi between 301-400)

Stage – III 'Severe' (AQI of Delhi between 401-450)

Stage – IV 'Severe +' (AQI of Delhi >450)

8. Actions under Stages II, III and IV of the GRAP are required to be invoked at least three days in advance of the AQI reaching to the projected levels of that stage, based on the dynamic model and weather/ meteorological forecast provided to the Commission by IMD / IITM on a day-to-day basis. GRAP also enlists citizen charter in each stage of GRAP to enable citizens to actively contribute towards pollution control measures.
9. Restrictive actions undertaken as per previous stages are to be continued, in addition to the air pollution stage under which the restrictive actions are envisaged to be taken. For example, restrictive actions under the Stage III category, whenever invoked, shall be in addition to those under Stage I and II respectively and so on and so forth.
10. Preventive and restrictive actions, including bans on certain set of activities, also impacting the economy and livelihood options, are needed to be imposed in NCR in adverse air quality scenarios as laid down in the GRAP. However, owing to a relatively better air quality during 2022, the number of days for which GRAP Stage III and above were required to be invoked were much lesser as compared to previous years.

11. The schedule for GRAP was further reviewed by the Commission in 2023 and Direction No. 77 was issued on 06.10.2023 for implementation with immediate effect, whenever orders are issued by the Commission for invoking actions under various Stages, in the entire NCR.
12. The Commission has also constituted a Sub-Committee to plan for advance action and issue necessary orders for invoking various provisions of the GRAP, based on the prevalent air quality and the AQI forecast to be provided by IMD from time to time. The Sub-Committee also reviews the actions taken by various agencies responsible towards effective implementation of the GRAP.
13. The Schedule of various preventive, mitigative and restrictive actions under different Stages of the GRAP as last revised in October, 2023 is enumerated below:

**Stage I – ‘Poor’ Air Quality
(DELHI AQI ranging between 201-300)**


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1. Ensure proper implementation of Directions/ guidelines on dust mitigation measures in Construction and Demolition (C&D) activities and sound environmental management of C&D waste.
2. Ensure strict compliance of Direction Nos. 11-18 dated 11.06.2021 not to permit C&D activities in respect of such projects with plot size equal to or more than 500 sqm which are not registered on the 'web portal' of the respective state / GNCTD, for remote monitoring of dust mitigation measures.
3. Ensure regular lifting of Municipal Solid Waste (MSW), Construction & Demolition (C&D) waste, and Hazardous wastes from dedicated dump sites and ensure that no waste is dumped illegally in open land areas.
4. Carry out periodic mechanized sweeping and water sprinkling on roads and ensure scientific disposal of the dust collected in designated sites/landfills.
5. Ensure that C&D materials & waste are properly stored/ contained, duly covered in the premises. Ensure transportation of C&D waste in covered vehicles and its recycling at an appropriate processing facility.
6. Strictly enforce directions and yardsticks for use of anti-smog guns at C&D sites.
7. Intensify use of anti-smog guns, water sprinkling and dust suppression measures in road construction / maintenance / repair projects.
8. Stringently enforce prohibition on open burning of biomass and municipal solid waste. Impose maximum EC upon violations in accordance with Hon'ble NGT's orders dated 04.12.2014 and 28.04.2015 in OA 21/2014.
9. Strict vigil to ensure that there are no burning incidents in the landfill sites / dumpsites.
10. Deploy traffic police for smooth traffic flow at all identified corridors with heavy traffic and congestion prone intersections.
11. Strict vigilance and enforcement of PUC norms for vehicles.
12. No tolerance for visible emissions –

Stop visibly polluting vehicles by impounding and / or levying maximum penalty.
13. Strictly enforce the Hon'ble Supreme Court order on diversion of non-destined truck traffic for Delhi, through Eastern and Western Peripheral Expressways.
14. Strictly enforce NGT / Hon'ble SC's order on overaged diesel / petrol vehicles and as per extant statutes.
15. Ensure strict penal/ legal action against non-compliant and illegal industrial units.
16. Stringently enforce all pollution control regulations in Industries, brick kilns and hot mix plants etc. - strict compliance of the prescribed standards of emissions.
17. Ensure that only approved fuels are used by the industries in NCR including in brick kilns and hot mix plants and enforce closure in case of violations, if any.
18. Stringently enforce emission norms in thermal power plants and strict actions be taken against non-compliance.
19. Strictly enforce Hon'ble Courts / Tribunal orders regarding ban on firecrackers.
20. Ensure regular lifting and proper disposal of industrial waste from industrial and non-development areas.
21. DISCOMs to minimise power supply interruptions in NCR.
22. Ensure that diesel generator sets are not used as regular source of power supply.

