ACTION PLAN FOR AIR POLLUTION AND IT'S CONTROL BY AIR QUALITY MONITORING COMMITTEE (AQMC)

(In compliance to Hon'ble NGT in the order dated 08.10.2018 passed in OA no. 681/2018 in the matter of: news item published in the times of India authored by Shri Vishwa Mohan titled "NCAO with multiple timelines to clear air in 102 cities to be released around August 15")

Submitted to

Central Pollution Control Board (CPCB)

by

Department of Environment, Govt. of Delhi/ Delhi Pollution Control Committee (DPCC)

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ACTION PLAN BY AIR QUALITY MONITORING COMMITTEE (AQMC) FOR

AIR POLLUTION AND ITS CONTROL IN COMPLIANCE TO IN COMPLIANCE TO THE DIRECTIONS OF THE HON'BLE NGT CONTAINED IN THE ORDER DATED 08.10.2018 PASSED IN OA NO. 681/2018 IN THE MATTER OF: NEWS ITEM PUBLISHED IN THE TIMES OF INDIA AUTHORED BY SHRI VISHWA MOHAN TITLED "NCAO WITH MULTIPLE TIMELINES TO CLEAR AIR IN 102 CITIES TO BE

I. BACKGROUND:

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Hon'ble NGT vide order dated 08.10.2018 in O.A No. 681/2018 in the matter of: News Item Published in the Times of India Authored by Shri. Vishwa Mohan Titled "NCAO with Multiple Timelines to clear Air in 102 Cities to be released around August 15" has directed constitution of Air Quality Monitoring Committee (AQMC) comprising of Directors of the following Departments for NCT of Delhi:

- 1. Department of Environment, GNCTD
- 2. Transport Department, GNCTD
- 3. Industries, GNCTD
- 4. Urban Development, GNCTD
- 5. Agriculture, GNCTD
- 6. Member Secretary, Delhi Pollution Control Committee (DPCC)

As per the order AQMC had to prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans as per directions contained in the order. The AQMC had to function under the overall supervision and coordination of Principal Secretary, (Environment) Department of Environment, GNCTD.

The directions of the Hon'ble Tribunal as contained in the above order said are as reproduced below:

15..... issue direction as follows:

- i. All the States and Union Territories with non-attainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans.
- ii. The Action Plans may be prepared by six-member committee comprising of Directors of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board or Committee of the concerned State. The Committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall Page 2 of 33

supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring intra-sectoral co-ordination.

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- iii. The Action Plans may take into account the GRAP, the CAP and the action plan prepared by CPCB as well as all other relevant factors. The Action Plans may be forwarded to the CPCB by 31.12.2018. The same may be placed before the Committee as directed in direction no. vi. The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning, agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc. The action plan shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes.
- iv. The Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.
- v. The Action Plan should be consistent with the carrying capacity assessment of the nonattainment cities in terms of vehicular pollution, industrial emissions and population density, extent of construction and construction activities etc. The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating number of vehicles and their parking and plying, population density, extent of construction and construction activities etc. Guidelines may accordingly be framed to regulate vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment.
- vi. The Committee comprising of (a) Shri. Prashant Gargava, Member Secretary, CPCB, (b) Dr. Mukesh Khare, Professor, IIT Delhi, and (c) Dr. Mukesh Sharma, Professor, IIT Kanpur shall examine the Action Plans and on the recommendations of the said Committee, the Chairman, CPCB shall approve the same by 31.01.2019.
- vii. The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate Action Plans, as directed.
- viii. The CPCB, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS.
- ix. The CPCB and all the State Pollution Control Boards and Pollution Control Committees shall collectively workout and design a robust nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities/towns. The scope of monitoring should be expanded to include all twelve (12) notified Page 3 of 33

- parameters as per Notification No B-29016/20/90/PCI-L dated 18th November, 2009 of CPCB. The continuous Ambient Air Quality Monitoring Stations (AAQMS) should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite action plan with timelines for its execution which shall not be more than three months. It is expected that all such AAQMS shall be connected to central server of CPCB for reporting analysis of results in a form of Air Quality Bulletin for general public at regular intervals atleast on weekly basis and ambient air quality on continuous basis on e-portal. MoEF&CC will provide requisite funds for the purpose. MoEF&CC in consultation with Ministry of Housing and Urban Affairs, MoRTH, Ministry of Petroleum and Natural Gas, Ministry of Agriculture, Cooperation and Farmers Welfare or any other Ministry to lay down such guidelines as may be considered necessary for improvement of air quality in the country.
- 16. A copy of this be sent by e-mail to all the concerned i.e. Ministries of Environment, Forest & Climate Change, Housing and Urban Affairs, Road Transport and Highway, Agriculture, Petroleum and the Chief Secretaries of all the States and Union Territories for compliance.
- 17. We understand that some of the Zonal Benches of the National Green Tribunal have also passed directions on the subject of Ambient Air Quality and the States in those Zones are in the process of implementation of such directions. Specific reference may be made in this regard to judgement dated 11.08.2016 in O.A No. 33/2018/EZ in the matter of Subhas Datta v. State of West Bengal & Ors. We make it clear that this order shall not be considered as an impediment to those actions but as an addition or supplement thereto for achieving the object of this order at the macro level and of the said order at the micro level in the concerned cities.
- 18. Needless to say, that order of National Green Tribunal is binding as a decree of Court and noncompliance is actionable by way of punitive action including prosecution, in terms of the National Green Tribunal Act, 2010.
- 19. The CPCB may compile the data and furnish the same to this Tribunal by email at filing.ngt@gmail.com on or before 15.2.2019.
- 20. Put up for consideration in the last week of February, 2019.

Accordingly, first meeting of AQMC under the Chairmanship of Principal Secretary (Environment) was held on 16.11.2018. Deliberations of the meeting are as reproduced below:

 Department of Environment/Delhi Pollution Control Committee will prepare the draft Action Plan by taking into account the GRAP, CAP, 41 directions issued by CPCB and other plans and will send to all the Members of the Committee and other Stakeholder Departments by <u>30th</u> <u>November, 2018</u> for obtaining their comments.

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- 2. All the Members of AQMC and other Stakeholder Departments will send the comments positively by <u>10th December, 2018</u> to Department of Environment for finalization of Action Plan.
- 3. Department of Environment/ Delhi Pollution Control Committee will finalize the Action Plan and put up for the approval of Chief Secretary, Delhi by <u>20th</u> <u>December, 2018.</u>
- **4.** After the approval of the Chief Secretary, Delhi the Department of Environment will submit the finalized Action Plan to CPCB by <u>25th December, 2018.</u>

The AQMC constituted for the purpose has noted the following back ground facts that were placed before by the Department of Environment, Government of Delhi.

II. INTRODUCTION:

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Air pollution in Delhi is a serious cause of concern for the Government of NCT of Delhi. World Health Organization defines air pollutants as substances put into the air by activities of mankind into concentration sufficient to cause harmful effects to health, crop-yield and property. Air Pollution mainly constitutes particulate matter and gases. Increasing levels of PM_{2.5} (Particulate Matter of less than 2.5 micron size), PM₁₀ (Particulate Matter of less than 10 micron size), NO₂ (Nitrogen dioxide) in ambient air have been in attention of the media, Courts and various other organizations as well as general public. Meteorological factors viz Wind Speed, Wind Direction, humidity, temperature etc also plays a crucial role in the air pollution episodes that happens in the winter months in the whole of North India. It is also evident that Delhi's Environment is highly influenced by dust storm from Rajasthan and in winter by calm conditions and inversion as well as biomass burning in NCR.

As per the study got conducted by Department of Environment, Govt. of Delhi through IIT Kanpur in 2015, the major sources of air pollution in Delhi have been identified as under:-

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- Vehicular pollution.
- Road and soil dust and its re-suspension.
- Dust generated due to construction and demolition activities.
- Burning of dry leaves/garbage etc.
- Industrial pollution emissions.
- Trans-state movement of pollutants specially due to burning of crop residue in neighboring states.
- Industrial sources/Thermal Power stations.

The possible main reasons for high level of air pollution were as follows:

- (a) Crop residue burning in neighboring states.
- (b) Non-favorable metrological conditions like calm wind, temperature inversion at lower height.
- (c) Vehicular Pollution.
- (d) Dry conditions helping re-suspension of particulate matter (PM).

III. MONITORING OF AIR POLLUTION:

To monitor the Ambient Air Quality parameters, there are 40 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in Delhi (DPCC-26, CPCB-6, MoES-8). The Online data of Ambient Air Quality of DPCC 26 CAAQMS are available on DPCC website. It is also noted that the monitoring data of DPCC CAAQMS are also taken for the overall calculations being done by CPCB for its Air Quality Index (AQI) calculations and also for the forecasting of the air pollution for the three days by the SAFAR program of Ministry of Earth Sciences, Govt. of India.

IV. DUST STORM EPISODE WITNESSED FROM 12TH JUNE TILL 17TH JUNE 2018 AND VERY POOR AIR QUALITY CONDITION IN OCTOBER, 2018 IN THE CITY:

An incidence of Dust storm occurred during the month of June, 2018. The figure 1 and 2 shows the variation in concentration of PM $_{2.5}$ and PM $_{10}$ from 1st January, 2018 to 28th Nov, 2018. This period consist of winter and summer in Delhi. In Summer, the last peak of PM $_{10}$ was recorded from 12th June to 16th June when concentration of PM $_{10}$ reached Page 6 of 33

up to 1511 μ g/m³ on 13th of June. However, PM_{2.5} reached up to 271 μ g/m³ on the same day. When Delhi faced severe Dust storm like conditions from 12th June to 17th June 2018. It may be attributed to the windblown dust from the Rajasthan Fig. 3 & Fig. 4 shows the variation in concentration of PM₁₀ and PM_{2.5} for the period of October and November, 2018. The higher values in winter months can be attributed to emission from local sources and trans-state movement of pollutant specially due to burning of crop residue in neighboring states, lower mixing height and other meteorological conditions like calm condition, low temperature etc.

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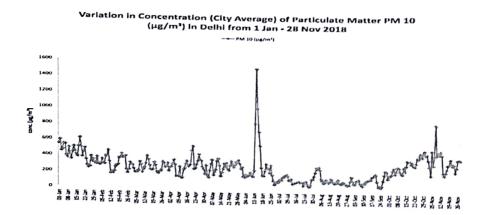


Figure-1

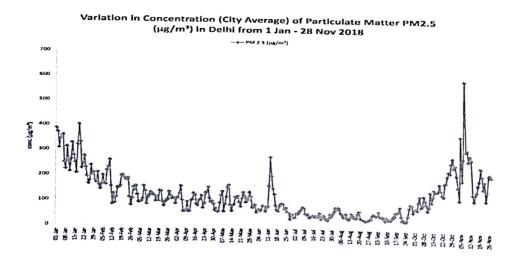


Figure- 2

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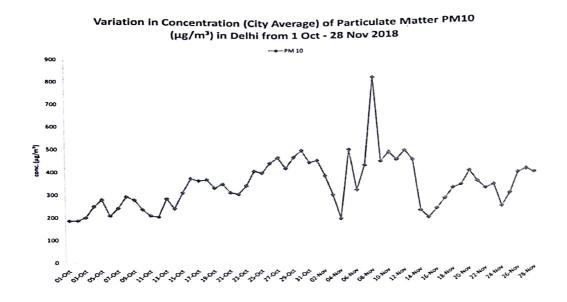


Figure- 3

Variation in Concentration (City Average) of Particulate Matter PM2.5 (µg/m³) in Delhi from 1 Oct - 28 Nov 2018 700 600 500 200 100 0 TO CONTRACTOR TO NO 20 HO BHO 100 2.84 3 ~ 00

Figure- 4

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The AQMC members have been briefed, that in view of the importance and magnitude of the problem, the issue of Air Pollution Control were reviewed at different levels both in Government of India and Govt. of NCT of Delhi. The AQMC member had been briefed that meetings held both at Government of India level and at Government of Delhi level which are depicted below:

At Government of India, Principal Secretary to Prime Minister, Secretary, Ministry of Environment Forests and Climate Change, Govt. of India, Chairman (EPCA), Chairman (Central Pollution Control Board) have been reviewing the Air Pollution Control to be taken at short, medium and long term measures.

At Government of Delhi level, periodical meetings have been held at level of Hon'ble Lt. Governor, Hon'ble Minister (Environment), Chief Secretary, Delhi and Secretary (Environment), Govt. of Delhi.

V. ACTIONS SO FAR TAKEN TOWARDS CONTROLLING AIR POLLUTION:

1. Review Meetings held at Govt of India

- Hon'ble Minister and Secretary, MoEF&CC, GOI had convened review meetings periodically with all stakeholders and reviewed the Air Pollution Control Measures taken by all agencies.
- High Level Task Force (HLTF) on issues of air pollution control has been constituted under Pr. Secretary to Prime Minister and its periodical report on recommendations of HLTF is being compiled and sent to Secretary, MoEF&CC, GOI by Government of Delhi. This report is discussed and based on this report Principal Secretary to PM convenes review meeting at regular intervals.
- The HLTF reviews action taken report submitted by all the agencies including the neighboring states of Rajasthan, Haryana, UP and Punjab.
- The High Level Task Force reviews the following aspects of Air Pollution(Control & Management):-

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- i. Installation and getting data of Continuous Ambient Air Quality Monitoring Stations (CAAQMS).
- ii. Procurement and deployment of Mechanical Road Sweeping (MRS) Machines.
- iii. Water sprinkling using treated sewage water in the roads.
- iv. Massive greening program by all the agencies.
- v. Dust Mitigation in all the major construction sites. Inspection and fining of violators who have not taken control measures.
- vi. Vertical greening of pillars and flyovers.

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- vii. Deployment of water tankers by the construction agencies.
- viii. Removal of silt from drains and dumping in designated sites.
- ix. Prevention of biomass burning by the farmers in the state of Punjab and Haryana.
- x. Procurement and distribution of Stubble Removal Machines to the farmers.
- xi. Switching over to PNG by Industries.
- xii. Operationalize Western & Eastern Peripheral Expressway.
- xiii. Paving of roadsides to minimize dust.
- xiv. Speedy implementation and establishment of Solid Waste Processing Plant.
- xv. Speedy procurement of Buses by DTC and on Cluster mode.
- xvi. Providing last mile connectivity by DMRC by dove-tailing metro stations through mini buses and e-rickshaws.
- xvii. Removal of encroachment on roads by the civic agencies.

2. <u>Meetings by Environment Pollution (Prevention and Control) Authority</u> (EPCA)

Chairman, EPCA have also convened a number of meetings in order to ensure timely implementation of various projects. Meetings were held periodically to review the progress of various measures taken by different agencies for control of air pollution particularly with respect to implementation of GRAP. Specific review meetings had been held for Anand Vihar, Bawana-Narela areas to control the air pollution.

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3. Meetings by Hon'ble Lt Governor:

Hon'ble Lt. Governor of Delhi had also reviewed with all the Departments and local bodies on the issues relating to Air Pollution in NCT of Delhi. The implementation of various projects both ongoing and new with timelines had been reviewed. Hon'ble LG has also specifically reviewed various action taken to control air pollution in the Anand Vihar ISBT area and Bawana-Narela area. He has tasked agencies with Short Term and Long Term Action Plan to mitigate the same.

4. Meetings by Hon'ble Minister (Envt & Forests) Govt of Delhi.

Hon'ble Minister (Environment & Forests), GNCTD also convened a number of meetings to discuss regarding the measures taken for controlling Air Pollution with all the agencies involved in various activities for the control of air pollution as well as for implementation of GRAP.

5. Meetings by Chief Secretary, Delhi.

Various review meetings had been convened by the Chief Secretary, Delhi from time to time. All Municipal Commissioner, Local Bodies, Transport Commissioner, Forest Department and all other concerned departments progress on various projects / measures are discussed and reviewed in the meeting. Specific timelines are given to the agencies for implementation of all measures before onset winter in 2018.

VI. IMPLEMENTATION OF GRADED RESPONSE ACTION PLAN (GRAP) IN DELHI:

The AQMC members had been briefed, that, due to the poor Air Quality Index (AQI), Severe Category of GRAP provisions had been invoked in the month of June, 2018 and during 1st November to 12th Nov, 2018.

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Further, the AQMC members had been informed that based on the directions of EPCA, the provisions of GRAP under Very poor category was invoked from 15.10.2018 till 15.03.2019 with following directions:

- Increasing bus and metro services by augmenting contract buses and increasing frequency of service.
- Increase frequency of mechanized cleaning of road and sprinkling of water on roads. Identify road stretches with high dust generation.
- Residential Welfare Associations and individual house owners to provide electric heaters during winter to security staff to avoid open burning by them.
- Alert in newspaper/TV//Radio to advise people with respiratory and cardiac patients to avoid polluted areas and restrict outdoor movement
- > Stop use of diesel generators sets.

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- > Shut down Badarpur Power Plant as of October15, 2018.
- Take steps to maximize generation of power from existing natural gas based plants to reduce operation of coal based power plants in the NCR.

Besides, the AQMC members had been informed that as directed by EPCA following directions had been issued with effect from 1st Nov 2018:

- All construction activities involving excavation, civil construction (excluding internal finishing/work where no construction material is used) to remain closed in Delhi and other NCR districts from November 1-12, 2018.
- All stone crushers, hot mix plants generating dust pollution to remain closed in Delhi and other NCR districts from November 1-12, 2018.
- All industries using coal and biomass as fuel (excluding thermal and Waste to Energy Plants) to remain closed in Delhi and other NCR districts from November 4-10, 2018. Industries that use natural gas as fuel can continue to operate.
- Transport department/traffic police to intensify checking of polluting vehicles and control traffic congestion in Delhi and other NCR districts during November 1-12, 2018. There should be no tolerance for visibly pollution vehicles. This will require stringent monitoring and on-spot fines for visibly polluting vehicles.

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Intensify patrolling , including night patrolling in industrial areas and other 'hot spots' in the city so that there is complete control on waste burning as well as industrial emissions. EPCA has already brought to your attention that it has found many cases of waste burning and industrial emissions, which is a gross violation of GRAP conditions.

6.

- Intensity efforts for interrupted power supply in NCR towns to avoid requirement of operating DG sets and inconvenience to public.
- Publish in newspapers and disseminate widely the following information for the general public:
 - The need for public to minimize exposure and also advice people to minimize their travel using private vehicles as much as possible.
 - Enumerate and list all actions that have to be taken under GRAP, so that people are informed and can act as stakeholders in the efforts to control pollution.
 - Publish list of penalties that have been imposed and actions taken against people/industries found polluting. This information will provide deterrence and help improve enforcement.

This was followed by EPCA directions for stoppage of Trucks from 8th Nov to 12th Nov 2018. EPCA, in agreement with CPCB task force on 12 Nov 2018, allowed construction activity only during day time between 6 am to 6 pm.

52 joint teams involving SDMs, officers of CPCB, DPCC & Local bodies had been deployed from 1st Nov, 2018 to 10th Nov, 2018. Night patrolling by the Environmental Marshalls were also carried out to prevent garbage/biomass or waste burning etc. Remedial actions on the spot where ever such burning was found was also done

VII. ACTION PLANS/ PROPOSALS OF DELHI GOVERNMENT TO TACKLE THE AIR POLLUTION SITUATION IN DELHI:

The AQMC members had been briefed regarding the action plan/ proposals of the various Government Departments and also by local bodies in respect of following:

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- Mechanical road sweeping
- Water sprinkling using treated sewage water.
- Solid waste management both centralised & Decentralised.
- Plans for remediation of dump sites.
- C&D waste management,
- silt management,
- plantation,

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- Greening & Paving.
- Greening of fly overs and over bridges.
- Greening of open spaces, vertical gardens etc.
- Industrial air pollution control by converting them to PNG.
- Fiscal incentives to the industries, tandoors and hotels & restaurants for conversion into PNG from conventional fuels.
- Various enforcement actions taken by DPCC in respect of dust control and bio mass burning etc by imposing heavy fines.
- Deployment of environmental Marshals in each ward.
- Enforcement actions taken by other agencies.
- Action taken by industries in the non confirming areas.

The detailed action plans in respect of each of these activity is given below in detail:

Augmentation of Solid Waste processing facilities by MCDs:

- By increasing capacity of Waste to Energy Plant from existing 5100 TPD to 10,300 TPD to take care of entire waste by establishing new units /capacity addition at Okhla, Tehkhand, Ghazipur and Bhalaswa.
- By increasing capacity of C & D waste recycling from existing 2650 TPD to 4650 TPD, to take care of the entire C & D waste by establishing new units.
- By establishing smaller facilities to process Bio-degradable waste at decentralized locations of capacity ranging from 1 TPD to 5 TPD.

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Greening of unpaved area:

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 MCDs, NDMC and PWD has plan/ proposals for Greening / paving of central verges / road berms / unpaved.

Water Sprinkling on roads:

 MCDs, NDMC and PWD has plan/ proposals for augment regular water sprinkling on roads before sweeping by deploying sufficient number of water tanker with sprinklers.