	<p>23. Enforce complete ban on coal / firewood in Tandoors in Hotels, Restaurants and open eateries.</p> <p>24. Ensure hotels, restaurants and open eateries use only electricity / clean fuel gas-based appliances.</p>
	<p>25. Information dissemination including through social media and bulk SMS etc. Mobile Apps to be used to inform people about the pollution levels, contact details of control room, enable them to report polluting activities / sources to the concerned authorities and inform them about actions that would be taken by Government.</p>
	<p>26. Ensure quick actions for redressal of complaints on 311 APP, Green Delhi App, SAMEER App and other such social media platforms to curb polluting activities.</p>
	<p>27. Encourage offices to start unified commute for employees to reduce traffic on road.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">CITIZEN CHARTER</p>	<ul style="list-style-type: none"> • Keep engines of your vehicles properly tuned. • Maintain proper tyre pressure in vehicles. • Keep PUC certificates of your vehicles up to date. • Do not idle your vehicle, also turn off the engine at red lights. • Prefer hybrid vehicles or EVs to control vehicular pollution. • Do not litter / dispose wastes, garbage in open spaces. • Report air polluting activities through 311 App, Green Delhi App, SAMEER App etc. • Plant more trees. • Celebrate festivals in an eco-friendly manner – avoid firecrackers. • Do not drive/ply end of life/ 10/15 years old Diesel/Petrol vehicles.

**Stage II – ‘Very Poor’ Air Quality
(DELHI AQI ranging between 301-400)**

1. Carry out mechanical/ vacuum sweeping and water sprinkling of the identified roads on a daily basis.
2. Ensure water sprinkling along with use of dust suppressants (at least every alternate day, during non-peak hours) on roads to arrest road dust especially at hotspots, heavy traffic corridors, vulnerable areas and proper disposal of dust collected in designated sites/landfills.
3. Intensify inspections for strict enforcement of dust control measures at C&D sites.
4. Ensure focussed and targeted action for abatement of air pollution in all identified hotspots in NCR. Intensify remedial measures for the predominant sector(s) contributing to adverse air quality in each of such hotspots.
5. Ensure uninterrupted power supply to discourage use of alternate power Generating sets/ equipment (DG sets etc.).

6. **Strictly implement the following Schedule for regulated operations of DG sets across all sectors in the NCR including Industrial, Commercial, Residential and offices etc in accordance with Direction No. 76 dated 29.09.2023.**

Capacity Range of DG sets	System to be adopted for control of emissions	Regulations for use
Power generating sets of all capacities running on LPG/ Natural Gas/ Bio-gas/Propane/Butane	None	No restrictions
Power generating sets of all capacities up to 800 kW to standards as per MoEFCC notification No. GSR 804(E) dated 03.11.2022	None	No restrictions.
800 kW and above	Any emission control mechanism, strictly subject to compliance of the prescribed emission standards	No restrictions

125 kW to less than 800 kW	Dual fuel mode OR Retro-fitted ECDs through certified vendors / agencies	No restrictions
19 kW to less than 125 kW	Dual fuel mode	No restrictions DG Sets not working in a dual fuel mode, only owing to non- availability of gas infrastructure and supply, shall be permitted only for prescribed emergency services.
Portable DG sets (below 19 kW)	Presently no specific means of emission control are available in this category / capacity range of DG sets.	Not to be generally permitted. These shall, however, be permitted only for prescribed emergency services.

Note: In the interest of not disrupting emergency services and permitting sufficient time for adopting the stipulated emission control mechanism in existing DG Sets, as a one-time exception, DG Sets for all capacity ranges (which have still not been equipped with emission control devices / systems as per the above noted schedule), shall be permitted to be run only for emergency services in the NCR as listed below, **only up to 31.12.2023** and strictly subject to adherence to the above noted measures for emission control, thereafter:

- (i) Elevators / Escalators / Travelators etc. in various installations; Commercial entities / residential societies shall, however, ensure that operation of DG sets and supply therefrom is purely limited to operation of elevators / escalators / travelators etc. and not for any other activities of commercial entities / residential societies.
- (ii) Medical Services (Hospital/Nursing Home/Health care facilities) including units involved in manufacturing of life saving medical

	<p>equipment/devices, drugs and medicines.</p> <p>(iii) Railway Services / Railway Stations.</p> <p>(iv) Metro Rail Corporation & MRTS Services, including trains and stations.</p> <p>(v) Airports and Inter-State Bus Terminals (ISBTs).</p> <p>(vi) Sewage Treatment Plants.</p> <p>(vii) Water pumping Stations.</p> <p>(viii) Projects related to national security, defence & of national importance.</p> <p>(ix) Telecommunications and IT/ data services.</p>
	7. Synchronize traffic movements and deploy adequate personnel at intersections / traffic congestion points for smooth flow of traffic.
	8. Alert in newspapers / TV / radio to advise people about air pollution levels and Do's and Don'ts for minimizing polluting activities.
	9. Enhance Parking fees to discourage private transport.
	10. Augment CNG/ electric bus and metro services by inducting additional fleet and increasing the frequency of service.
	11. Resident Welfare Associations to necessarily provide electric heaters to security staff to avoid open Bio-Mass and MSW burning during winters.
CITIZEN CHARTER	<ul style="list-style-type: none"> • People to use public transport and minimize use of personal vehicles. • Use technology, take less congested route even if slightly longer. • Regularly replace air filters at recommended intervals in your automobiles. • Avoid dust generating construction activities during months of October to January. • Avoid open burning of solid waste and bio-mass.

**Stage III – ‘Severe’ Air Quality
(DELHI AQI ranging between 401-450)**

Actions

1. Further intensify the frequency of mechanised/ vacuum-based sweeping of roads.
2. Ensure daily water sprinkling along with dust suppressants, before peak traffic hours, on roads and right of ways including hotspots, heavy traffic corridors and ensure proper disposal of the collected dust in designated sites/ landfills.
3. Further intensify public transport services. Introduce differential rates to encourage off-peak travel.
4. Construction & Demolition activities:
 - (i) Enforce strict ban on construction and demolition activities in the entire NCR, except for the following categories of projects:
 - (a) Projects for Railway services / Railway stations
 - (b) Projects for Metro Rail Services and stations
 - (c) Airports and Inter State Bus Terminals
 - (d) National security/ defence related activities/ projects of national importance;
 - (e) Hospitals/ health care facilities
 - (f) Linear public projects such as highways, roads, flyovers, over bridges, power transmission/ distribution, pipelines etc.
 - (g) Sanitation projects like sewage treatment plants and water supply projects etc.;
 - (h) Ancillary activities, specific to and supplementing the above noted categories of projects.

Note: The above exemptions shall be further subject to strict compliance of the C&D Waste Management Rules, dust prevention/ control norms including compliance with the directions of the Commission issued from time to time in this regard.

(ii) Other than the projects exempted under (i) above, dust generating/ air pollution causing C&D activities to be strictly banned during this period shall include:

- Earthwork for excavation and filling including boring & drilling works.
- All structural construction works including fabrication and welding operations.
- Demolition works.
- Loading & unloading of construction materials anywhere within or outside the project sites.
- Transfer of raw materials either manually or through conveyor belts, including fly ash.
- Movement of vehicles on unpaved roads.
- Operation of batching plant.
- Laying of sewer line, waterline, drainage work and electric cabling by open trench system.
- Cutting and fixing of tiles, stones and other flooring materials.
- Grinding activities.
- Piling work.
- Water Proofing work.
- Painting, Polishing and varnishing works etc.
- Road construction/ repair works including paving of sidewalks / pathways and central verges etc.

(iii) For all construction projects in NCR, non-polluting / non-dust generating activities such as plumbing works, electrical works, carpentry related works and interior furnishing / finishing / decoration works (excluding painting, polishing and varnishing works etc) shall be permitted to be continued.

5. Close down operations of stone crushers

6. Close down all mining and associated activities in the NCR.

7. NCR State Govts. / GNCTD to impose strict restrictions on plying of BS III petrol and BS IV diesel LMVs (4 wheelers) in Delhi and in the districts of

Gurugram, Faridabad, Ghaziabad and GautamBudh Nagar.

8. State Govts. in NCR and GNCTD may take a decision on discontinuing physical classes in schools for children up to Class V and conducting classes in an online mode.

**CITIZEN
CHARTER**

- Walk or use cycles for small distances.
- Choose a cleaner commute. Share a ride to work or use public transport.
- People, whose positions allow working from home, may work from home.
- Do not use coal and wood for heating purpose.
- Individual house owners may provide electric heaters (during winters) to security staff to avoid open burning.
- Combine errands and reduce trips.