Public Transport:

- Procurement of 2000 CNG buses by Transport Department.
- Procurement of 1000 electric buses by Transport Department.
- Last mile connectivity by DMRC The DMRC has contributed a subsidiary company and procuring feeder buses to serve as last mile connectivity in an organized way.
- DMRC is in process of acquiring additional metro coaches.
- Journey Planner app integrating Metro, DIMTS and DTC services
- Ensure that non- destined trucks do not enter Delhi.
- Ensuring compliance of the Toll and Municipal charges for entering of trucks in Delhi.
- · Policy on Promotion and use of e vehicles including buses.

VIII. MEASURES THAT ARE CONTINUOUSLY BEING TAKEN TO CONTROL AIR POLLUTION IN DELHI:

- 1. Monitoring and Action against persons for burning of waste material/garbage in open:- Government has undertaken special drive of inspections to prevent air pollution due to burning of leaves/garbage in open areas.
 - i. To receive the public complaints in order to stop the burning of Garbage/Waste material/ Leaves, Delhi Pollution Control Committee

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(DPCC) has opened "Whatsapp account with mobile number 9717593574" and "9717593501".

ii. Sub Divisional Magistrates (SDMs) along with Tehsildars (Executive Magistrate), Department of Revenue, GNCTD, have been authorized to take action against violations. Penalty is being imposed in accordance with the directions of Hon'ble National Green Tribunal.

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- iii. For prohibition of burning of dry leaves / garbage / plastic etc, Municipal Corporation of Delhi (MCDs)/ Delhi Development Authority (DDA) has been asked that if any violation found, concerned S.O. (Horticulture) and Sanitation Inspection will be held responsible personally and action will be taken against them.
- iv. Other Civic Agencies also have imposed fines in respect of violations found at sites.
- 2. Monitoring and Action against violators of dust control measures:- Govt. has launched special drive to improve air quality by way of enforcing Dust Control Measures by the construction project agencies/ individuals. Area SDMs, Tehsildars, Assistant Engineers of Public Works Development (PWD) and Delhi Pollution Control Committee (DPCC) are regularly inspecting projects for checking the compliance of dust control and levy compensation for violations of dust control measures.
 - i. SDMs alongwith Tehsildars (Executive Magistrate), Department of Revenue, Govt. of NCT of Delhi and Assistant Engineer of Public Works department (PWD) have been authorized to take action against violations. Penalty is being imposed in accordance with the directions of Hon'ble National Green Tribunal.
 - ii. All local bodies and DDA have also been asked to apprise public in general and owners and builders in particular who have got their building plans sanctioned for following dust control measures.

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iii. DPCC has imposed fine on construction projects who have obtained Environmental Clearance (built up area more than 20,000/- sq. Mtrs)

Review meetings have been convened with stakeholder departments/Agencies for prohibition of burning of leaves, garbage, plastic, rubber etc in open and for taking dust control measures at construction sites.

Mechanical Road Sweepers :					
o Existing	48 Nos. (SDMC = 18, North DMC=12, EDMC=10,				
	NDMC=7, DCB=01)				
o New being	12 Nos. (SDMC = 6, North DMC=6)				
procured					
 All existing and new MRS-fitted with GPS Online Schedule is published on respective websites. Online feedback from RWAs and individuals provided on FaceBook & Twitter Third Part Monitoring by TERI 	NDMC:- • GPS are exists in 03 Nos. of existing MRS • GPS to be provide in 04 Nos. newly procured MRS. North DMC: MRS, location and running can be tracked through web link:- <u>https://track.roadpoint.in/login.html</u> <u>https://www.facebook.com/Monitoring-of-Mechanical-Road-</u> <u>Sweepers-in-North-DMC-668310160204472/</u> <u>https://twitter.com/sweeper_road</u> SDMC: <u>http://esbm.mcdonline.gov.in/SWMS/solidwasteDashboard/</u> <u>Dashboard/ms</u> " EDMC: http://solutionsget.in & <u>http://facebook.com/EDMCMRS</u>				
Water Sprinklers / Tankers :					
o Existing	341 Nos (SDMC=132, North DMC=110, EDMC=40, NDMC=14, PWD=44, DCB=01).				
o New being	161 Nos (SDMC = 17, North DMC= 104 nos , EDMC=40)				
procured					

ROAD DUST CONTROL MEASURES:

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Challan	issued/Fine imposed with re	spect to D	ust Control at
construc	tion sites (since 01.01.2018 till 3	30.11.2018)	
S.No	Department	1 0.	ist Control at
		construc	tion sites
1		Challans/	Amount
		Notice	collected
		issued	(Rs.)
1	East Delhi Municipal	3470	47,76,500/- (Deposited)
·	Corporation (EDMC)		2,55,53,500/- (Pending)
	South Delhi Municipal	5191	17,464,200/-
2	Corporation (SDMC)		
_	North Delhi Municipal	447	93,000,00/-
3	Corporation (NDMC)		
4	PWD	62	7,10,000/-
		7 (Cleaning	1,55,50,000/-
5	DPCC	7 (Closure	1,00,00,000
		Direction)	05 54 000/
6	Revenue Department	104	35,51,000/-
7	Delhi Cantonment Board	01	50,000/-
		04	50,000/-
			(Deposited)
8	New Delhi Municipal Council		1,50,000/-
			(Pending)

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3. NGT Orders/Judgments in O.A No 21/2014 regarding air pollution controlaction taken are being complied in coordination with concerned departments and three monthly comprehensive report in compliance to NGT directions is being sent to CPCB.

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- 4. Promotion of Battery Operated Vehicles:- With the view to promote non-polluting e-vehicles, Govt. has announced subsidy schemes for adopting various kinds of e-vehicles such as Two-Wheeler, Four-Wheelers and also e-rickshaws. Owners of newly purchased battery operated 4 wheelers and 2 wheelers are given subsidy by GNCTD, in addition to subsidy by Govt. of India @ Rs 2000-5500 for two wheelers and Rs. 30000/-to1,50,000/- for four wheelers. One time fixed subsidy of Rs. 30,000/- is given to Battery Operated e-rickshaw owner, authorized by Transport Department and registered in the NCT of Delhi.
- Prohibition on bursting of firecrackers: Direction U/S 31(A) of Air (Prevention & Control of Pollution) Act, 1981 read along with Rule 20A of Air (Prevention & Control of Pollution) (Union Territories) rules, 1983 to ban bursting of firecrackers/ fireworks at all times except on religious occasions has been issued on 08.12.2016.

Hon'ble Supreme Court issued directions via order dated 23.10.2018 & subsequent orders in Writ Petition (Civil) No. 728 of 2015 regarding bursting of Firecrackers. DPCC has printed leaflets containing Supreme Court directions in brief for awareness of type of firecrackers allowed and harmful effects of bursting of Firecrackers.

- 6. Imposition of Change on lights and heavy duty commercial vehicles entering Delhi: In compliance with the order dated 09.10.2015 and 16.12.2015 of Hon'ble Supreme Court, Environment Compensation Charge (ECC) is levied on Delhi bound light and heavy duty commercial goods vehicles. Notifications have been issued as per Hon'ble Supreme Court directions.
- Greening of City: As per latest Forest Survey of India report 2017, Green cover of Delhi has increased to about 305.41 sq km from 26 Sq. Km in 1997. The increased green cover also acts as carbon sink. Target of plantation set for 2018-2019 is 32.18 lakhs saplings by all greening agencies of which more than 25 Lac saplings have been already planted.

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8. Environmental Marshalls:

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Department of Environment, Govt. of Delhi has deployed Home Guard (HG) volunteers as Environmental Marshals. 83 home guards have been deployed in wards of three Municipal Corporations. They have been instructed to act as eyes of Environment Dept./DPCC and report the instances of violations. Environmental Marshals have been deployed for night patrolling also.

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Total Cases Reported Dec'17- No Total Violation	13528
Cases Resolved at site	12398
Not Resolved	1130

- 9. Public Awareness conducted by Department of Environment, Govt. of Delhi:-
 - Organized workshops for areas under Jurisdiction of North MCD, South MCD and East MCD on "Prohibition on open burning of any kind of material – A Small Step Targeting Big Impact" respectively at Delhi Secretariat. Workshop was for public awareness and interaction with implementing authorities. The officials from North MCD and South MCD i.e. SI/ASI and horticulture wing participated in the workshop along with RWAs, School/Colleges from the areas under jurisdiction of North and South MCD.
 - Every year Anti-Fire Cracker Campaign is being organised with Eco-Club Schools/Colleges.
 - Public notices have been issued on prohibition on open burning of leaves, waste, garbage etc.
 - Organized workshop for area under Jurisdiction of North MCD on "Dust Control Measures at construction sites to Control Air pollution".

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a) IX. <u>NEW INTITAIVES BY DELHI GOVERNMENT:</u>

i. Green Budget Implementation:

The Government of Delhi has passed a Green Budget where in provisions have been made for providing subsidy to the following:

- Conversion of industries to PNG approved by Cabinet on 04.09.2018.
- Conversion of coal based Tandoors to Gas based approved by Cabinet on 04.09.2018.

Also a real-time source apportionment study in partnership with the University of Washington is proposed and it will carry out near-continuations analysis of factors causing pollution on a regular basis.

A draft RFP is being prepared to provide a dedicated information system showing current levels of pollution by installing 1000 indoor display panels inside all Governments building that are dealing with the public.

ii. Notification issued on Approved Fuel:

The Delhi Pollution Control Committee (DPCC) has issued approved fuel notification on 29.6.2018. As per the notification only approved fuels are permitted to be used which as follows:

- **1.** Petrol (BS VI with 10 PPM Sulphur) as per the Notification of Government of India as amended from time to time.
- Diesel (BS VI with 10 PPM Sulphur) as per the Notification of Government of India as amended from time to time.
- 3. Liquid Petroleum Gas (LPG)
- 4. Natural Gas/Compressed Natural Gas (CNG)
- 5. Aviation turbine fuel
- 6. (a) Firewood for crematoriums and for other religious purposes.

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(b) Wood Charcoal for Tandoors and Grills of Hotels/ Restaurant/ Banquet Halls/ Eating Houses having emission channelization / control system.(c) Wood Charcoal for use in clothes ironing.

- 7. Biogas
- 8. Refuse Derived Fuel (only for Waste-to-Energy Plants)
- **9.** Any other clean fuel notified by the Govt. of NCT of Delhi / Govt. of India, subsequent to this notification.

Note:

- **1.** Besides above, Coal with low Sulphur (less than 0.4%) permitted for use in Thermal Power Plant only.
- All other fuels will be deemed "unapproved" and so disallowed for use in NCT of Delhi.
- **3.** Existing Industries / Units shall convert / switch over from their existing fuels to the above mentioned Approved Fuels within 90 days from the date of issue of this Notification.

The AQMC members have further been briefed about the initiatives at a pilot. R&D scale done by CPCB in respect of the control of air pollution at construction sites and at heavy traffic intersections etc.

- i. At 5 main intersections a device called WAYU with static filters has been installed which will operate in series to suck and control the emissions from the traffic intersection including at ITO junction. This has been awarded by CPCB to NEERI as an R&D study.
- ii. At 3 construction sites in Delhi a dust suppressant is being used as a pilot project by CPCB through NEERI.
- iii. Dynamic filters in buses are also being tried on a pilot basis by CPCB/ MoEF & CC, GOI.
- With the joint collaboration of various Ministries namely, MOEF&CC, MOES, IMD, IITM, CPCB, DPCC etc an advance early warning systems has been launched.

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X. NCR STATES RELATED ISSUES WHICH IMPACT AMBIENT AIR QUALITY OF DELHI:

Following issues as mentioned below specifically relate to NCR states which impact ambient air quality of Delhi:

- The feasibility of providing U-Turn and underpass near borders to turn back the non-destined vehicles trying to enter the city needs to be explored.
- Air quality monitoring stations as set up in Delhi to be set up in NCR with online display of data.
- Local bodies and major construction agencies in Delhi have already been directed to use dust suppression methods on the construction sites to reduce the dust emissions. Delhi Police and Department of Transport have been directed to allow transportation of construction material and demolition waste only in closed and properly covered trucks. The neighboring states must ensure that all the construction sites must undertake the dust suppression methods to control the dust emission from the construction sites. Further, any construction material or construction waste carried to Delhi must be transported in closed or properly covered trucks.
- The practice of burning of paddy stubs in the agricultural zones adjoining Delhi needs to be stopped. Agriculture burning in the NCR and neighboring states is other major contributor of the particulate and other gaseous pollutants in Ambient Air of Delhi. It is pertinent to mention here that from October to January are crucial months for Delhi, as with onset of winter, concentration of particulate and gaseous pollutants increase significantly. Agricultural fire in Punjab & Haryana is a major cause, the Aqua satellite of NASA had taken the image and shared it in public domain. The images show the cloud of ash spreading almost in the northern belt and especially on Delhi.

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Though, stringent steps have been taken/being taken by Delhi Govt. for reducing air pollution in Delhi, there is an urgent need that NCR states also take similar steps as taken by Govt. of Delhi.

The AQMC members have been briefed regarding the steps taken by the Government of India for control of Agricultural residue burning in the NCR states. The scheme of subsidy for purchase of a Happy Seeder machine and also for providing subsidy for mulching machine.

XI. THE ACTION PLANS SO FAR BEING IMPLEMENTED:

(1) <u>The action points of CAP (Comprehensive Action Plan) for Air</u> <u>Pollution Control in Delhi & NCR (Annexure I):</u>

Air Quality Monitoring

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- DPCC has set up 26 real time monitoring stations apart from 14 air quality monitoring stations that are operated by Central Pollution Control Board (CPCB) and Ministry of Earth Sciences (MoES) with continuous relay of information.
- A real-time source apportionment study in partnership with the University of Washington is proposed and it will carry out near-continuations analysis of factors causing pollution on a regular basis.
- RFP is being prepared to provide a dedicated information system showing current levels of pollution by installing 1000 indoor display panels inside all Governments building that are dealing with the public.
- NCR-wide air quality monitoring expansion
- Undertake satellite-based monitoring for tracking and enforcing agriculture
 waste burning

Action to reduce vehicular emissions

Ensure on-schedule implementation of BS VI fuel and emission standards
 Page 24 of 33

Action on Dieselization

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- Expand CNG programme across NCR
- Introduce battery-operated vehicles
- Install vapour recovery systems in fuel refuelling outlets to reduce benzene emissions in NCR
- Auditing of Pollution under Control (PUC) certification centres
- Tighten PUC norms for post 2000 vehicles. Upgrade in-use emissions testing for diesel vehicles.
- Implementation an on-board diagnostic system fitted in new vehicles inspection.
- Link PUC certificates with annual vehicle insurance to ensure 100 per cent compliance
- Enforcement of law against visibly polluting vehicles.
- Delhi to review and upgrade Burari commercial vehicle testing centre
- Ensure requisite infrastructure for hydro testing of CNG cylinders in Delhi and NCR
- Divert truck traffic
- Check overloading
- Fast track construction of Western and Eastern Peripheral Expressways
- Inter-state freight transport plan
- Fuel quality: Prepare an action plan to check fuel adulteration and random monitoring of fuel quality data.

> Strategies to reduce vehicle numbers on roads

- Improvement in bus numbers and services
- Implement the recommendations of Route Rationalization Report of GNCTD
- Reform of DTC and Cluster Bus Operations modernize fleet and crew scheduling process of DTC, install GPS units on DTC buses and create a traffic control cell for monitoring bus movement, rationalize scheduling of buses under DTC and cluster scheme

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- IT system in buses, bus- stops and control centre and passenger information systems for reliability of bus services, and service monitoring
- Bus parking should be made integral to urban planning. Multi-level bus parking to be provided in depots to more efficiently use available land area.
- Need bus fare policy to ensure that it is affordable and remains competitive vis-avis the operational cost of two- wheelers.
- Enforce bus lanes and keep them free from obstruction and encroachment
- Augmenting the service of Metro for carrying more passengers

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- Three-wheelers: Implement electro-mobility for three-wheelers to make them zero emission as efficient feeder system for last mile connectivity and integration with bigger public transport systems. Organise their services for efficient deployment.
- BRTS / LRTS to be implemented in targeted high frequency routes and complemented with bus services with proper integration of routes, stations and terminals
- Fare integration and common ticketing; bring ETVMs into all DTC buses. Common mobility cards to be the mandatory access card for buses
- Implementation of multi- modal integration plan for bus-Metro IPT-NMT at key/ all interchange points
- Demarcation and development of Influence Zones around Metro stations as per MPD-2021 to improve access to the public transport system
- Proper regulations and organization including providing driver-training, certification, etc. for cab and auto-rickshaw drivers
- NCR connectivity for public transport need bus and Metro plans
- Rationalize entry taxes in NCR under the NCR reciprocal agreement to lower costs of travel by public transport
- Integrate ITS in bus systems in cities in NCR (automated vehicle location, passenger information system, fare collection system)
- Regional Rapid Transit System (RRTS) integrated with local transit systems should be implemented to provide seamless connectivity between regional and sub-regional centres of NCR

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- Integrated passenger terminals to be created with mixed use and multi- modal facilities for passenger comfort, integrating regional and local public transit systems
- Implement traffic impact assessment of infrastructure project for planning and management
- Non- Motorized transport (NMT) network
- Parking policy to reduce congestion and pollution
- Enforcement and Management
- Parking pricing and penalty
- Traffic management

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- Introduce early alarm system during traffic congestion for the benefit of commuters on major routes, to facilitate route diversion
- Consider introducing plan for flexi / staggered timings to minimize peak movement of vehicles on-roads.
- Synchronize traffic movements / introduce intelligent traffic systems for lanedriving
- Formulate action plan for controlling decongestion of fuel stations including • increasing the number of dispensing machines.
- Electronic monitoring of traffic violations
- Examine existing framework for removing broken down buses / trucks from roads and create a system for speedy removal and ensuring minimal disruption to • traffic from such buses/ trucks.
- Conduct audit of traffic intersections and install functional traffic signals at all major intersections in all NCR cities.
- Conduct review of traffic signalling system at all intersections in Delhi / Noida and Gurugram and other NCR towns that are traffic hotspots and bring requisite changes to reflect the traffic movement pattern at intersections.
- Enforce lane driving through heavy fining as in Mumbai

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Power plants and industries

- Permanent closure of Badarpur Power Plant after commissioning of the Tughlakabad sub-station or move towards cleaner natural gas. (Badarpur Power Plant closed permanently w.e.f. 15.10.2018)
- Closure of Badarpur during peak winter months when Graded Response Action Plan is in force. (Badarpur Power Plant closed permanently w.e.f. 15.10.2018)
- Monitoring of fly ash pond at Badarpur, particularly during summer months to control fugitive dust.
- Plan for site restoration of over 60 ha fly ash pond of Badarpur
- Time-bound action based on plan for restoration of fly ash pond land area.
- Move to full utilization of the cleaner natural gas- based Bawana station for power supply to Delhi.
- Progressively close the older and more polluting thermal power plants in NCR and to move to cleaner natural gas.
- Urgent ban on furnace oil, pet coke, which are dirty industrial fuels with high sulphur and heavy metals.(Govt. of Delhi issued notification for approved fuel in Delhi in June, 2018)
- Strict enforcement against illegal use of such fuels, including fuels which do not have specifications laid down or are included in the acceptable fuels as mandated by state pollution control boards.
- Strict enforcement of Air Pollution Control Measures in all industries includes those located in unauthorized areas.
- Stop unrestricted import of such fuels, which are high in pollution because of high Sulphur or toxins
- Ensure that the sale, transportation and distribution of such fuels follows CMVR strictly for hazardous goods and ensure that there is no sale in restricted regions.
- Ensure calibration and working of Continuous Emission Monitoring System (CEMS) in all industries in NCR and provide information to monitoring agencies to begin and work out how this information can be provided to public as this will ensure that the system is operational.

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Brick-kilns

 Convert all brick kilns to zigzag technology – from natural draft kilns to induced-draft kilns (zigzag technology)

Incinerators

- Implementation emission norms for incinerators and examine the feasibility of less polluting alternatives.
- Implement CEMS for incinerators and provide data on emissions on an open platform progressively
- Develop a siting policy for biomedical incinerators.

Waste-to-Energy plants

- Strict implementation of emission norms, use state of the art technology and provide emission data to State Pollution Control Boards
- Develop a sitting policy for waste to energy plants

Generator sets

- Ensure that only those DG sets that meet the standards are allowed to operate.
- Operating time of DG sets should be regulated according to graded action plan.
- Only approved fuel should be allowed
- Non-usage of DG sets in social events as per graded action plan
- Alternate power systems should be promoted in cell towers, and use of DG sets discouraged

> Open burning (including solid waste and agricultural residues)

- SC order dated 16.12.2015 has directed a complete ban on garbage burning in the entire NCR region
- Ensure proper collection of horticulture waste (biomass) and composting-cumgardening approach; municipal zonal offices should be responsible for controlling burning of leaves and garbage on roads / parks.

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 Implement citizen reporting app -- reporting of garbage / municipal solid waste burning through mobile- based applications and other social media platforms linked with Central and state-level control rooms for accountability

Regional problem and Biomass Burning

- Ensure strict enforcement of ban on burning of agriculture waste and crop residues in Punjab and Haryana.
- To increase subsidy for purchase of equipment that eliminates the need for burning stubble and straw.
- Enforce the series of directives from the Hon'ble Supreme Court and NGT on ban on agricultural burning and recycling and reuse of this waste.

Episodic events

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• Fire crackers -- Implement and monitor the SC order of September 12, 2017 & its subsequent orders in Oct, 2018.