**Stage IV – ‘Severe +’ Air Quality
(DELHI AQI > 450)**

1. Stop entry of truck traffic into Delhi (except for trucks carrying essential commodities/ providing essential services and all LNG/ CNG / electric trucks).
2. Do not permit LCVs registered outside Delhi, other than EVs / CNG / BS-VI diesel, to enter Delhi, except those carrying essential commodities / providing essential services.
3. Ban on plying of Delhi - registered diesel operated Medium Goods Vehicles (MGVs) and Heavy Goods Vehicles (HGVs) in Delhi, except those carrying essential commodities / providing essential services.

4. Ban C&D activities also in linear public projects such as highways, roads, flyovers, overbridges, power transmission, pipelines etc.	
5. NCR State Govts. and GNCTD may take a decision on discontinuing physical classes even for classes VI – IX, class XI and conduct lessons in an online mode.	
6. NCR State Governments / GNCTD to take a decision on allowing public, municipal and private offices to work on 50% strength and the rest to work from home.	
7. Central Government may take appropriate decision on permitting work from home for employees in central government offices.	
8. State Governments may consider additional emergency measures like closure of colleges/ educational institutions and closure of non-emergency commercial activities, permitting running of vehicles on odd-even basis of registration numbers etc.	
CITIZEN CHARTER	<ul style="list-style-type: none"> • Children, elderly and those with respiratory, cardiovascular, cerebrovascular or other chronic diseases to avoid outdoor activities and stay indoors, as much as possible.

14. The Sub-Committee constituted for invoking actions under the GRAP has been continuously reviewing the prevailing air quality scenario in NCR and in wake of the average air quality of Delhi deteriorating to “Poor” Stage, decided to invoke various actions under the Stage-I in the entire NCR w.e.f. 06.10.2023 and with further likely worsening of the air quality into “Very Poor” category, Stage-II of the revised GRAP was also imposed, in addition to the State-I measures, w.e.f. 21.10.2023.

15. Implementing / enforcement agencies have been identified and listed against each of the actions envisaged in the revised schedule of GRAP and such agencies are required to strictly implement / enforce these towards controlling further deterioration of air quality in the NCR.
16. While the month of October, 2023 saw 'Very Poor' Average Air quality (AQI >300) mainly towards the end of the month, in wake of highly unfavourable meteorological and climatic conditions prevailing around this point of time year on year, measures under GRAP Stage-II were invoked proactively on 21.10.2023 so as to intensify the ongoing preventive measures towards abatement of air pollution and also endeavouring delayed invoking of Stage-III of the GRAP, as much as possible. GRAP Stage-III in previous years was generally required to be invoked in last week of October and even GRAP Stage-IV was required to be invoked as early as on 03.11.2022 in 2022.
17. Owing to concerted efforts put in by various stakeholders towards abatement of air pollution in the NCR, measures initiated as per the comprehensive policy to abate air pollution in NCR, improved monitoring and enforcement of various policy actions and aided with favourable meteorological and climatic conditions from time to time, the overall air quality in Delhi-NCR has witnessed an improving trend since the

inception of the Commission. The key parameters for daily average air quality for Delhi for the period between January – October, 2023 have been the best in 2023 as compared to the corresponding periods, from 2018 to 2022 (barring the periods of very low anthropogenic, industrial and commercial activities during the COVID affected year 2020, owing to complete lockdowns and other restrictions) as detailed below:

Period: 1st Jan – 31stOctober						
Year	2018	2019	2020	2021	2022	2023
Daily Average AQI	200.8	192.5	156.2	179.0	187.0	172.2
Total No. of Days with “Good – Moderate” AQI	157	175	224	197	160	206
Daily avg. PM2.5 ($\mu\text{gm}/\text{m}^3$)	94	89	72	82	82	76
Daily avg. PM10 ($\mu\text{gm}/\text{m}^3$)	217	199	149	183	193	175

18. With persistent field level efforts and targeted policy initiatives for quantified results in the short/ medium/ long term, it is expected that air quality scenario over Delhi will see marked improvement, year on year. The above table reveals that the number of “Good” to “Moderate”

AQI days recorded so far during 2023 have been the highest (206 days), except for the COVID lockdown year of 2020, ever since the AQI parameters were started to be recorded by the CPCB.

DELHI
Dated 03.11.2023

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DIRECTOR, CAQM

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