Domestic chulha burning and open eateries

- In slums and low-income neighbour hoods, as well as roadside eateries/dhabas/ restaurants etc promote and give access to LPG and electricity. Link commercial license to clean fuels.
- Prohibit use of coal in hotels and restaurants, eliminate use of kerosene for cooking in NCR and incentivize move to LPG.
- A targeted programme can be developed with the Union Ministry of Petroleum and Natural Gas for wider distribution of LPG.

> Control measures of Road Dust

- SC direction dated December 16, 2016 has directed repair and building of pavements and vacuum cleaning of roads.
- Enforcement of air pollution control in concrete batching (use of water spray and wind breakers, bag filter at silos and enclosures, hoods, curtains etc)

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Control measures for construction dust

- SC order dated 16.12.2015 directed the Delhi Govt. to ensure measures are taken to mitigate dust pollution from construction
- For material handling and construction demolition, it should be obligatory on part of the developers to provide evidence of debris disposal at designated sites.
 Promote recycling of construction material

(2) The action points of GRAP (Graded Response Action Plan) (Annexure II):

- The GRAP was notified by MoEF & CC, Gol on January 12, 2017
- To be Enforced / Monitored by EPCA
- Task Force constituted in CPCB review air quality status, suggest additional measures during Severe + days, area specific local plans;
- Actions under moderate to poor to continue throughout the year
- Very poor and Severe category actions during winter months.
- Emergency actions after 48 hours of persistent severe plus situation.

Range of PM_{10} and $PM_{2.5}$ as per the ambient air quality:

Stage	PM10	PM2.5
Good	<100	<60
Moderate to Poor	101-350	61-120
Very Poor	351-430	121-250
Severe	430-500	250-300
Severe +	>500	>300

Stage-wise Action required to be taken by various Agencies

Stage: Moderate to Poor

- Stop Garbage Burning.
- Strict enforcement by PCBs in Industries.

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- Strict enforcement in Thermal power plants.
- Mechanized sweeping of roads.
- Water sprinkling on unpaved roads.
- · Strict enforcement of vehicular pollution norms and imposing fines.
- Dust control enforcement in construction activities.
- Additional traffic Police deployment for smooth flow of traffic.
- Diversion of non destined trucks.
- Enforcement of ban on fire crackers.
- Watering of fly ash ponds.
- Information dissemination and public participation.

Stage: Very Poor

- Increased frequency of Mechanized road sweeping and water sprinkling especially in hotspots.
- Stop use of DG Sets.
- Enhancement of parking fees by 3 to 4 times.
- · Increasing the bus and metro services.
- Ban on coal and firewood burning in hotels and eateries.
- Involvement of RWAS for providing electric heaters to security to reduce the garbage/Leaf burning.
- Public advisory in the media regarding ill effects of Air Pollution and to remain indoors.

Stage: Severe

- Increased frequency of Mechanized road sweeping and water sprinkling especially in hotspots.
- Closing of brick kilns, hot mix plants and stone crushers.
- Shutting down of BTPS.
- Intensify public transport services.
- Introduce differential rates to encourage off peak travel.

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Stage: Severe plus

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- Stop entry of truck except carrying essential goods.
- Stop all construction activities.
- Introduction of odd-even scheme for private vehicles.
- Consider in task force to close down of schools.

XII. CONCLUSIONS

In compliance to order OA 681 of 2018, Air Quality Monitoring Committee (AQMC) meeting held under the Chairmanship Pr. Secretary (Environment), GNCTD on 16.11.2018. Both CAP and GRAP are being implemented in Delhi along with 41 directions issued by CPCB under Air Act (Annexure III) by various implementing agencies for controlling air pollution in Delhi, mandatorily. All the above stated action plan/ directions cover all the aspects/ steps to be taken to control air pollution. In view of this, preparation of another action plan with respect to Delhi will be a duplicate exercise and may not be desirable for Delhi as the implementation of these plans is being monitored at different levels at Government of Delhi, by EPCA, CPCB, MOEF&CC, GOI and by Pr. Secretary to Prime Minister.

MOST URGENT/NGT MATTER

Department of Environment Govt. of NCT of Delhi 6th Level, C-Wing, Delhi Secretariat, I.P. Estate, New Delhi -110002 Tele: 23392306 Fax: 23392029

F. DPCC/(10)(10)/(....)/Leg 18/7025-7033

Date: 14/11/18

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OFFICE ORDER-CUM-MEETING NOTICE

Sub: Constitution of Air Quality Monitoring Committee (AQMC) in respect of Delhi in Compliance to the directions of the Hon'ble NGT contained in the order dated 08.10.2018 passed in OA No. 681/2018 in the matter of: NEWS ITEM PUBLISHED IN THE TIMES OF INDIA AUTHORED BY SHRI VISHWA MOHAN Titled "NCAO with Multiple Timelines to clear Air in 102 Cities to be released around August 15"

The directions of the Hon'ble Tribunal as contained in the above order said are reproduced below:

15..... issue direction as follows:

- i. All the States and Union Territories with non-attainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans.
- ii. The Action Plans may be prepared by six-member committee comprising of Directors of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board or Committee of the concerned State. The Committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring intra-sectoral co-ordination.
- iii. The Action Plans may take into account the GRAP, the CAP and the action plan prepared by CPCB as well as all other relevant factors. The Action Plans may be forwarded to the CPCB by 31.12.2018. The same may be placed before the Committee as directed in direction no. vi. The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning, agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc. The action plan shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes.
- iv. The Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.
- v. The Action Plan should be consistent with the carrying capacity assessment of the nonattainment cities in terms of vehicular pollution, industrial emissions and population density,

Page 1 of 3

extent of construction and construction activities etc. The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating number of vehicles and their parking and plying, population density, extent of construction and construction activities etc. Guidelines may accordingly be framed to regulate vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment.

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- vi. The Committee comprising of (a) Shri. Prashant Gargava, Member Secretary, CPCB, (b) Dr. Mukesh Khare, Professor, IIT Delhi, and (c) Dr. Mukesh Sharma, Professor, IIT Kanpur shall examine the Action Plans and on the recommendations of the said Committee, the Chairman, CPCB shall approve the same by 31.01.2019.
- vii. The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate Action Plans, as directed.
- viii. The CPCB, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS.
- The CPCB and all the State Pollution Control Boards and Pollution Control Committees shall ix. collectively workout and design a robust nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities/towns. The scope of monitoring should be expanded to include all twelve (12) notified parameters as per Notification No B-29016/20/90/PCI-L dated 18th November, 2009 of CPCB. The continuous Ambient Air Quality Monitoring Stations (AAQMS) should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite action plan with timelines for its execution which shall not be more than three months. It is expected that all such AAQMS shall be connected to central server of CPCB for reporting analysis of results in a form of Air Quality Bulletin for general public at regular intervals atleast on weekly basis and ambient air quality on continuous basis on e-portal. MoEF&CC will provide requisite funds for the purpose. MoEF&CC in consultation with Ministry of Housing and Urban Affairs, MoRTH, Ministry of Petroleum and Natural Gas, Ministry of Agriculture, Cooperation and Farmers Welfare or any other Ministry to lay down such guidelines as may be considered necessary for improvement of air quality in the country.
 - 16. A copy of this be sent by e-mail to all the concerned i.e. Ministries of Environment, Forest & Climate Change, Housing and Urban Affairs, Road Transport and Highway, Agriculture, Petroleum and the Chief Secretaries of all the States and Union Territories for compliance.
 - 17. We understand that some of the Zonal Benches of the National Green Tribunal have also passed directions on the subject of Ambient Air Quality and the States in those Zones are in the process of implementation of such directions. Specific reference may be made in this regard to judgement dated 11.08.2016 in O.A No. 33/2018/EZ in the matter of Subhas Datta v. State of West Bengal & Ors. We make it clear that this order shall not be considered as an impediment to those actions

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but as an addition or supplement thereto for achieving the object of this order at the macro level and of the said order at the micro level in the concerned cities.

- 18. Needless to say, that order of National Green Tribunal is binding as a decree of Court and noncompliance is actionable by way of punitive action including prosecution, in terms of the National Green Tribunal Act, 2010.
- 19. The CPCB may compile the data and furnish the same to this Tribunal by email at filing.ngt@gmail.com on or before 15.2.2019.
- 20. Put up for consideration in the last week of February, 2019.

Accordingly, as per para 15 of the above said order, a six member Air Quality Monitoring Committee (AQMC) comprising of Directors or Officers of equivalent rank of the following Departments is being constituted for NCT Delhi:

- 1. Department of Environment, GNCTD
- 2. Transport Department, GNCTD
- 3. Industries, GNCTD
- 4. Urban Development, GNCTD
- 5. Agriculture, GNCTD
- 6. Member Secretary, Delhi Pollution Control Committee (DPCC)

AQMC will prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans as per directions contained in the order. AQMC will function under the overall supervision and coordination of Principal Secretary, (Environment), Department of Environment, GNCTD. This may be further supervised by the Chief Secretary, Delhi. AQMC have to forward the Action plan to CPCB by 31.12.2018.

This is issued with the approval of Chief Secretary, Delhi.

First meeting of the Committee is to be held on 16.11.2018 at 4:30 PM under the Chairmanship of Principal Secretary (Environment) in Conference Room of Department of Environment, 6th Floor, C Wing, Delhi Secretariat.

S.M. Ali Spl. Secretary (Environment)

To:

- 1. Pr. Secretary, Department of Urban Development, GNCTD
- 2. Pr. Secretary, Department of Industries, GNCTD
- 3. Commissioner, Transport Department, GNCTD
- 4. Secretary cum Commissioner, Development Department, GNCTD
- 5. Member Secretary, Delhi Pollution Control Committee (DPCC)
- 6. Director, Department of Environment, GNCTD

Copy for kind information to:

- 1. Chairman, Central Pollution Control Board
- 2. Bc.Secretary (Environment)-Cum-Chairman DPCC, Department of Environment, GNCTD
- 3. OSD to Chief Secretary, Delhi

DEPARTMENT OF ENVIRONMENT

GOVT. OF NCT OF DELHI, 6TH LEVEL, C-WING DELHI SECRETARIAT, NEW DELHI-110002 Tel: 23392034

F. DPCC/(10)(10)/(....)/Leg 18/7360-7372

Date- 고기॥॥

MINUTES OF MEETING

Minutes of the meeting of Air Quality Monitoring Committee (AQMC) held under the Chairmanship Pr. Secretary (Environment), GNCTD on 16.11.2018 in respect of Delhi in Compliance to the directions of the Hon'ble NGT contained in the order dated 08.10.2018 passed in OA No. 681/2018 in the matter of: NEWS ITEM PUBLISHED IN THE TIMES OF INDIA AUTHORED BY SHRI VISHWA MOHAN Titled "NCAO with Multiple Timelines to clear Air in 102 Cities to be released around August 15"

Meeting of Air Quality Monitoring Committee was held on 16.11.2018 under the Chairmanship of Pr. Secretary (Environment), GNCTD at Delhi Secretariat. The list of participants is at Annexure – I.

- The meeting was attended by Secretary (Development Department), representing Agriculture Department GNCTD, Member Secretary (DPCC), Director (Environment), GNCTD, Dy. Commissioner (Transport Department), GNCTD and Senior Officers from Industry department/DSIIDC.
- II. Director (Environment) briefed the Committee about the order of Hon'ble NGT dated 08.10.2018 and apprised that Action Plan is to be prepared within 2 months from the date of order aiming at bringing the standard of air quality within permissible norms within 06 months from date of finalization of the action plan and to be forwarded to Central Pollution Control Board (CPCB) by 31.12.2018.
- III. The said Action Plan is to be prepared as per order of Hon'ble NGT and will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning, agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc. The action plan shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes. The Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.

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After discussing the order of Hon'ble NGT in detail the AQMC Chaired by Pr. Secretary (Environment), GNCTD decided the following:

 Department of Environment/Delhi Pollution Control Committee will prepare the draft Action Plan by taking into account the GRAP, CAP, 41 direction issued by CPCB and other plans and will send to all the Members of the Committee and other Stakeholder Departments by <u>30th November, 2018</u> for obtaining their comments.

(Action: Dept. of Environment/DPCC)

C/26

 All the Members of AQMC and other Stakeholder Departments will send the comments positively by <u>10th December, 2018</u> to Department of Environment for finalization of Action Plan.

(Action: All Members of the AQMC and other Stakeholder Departments)

3. Department of Environment/ Delhi Pollution Control Committee will finalize the Action Plan and put up for the approval of Chief Secretary, Delhi by <u>20th</u> <u>December, 2018.</u>

(Action: Dept. of Environment /DPCC)

 After the approval of the Chief Secretary, Delhi the Department of Environment will submit the finalized Action Plan to CPCB by <u>25th December</u>, 2018.

(Action: Dept. of Environment /DPCC)

Meeting ended with a vote of thanks to the Chair.

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Dr. Anil Kumar Director (Environment)

<u>To:</u>

IV.

- 1. Pr. Secretary, Department of Urban Development, GNCTD
- 2. Pr. Secretary, Department of Industries, GNCTD
- 3. Commissioner, Transport Department, GNCTD
- 4. Secretary cum Commissioner, Development Department, GNCTD
- 5. Member Secretary, Delhi Pollution Control Committee (DPCC)
- 6. Director, Department of Environment, GNCTD
- 7. Sh. Tarun Kapoor, Dy. Commissioner, Transport Department, GNCTD
- 8. Sh. S. K. Singh, Advisor, DSIIDC, GNCTD
- 9. Sh. Vinod Kumar, Dy. Commissioner, Department of Industries, GNCTD

Copy for kind information to:

- 1. Chairman, Central Pollution Control Board
- 2. Secretary (Environment)-Cum-Chairman DPCC, Department of Environment, GNCTD
- 3. OSD to Chief Secretary, Delhi
- 4. PA to Special Secretary (Environment), GNCTD

Page 2 of 2

ATTENDANCE SHEET

Sub: Meeting convened under the chairmanship of Pr. Secretary (Environment), GNCTD, for constitution of Air Quality Monitoring Committee (AQMC) in respect of Delhi in Compliance to the directions of the Hon'ble NGT contained in the order dated 08.10.2018 passed in OA No. 681/2018 in the matter of: NEWS ITEM PUBLISHED IN THE TIMES OF INDIA AUTHORED BY SHRI VISHWA MOHAN Titled "NCAO with Multiple Timelines to clear Air in 102 Cities to be released around August 15'

Date: 16.11.2018

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Time: 4:30 PM

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S. No.	Name of Officor	Designation	Telephone Number	E-mail ID	Signature
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COMPREHENSIVE ACTION PLAN FOR AIR POLLUTION CONTROL IN DELHI & NCR

 Source-wise clean air action plan and compliance strategy for Delhi and NCR to meet clean air standards

2.1 Air quality monitoring

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S. No.	Action points	Agency responsible	Timeline of EPCA for Implementatio n	Decision during the Meetings in MoEF&CC
2.1.1	DPCC to set up 20 more real time monitoring stations: The grid plan should be representative of population distribution and land use including residential, commercial, industrial, roadside and sensitive areas. Delhi currently has 28 real time air quality monitoring stations that are operated by Central Pollution Control Board (CPCB), Delhi Pollution Control Board (CPCB), Delhi Pollution Control Committee (DPCC), and Ministry of Earth Sciences (MOES) with continuous relay of information. These include 10 manual stations and 18 real time stations.	Departmen t of Environmen t (DOE), Delhi Pollution Control Committee (DPCC)	Done	Agreed
2.1.2	NCR-wide air quality monitoring expansion: The SC order of 2.12.2016 has directed CPCB to expand	Central Pollutio n Control Board (CPCB)	Rajasthan: Done Uttar Pradesh: December	Rajasthan: N.A UP: February 2018
	monitoring in the NCR. Accordingly, CPCB has submitted a plan	State pollutio n	2017 Haryana: January 2018	Haryana: January 2018

2.1.3	Response Action Plan as directed by	EPCA, Task Force under	Ongoing. Has been enforced	Agreed
2.1.3	on big diesel cars for installing monitoring stations and a Central Control Room for operational control and reporting in Delhi NCR. This is as per the plan submitted by CPCB. Enforce Graded	EPCA, Task	Ongoina	Agreed
	 Uttar Pradesh has manual and 1 real time monitoring stations with one each in Ghaziabad and Noida. Real time stations will be set up by March 2017. TheUP State Pollution Control Board will set up 6 manual and 8 real time stations. 2. Haryana has 4 real time stations and will set up 13 more real time and 22 manual stations; 3. Rajasthan has 9 manual stations; are under installation, which will be completed by March 2017. The Hon'ble SC, vide its order dated 06.02.3017, has directed utilization of Rs2.5 crore from the fund created from Environment Protection Charge an big diagal ages face 			
	to the Hon'ble Court. This includes	control boards in NCR		

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	the Hon'ble Supreme Court and notified by the	СРСВ	during 2017 and	
	Ministry of Environment, Forests		helped to bring down severe	
	and ClimateChange		levels of pollution	
2.1.4	Undertake satellite- based monitoring for tracking and enforcing agriculture waste burning	State governmen ts , CPCB	Ongoing during crop burning season each year	Agreed
2.1.5	Research studies including air pollution inventory, source apportionment, health impact studies, exposure impacts and other relevant studies: Govt. to support researchworks / scientific studies by academic / research institutions. Expertise will be sought from various institutions to develop protocols for assessment of the research proposals	Environme nt departmen ts and state boards in NCR	Ongoin g(CPCB to give progress every 3 months)	Agreed

2.2 Action to reduce vehicular emissions

S. No.	Action points	Agency responsible	Revised timeline for implementation	Decision during the Meetings in MoEF&CC	
	EMISSION AND FUEL QUALITY FOR NEW VEHICLES				
2.2.1	Ensure on- schedule implementation of BS VI fuel and emission	State transport departments, Ministry of Road Transport and Highways		Decision pending with Hon'ble court.	

1	Street on Sold Street S			
		standards, including early delivery of BS VI fuel for vehicles to modify technologies. Ensure registration of only BS IV vehicles from April 1, 2017 and only BS VI- compliant vehicles from April 2020 Supreme Court order of March 29, 2017 has directed that no vehicle that is not BSIV compliant can be registered from April 1, 2017. Any BSIII vehicle that comes for registration will have to provide the proof of sale before March 31, 2017	(MORIH) and Ministry of Petroleum and Natural Gas (MOPNG)	
	2.2.2	Action on dieselization: The SC order dated 12.8.2016 has imposed an environment pollution charge of 1% on registration of diesel vehicles with 2,000 cc and above. A fund has been created from	СРСВ	Decision pending with Hon'ble court.

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		fund pollution controlefforts.			
		Tax measures			
		are needed to			
		nullify			
		incentives for			
		diesel cars			
\vdash	0.0.0	over petrol cars.			
	2.2.3	Expand CNG	MOPNG, GAIL		MOPNG to
		programme	/ IGL	December	provide plan for further
		across NCR: The SC orders		2015 to	expansion of
		dated		current, the number of	CNG across
		16.12.2015,		CNG stations	NCR by end
		5.1.2016 and		has	of January
		10.5.2016 have		increased.	2018.
		directed CNG		Another 92	
		stations to be		stations have	
		set up across		been added	
		NCR and taxis		across NCR.	
		to			
		convert to CNG.		MoPNG to	
		NCR to expand CNG bus and		provide a plan for	
		auto fleets (see		further	
		agenda on		expansion	
		public		and for use in	
		transport).		buses and	
				public	
				transport,	
				including	
				removal of	
				fiscal	
				distortions that are	
		•		barriers to	
				fast adoption	
				of this fuel as	
				against diesel.	

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2.2.4	Introduce	DOE &	MoRTH to	The issue of
	battery-	DPCC, SPCBs,	submit plan	e- mobility is
	operated	Transport	within 3	under
	vehicles in	Dept,	months with	discussion in
	targeted	municipal	deliverables,	NITI Aayog
	segments of	bodies,	focus on	and group
	two-wheelers,	Discoms	speedy	of
	three-wheelers		implementa	Secretaries.
	and buses. Plan		tion to	This may
	infrastructure for		target 3	take some
	charging and		wheelers	more time.
	battery		and buses	MoRTH has
	disposal.		and feeder	issued
	Identify and		services like	enabling
	notify		taxis, metro-	regulations
	commercial		feeder and	already.
1	areas in cities		to provide	State
	with high		NCR-wide	government
	footfalls and		charging	of Delhi and
	good public		infrastructur	those of
	transport and		е.	NCR states
	goods transport			should
	connectivity		Plan by	prepare the
	that can be		February 28,	plan within
	pedestrianized,		2018	one (1) month for
	supported by			
	zero emission			speedy
	battery-			implementa
	operated			tion, as per MoRTH
	vehicles: Priority			regulations.
	may be			regulations.
	accorded to			
	battery-			
	operated para- transit as			
	feeders and for			
	last mile			
	connectivity in			
	such areas.			
	Ensure			
	organized			
	deployment to reduce			
	congestion.			

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2.2.5	Install vapour recovery systems in fuel refueling outlets to reduce benzene emissions in NCR. CPCB has issued direction for installation of stage I and Stage I vapor recoverysystem in all retail outlets with capacity 3000 klm and more in 46 million plus cities by December 2017. In Delhi and NCR all retail outlets should complywith this.	MOPNG, Transport Dept., state boards, DOE	May 2018 (6 months from approval of plan)	Agreed
2.2.6	Auditing of Pollution under Control (PUC) certification centres The SC orders dated 25.11.2016, 2.12.2016, 17.1.2017 and 06.02.2017 have directed the government and EPCA to audit stations in Delhi- NCR and suggest improvements.	ON-ROAD VEH State departments of transport in Delhi and NCR	ICLES In its order of August 10, 2017 Hon'ble Court has already given directions to MoRTH on this. MoRTH to provide compliance report to Hon'ble Court on implementatio n of its directions by December 10,	MORTH has already issued directions to states. Compliance from State Governments expected by 31stJanuary 2018
2.2.7	Tighten PUC norms for post- 2000 vehicles.	Ministry of Road Transport and Highways	2018. Hon'ble Court has in the October 11, 2017	Noted

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	Upgrade in-use emissions testing for diesel vehicles.		order directed ARAI (Automotive Research Association of India) to give report on this matter within 8 weeks to EPCA.	
2.2.8	Implement an on-board diagnostic system fitted in new vehicles for vehicle inspection. Improve facilities for its implementation	Ministry of Road Transport and Highways Department of Transport, NCR	The Union has to revert back on the proposal for hand-held scanners to verify the functioning of OBD system and the plan proposed by the Hon'ble Court (vide its order dated October 11) to phase in the introduction, starting Grade A cities. MORTH	Affidavit already filed by MoRTH in SC. Further direction of SC are awaited.
2.2.9	Link PUC certificates with annual vehicle insurance to ensure 100 per cent compliance.	MORTH, Transport Departme nt, IRDA (Insurance Regulatory and Development Authority)	Done. In its order of August 10, 2017 Hon'ble Court has already given directions to MoRTH on this. MoRTH to provide compliance report to Hon'ble Court on implementatio n of its directions by December 10, 2018. MORTH	MORTH has already written to LIC and IRDA.MORTH to provide compliance by 28 th February 2018.

2.2.10	Enforcement of law against visibly polluting vehicles: impose penalty, launch extensive awarenessdrive against polluting vehicles.	Department of Transport, GNCTD, Rajasthan, UP, Haryana	Ongoing	Agreed
2.2.11	Delhi to review and upgrade the Burari commercial vehicle testing centre.	Transport Departme nt, Delhi	February 28, 2018	Commercial Vehicle Testing Centres coming up immediately in Jhuljhuli. 4 such other centres coming up in 6 months. Burari is still pending approval.
2.2.12	Ensure requisite infrastructure for hydro testing of CNG cylinders in Delhi and NCR.	State transport departments, Ministry of Petroleum and Natural Gas	February 28, 2018	This is a safety issue and is having monitored as part of Delhi Govt. Action Plan

	T	RANSIT TRUCK TRAFFIC	C	
2.2.13	Divert truck traffic: SC orders dated 9.10.2015, 16.12.2015 and 5.1.2016 directing diversion of non- destined trucks and imposition of ECC on incoming trucks. SC order for installation of RFID system in Delhi: As per the orders dated 9.10.2015, 5.1.2016 and 22.8.2016, the SDMC is tendering for RFID for 13 entry points, which account for 80% of commercial traffic into Delhi. The system will be commissioned before next winter.	Delhi Transport Department and Municipal Corporation of Delhi	Ongoing	Agreed. Turn around facility will be provided on priority basis in Badarpur, Kundli, Tikri, Gurgaon, NH24. NHAI and PWD will give timelines for the same.
2.2.14	Check overloading: The SC order dated 5.1.2016 directing for weigh-in- motion bridges / machines (WIM) at entry points to Delhi. NHAI has commissioned 60 WIM at 6 toll plazas for entry into Delhi. However, implementation of its penalty, which is 10 times of applicable rate for over-loaded vehicles, is lagging.	NHAI to commission WIMS and enforce at all entry points	February 28, 2018	Agreed

2.2.15	Fast track			
	construction of	NHAI	NHAI and	Both express ways
	Western and	schedule for	Haryana	would be open to
		EPE is mid-	government	public by April, 2018
	Eastern Peripheral	2018	to come	
	Expressways: Take		back to	
	steps to expedite	Haryana	Hon'ble	
	early completion	governme		
	of the Expressways	nt	Court on	
	and submit a		expediting	
	completion	schedule	schedules in	
		for WPE is	next hearing	
	schedule.	mid- 2019	on	
	SC orders dated		December 6,	
	11.2.2005,		2017.	
	11.3.2005,		2017.	
	1.8.2005 and			
	31.3.2016 on			
	building /			
	Upgrading			
	alternative bypass			
	roads. The EPE is			
	on schedule for			
	completion in July			
	2018 and one			
<i>x</i> .	stretch of WPE has			
	been			
	commissioned.			
	The EPCA has			
	given a report on			
	existing alternative			
	routes that need			
	upgradation. This			
	is also being			
	pursued with			
	MoRTH and			
	NHAI.			
2.2.16	Inter-state freight	Transport	Submission	MOUD to
2.2.10	transport plan:	Department	of plan by	coordinate with
		to coordinate		
	Submit plan for		February 28,	State Government
	inter- and intra-	with NCRPB	2018	and railways and
	state transport	and Railway		submit plan with
	sector for short	Ministry		one (1) month.
	term, mid-term			
	and long term			
	action points to			
	improve rail-based			
	freight traffic to			
	reduce			
	dependence on			
	trucks.			
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2.2.17	Fuel quality:	MOPNG	February 28,	Agreed
	Prepare an action plan to check fuel		2018	
	adulteration and		÷	
	random			
	monitoring of fuel			
	quality data. The MoPNG has set up			
	a fuel testing			
	laboratory, based			
	on previous SC			
	directions. To review its			
	operations and to			
	ensure that fuel			
	testing is done across NCR for all			
	combustion			
	fuels.			

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2.3 Strategies to reduce vehicle numbers onroads

S. No.	Action points	Agency responsible	Revise d timelin e for implem entatio n	Decision during the Meetings in MoEF&CC
	PUBLIC TRANSPORT ST	RATEGIES		
2.3.1	Improvement in bus numbers and services. SC orders dated 27.7.1998 and 5.1.2016 directing Delhi government to abide by SC direction to augment to 10,000 buses by 2000 and the Union to provide land for bus depots.	Delhi Transport Department, DTC, DIMTS, DDA	Delhi government must ensure total compliance with order of 1998 and 2016 by December 2018. This requires a total fleet of at least 10,000 buses	Agreed
2.3.2	Implement the recommendations of Route Rationalization Report of GNCTD. Improve availability by rationalizing routes and fleet enhancement with requisite modification	Delhi Transport Department, DTC and DIMTS	Immediate	June , 2018
2.3.3	Reform of DTC and Cluster Bus Operations – modernize fleet and crew scheduling process of DTC, install GPS units on DTC buses and create a traffic control cell for monitoring bus movement, rationalize scheduling of busesunder DTC and cluster scheme.	Delhi Transport Department, DTC and DIMTS	Immediate	4000 buses to install GPS in 3 months. Remaining fleet by December 2018.

2.3.4	IT system in buses, bus- stops and control centre and passenger information systems for reliability of bus services, and service monitoring.	Delhi Transport Department, DTC and DIMTS	Immediate	Initial activities by March, 2018. Completion by December 2018.
2.3.5	Bus parking should be made integral to urban planning. Multi- level bus parking to be provided in depots to more efficiently use available land area. Multi-modal, multi-use bus depots to be developed to provide high-class bus services and terminal experience to passengers. Should include well equipped maintenance workshops.	Delhi Transport Department, DTC and DIMTS	Immediate. EPCA report on availability of bus depot land shows that land is available for additional 2000 buses and that Delhi government must use options for multi-level parking in rest. DDA has made the requisite changes in Master Plan to allow for multi- levelparking	Millennium Depot issue pending in the court. Timelines can be finalised after court decision.
2.3.6	Need bus fare policy to ensure that it is affordable and remains competitive vis-a-vis the operational cost of two- wheelers.	Delhi Transport Department, DTC and DIMTS	Immediate	Agreed
2.3.7	Enforce bus lanes and keep them free from obstruction and encroachment.	Delhi Transport Department, DTC, DIMTS	Immediate	Agreed. To be enforced by Delhi Police and compliance given

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2.3.8	Augmenting the service of Metro for carrying more passengers: SC order dated 5.1.2016 directing for augmentation of service / coaches. Metro has submitted to EPCA its plan for inducting 486 additional coaches by December 2017 for existing lines. Of this, 270 have been procured. In addition, Metro has submitted proposal for 602 coaches, which is being examined by the Delhi govt.	DMRC	December 2018	Proposal pending with Delhi Govt. Timeline is agreeable.
2.3.9	Three-wheelers Implement electro-mobility for three- wheelers to make them zero emission as efficient feeder system for last mile connectivity and integration with bigger public transport systems. Organise their services for efficient deployment.	State transport departments	May 2018	State govt. of Delhi and those of NCR states to submit the plan within one (1) month for speedy implementation
2.3.10	BRTS / LRTS to be implemented in targeted high frequency routes and complemented with bus services with proper integration of routes, stations and terminals. Explore feasibility of BRT / LRTS connectivity between Delhi and other NCR cities	Delhi Transport Department, DTC and DIMTS	Transport departmen ts of Delhi, Haryana, UP and Rajasthan to provide action plan with schedules of key BRTS/LRTS corridors by February 28, 2018	Transport departmens of Delhi and Haryana to submit Action Plan by 28 th February 2018.
2.3.11	Fare integration and common ticketing; bring ETVMs into all DTC buses. Common mobility cards to be the mandatory access card for buses.	Delhi Transport Department, DTC and DIMTS	Immediate	Agreed

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2.3.12	Implementation of multi- modal integration plan for bus-Metro IPT-NMT at key / all interchange points.	Delhi Transport Department, DTC and DIMTS	Immediate DIMTS(Delhi integrated multi model system) Delhi Govt.	
2.3.13	Demarcation and development of Influence Zones around Metro stations as per MPD-2021 to improve access to the public transport system.	Transport Department, PWD, DDA /UTTIPEC, DMRC, DTC, DIMTS	Immediate	Delhi Transport Department to submit a plan ir 3 months
2.3.14	Proper regulations and organization including providing driver-training, certification, etc. for cab and auto-rickshaw drivers	DDA, MCD, PWD	Immediate	Delhi Transport Department to submit a plan ir 3 months
2.3.15	NCR connectivity for public transport – need bus and Metro plans. Rationalize routes and augment public transport in NCR on CNG mode.	Ministry of Urban Development , NCR Planning Board, state government s	MoUD to submit a comprehen sive plan by February 28, 2018 with clear deliverable s	MOUD to submit the plan within one (1) month.
2.3.16	Rationalize entry taxes in NCR under the NCR reciprocal agreement to lower costs of travel by public transport.	Ministry of Urban Development , NCR Planning Board, state government s	Immediate	Matter to be taken up for discussion by Secretary (EF & CC) with Secretary MOUD
2.3.17	Integrate ITS in bus systems in cities in NCR (automated vehicle location, passenger information system, fare collection system).	Ministry of Urban Developmen t, NCR Planning Board, state government s	Immediate	Agreed

2.3.18	Regional Rapid Transit System (RRTS) integrated with local transit systems should be implemented to provide seamless connectivity between regional and sub-regional centres of NCR.	Ministry of Railways and state governments	National Capital Region Transport Corporati on (NCRTC) to submit plan with schedule s by Decemb er 2017.	MOUD to submit plan within one (1) month.
2.3.19	Integrated passenger terminals to be created with mixed use and multi- modal facilities for passenger comfort, integrating regional and local public transit systems.	Ministry of Railways and state government s	Immediate	MoUD to submit plan within one (1) month after coordination with Railways and State Government.
2.3.20	Implement traffic impact assessment of infrastructure project for planning and management.	Ministry of Urban Development , Municipal government s, planning departments of cities, DDA in Delhi	Immediate	MoUD to submit plan within one (1) month.

2.4 Non-motorized transport (NMT)network

S. No.	Action points	Agency responsi ble	Revised timeline for implementation	Decision during the Meetings in MoEF&CC
2.4.1	 Prepare and implement zonal plans for developing an NMT network. This should include the following action points with appropriate timelines for implementation: Implement network plan for footpaths on 	PWD, MCD, NDMC, DDA, Traffic Police, UTTIPEC	All NCR states to provide plans with clear deliverables and schedule for last- mile connectivity by February 28, 2018	State Government of Delhi and NCR to submit plan within three (3) months.

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	all roads, as per the IRC codes and Street Design Guidelines. Target specific kilometers of footpaths and cycle tracks to be completed in a phased manner and	
	cover the entirecity.	
	Identify roads where dedicated and wide footpaths and cycle tracks (two- way) can be created on either side of the street, as per Street	
	Design Guidelines.	
3	 Implement a network plan for more 	
	secondary street networks and ungated streets to provide direct shortest routes for pedes-trians and cyclists. Vehicular traffic can also be redistributed from major junctions through multiple routes to decongest. Sig-nal-free corridors should be avoided as more road- space only attracts more traffic and impedes people's movement.	
	 Plan and upgrade pedestrian / NMT crossings at least every 250 m, with pedestrian signals and signages. These should preferably be at- grade. Reduce block sizes to reduce walking and cycling distances. 	
	 Synchronization of signals should be 	

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	implemented on a priority basis with an integrated IT- based traffic management system so that inspite of having frequent at- grade pedestrian cross- ings, traffic can move swiftly across signals.
5	Cycle sharing
Sec. 1	systems being introduced as
5.1	feeders to public transport to be expanded to cover
S. 1	entire Delhi.
	Identify and notify
5	key commercial
	areas with high footfalls and good
× .	public transport
	connectivity to
	create pedestrian plazas.
-	Make safety and walkability audits of
-	walking and cycling infrastructure
	mandatory. Encroachment of NMT lanes to be made punishable offence underthe current provision
	of law.

2.5 Parking policy to reduce congestion and pollution

S. No.	Action points	Agency responsibl		Decision during
		e	Implementatio	the
			n	Meetings
				În
				MOEF&C
				с

2.5.1	Parking policy and enforcement measures to be prepared and finalized for implementation in Delhi and NCR. To include – i) Enforcement strategies ii) Parking pricing policy and iii) Parking management strategies. Delhi Master Plan 2021 has provided for a ParkingDistrict Management Plan.	Delhl: DOE, UTTIPEC, all municipal agencies, traffic police, transport dept. NCR: All state government s, transport department s urban developme nt department s	Implement parking policy by February 28, 2018	Agreed Other NCR states to study the Delhi model and adopt according to their requirements.
	ENFORCEMENT		NT	
2.5.2	 Physically demarcate legal parking areas. Equip them with metering systems, proper signages, IT for information on parking availability to reduce cruising time and on- street management. Existing / planned public parking facilities and on- street and off- street parking (including multi- level) facilities should bebundled for management by a single agency/ operator. New stand- alone parking only sites are mostly not required since parking is permitted in all use zones. Parking facilities within developments (e.g. commercial/ residential/ institutional) should be shared and priced for enabling use by different types of 	Municipal corporations in Delhi and NCR Urban developmen t department	February 28, 2018 MCD& Municipal Corporation of NCR	Agreed Other NCR states to study the Delhi model and adopt according to their requirements

	Users during different times of the day, thus bringing down total parking space demand. • Plan and implement parking provision for buses, commercial vehicles and IPT- NMT modes, and for the differently- abled.			
	PARKING PRICI	NG AND PENALTY		
2.5.3	 Introduce and further upgrade variable time- based pricing, as per market demand. Coordinated off- street and on- street / surface pricingin commercial and residential areas, and parking permits in residential areas. Parking should be charged as per duration, location in city and size of the vehicle. Take steps to prevent parkingof vehicles in the non-designated areas. Penalties related to parking should be charged 10 times the parking fee along with impounding of vehicles after a certain level of violation. Strict penalty for 		28 th February, 2018	To be part of Parking policy expected to be finalized by 31 st March 2018

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	violation of parking regulations and	
	walkway	
	encroachment. Parking	
	on footpaths should be made a cognizable	
	offence under the Delhi	
	Municipal Corporation	ć
Sec. 1	Act and PoliceAct. Reform parking lease	
	agreements to increase	
	parking revenue for local	
	area development and public transport	
	improvement.	

2.6 Traffic management

S. No.		Agency	Revised	Decision
3. NO.	Action points	responsible	timeline	
			for	
			implemen	
2.6.1	Introduce early		State traffic	Agreed
2.0.1	 Introduce early alarm system 	PWD, MCD, NDMC,	police	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	during traffic	DDA,	department	ITMS project
	congestion for the	Traffic	s of Delhi,	of DDA
	benefit of	Police,	UP, Haryana	pending
	commuters on	UTTIPEC	and	with MHA.
	major routes, to		Rajasthan	
	facilitate route	NCR: All	to	
	diversion.	state governments	implement this plan on	
		, transport	traffic	
		departments	manageme	
		urban	nt by May	
		developmen	2018	
		t		
2.6.2	Consider	departments	May 2018	Agreed
2.0.2	introducing plan			Agreed
	for flexi /			
	staggered			
	timings to			
	minimize peak movement of			
	vehicles on roads.			
2.6.3	Synchronize traffic		May 2018	Agreed
	movements /			
	introduce intelligent			
	traffic systems for			
	lane- driving.			
2.6.4	Formulate action		May 2018	Agreed
	plan for controlling			
	decongestion of			
	fuel stations		4	
	including increasing the number of			
	dispensing			
	machines.			
2.6.5	Electronic		May 2018	Agreed
	monitoring of		,	
	traffic			
	violations.			

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		 0010	Agreed
2.6.6	 Examine existing 	May 2018	, (g)
	framework for		
	removing broken		
	down buses / trucks		
	from roads and		
	create a system for		
	speedy removal and		
	ensuring		
	minimal disruption to		
	traffic from such		
	buses		
	/ trucks.		Agreed
2.6.7	Conduct audit	May 2018	Agreeu
	of traffic		
	intersections and		
	install functional		
	traffic signals at all		
	major inter sections	2	
	in		
	all NCR cities.		
2.6.8	Conduct review	May 2018	Agreed
	of traffic signaling		
	system at all	0	
	intersections in Delhi		
	/ Noida and		
	Gurugram and other		
	NCR towns that are		
	traffic hotspots and		
	bring requisite		
	changes to reflect		
	the traffic		
	movement pattern		
	at		
	intersections.	 	
2.6.9	 Enforce lane 	May 2018	Agreed
	driving through		
	heavy fining		
	as in Mumbai.		

Scanned by CamScanner

2.7 Power plants and industries

S. No.	Action points	Agency responsib le	Revised timeline for implementation	Decision
2.7.1	Permanent closure of Badarpur Power Plant after commissioning of the Tughlakabad sub- station or move towards cleaner natural gas	NTPC and Power- grid corporati on	Badarpur will be permanent ly closed by mid- 2018	Agreed
2.7.2	Closure of Badarpur during peak winter months when Graded Response Action Plan is in force	NTPC/DPCC	Done	Agreed
2.7.3	Monitoring of flyash pond at Badarpur, particularly during summer months to control fugitive dust	DPCC	Done	Agreed
2.7.4	Plan for site restoration of over 600 ha fly ash pond of Badarpur	NTPC	Done. NTPC has submitted to DPCC on- site remediation before permanent closure	Agreed
2.7.5	Time-bound action based on plan for restoration of fly ash pond land area	NTPC	Site remediation by mid-July 2018	Agreed
2.7.6	Move to full utilization of the cleaner natural gas- based Bawana station for power supply to Delhi	Departme nt of Power, Delhi with GAIL	Immediate	The recommendati on is already implemented to a substantive extent with the decision regarding full utilization of one unit of the

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Programiyaly class	Ministry of	MoP and	Bawana Plant. Unit 1 should be made operational by 1/3/2018.
the older and more polluting thermal power plants in NCR and to move to cleaner natural gas. Change the merit order dispatch policy of the Union government so as to incentivize cleaner plants to operate in the	Power and state governmen ts	MoPNG to provide plan with timelines by February 28, 2018	
region.	INDUSTRIES		
Urgent ban on	MoEF&CC	Done. State	Agreed
furnace oil, pet coke, which are dirty industrial fuels with high Sulphur and heavy metals:	and state governmen ts	governmen ts of Delhi, Haryana, UP and Rajasthan to comply with SC order of October 24, 2017	Agreed
against illegal use of such fuels, including fuels which do not have specifications laid down or are included in the acceptable fuels as mandated by state	and state pollution control boards	. State governme nt of Delhi, Rajasthan, UP and Haryana to issue notification under Section 19.1 and 19.3 of Air Act, 1980 by December 31, 2017	
	polluting thermal power plants in NCR and to move to cleaner natural gas. Change the merit order dispatch policy of the Union government so as to incentivize cleaner plants to operate in the region. Urgent ban on furnace oil, pet coke, which are dirty industrial fuels with high Sulphur and heavy metals: Strict enforcement against illegal use of such fuels, including fuels which do not have specifications laid down or are included in the acceptable fuels as mandated by state	the older and more polluting thermal power plants in NCR and to move to cleaner natural gas. Change the merit order dispatch policy of the Union government so as to incentivize cleaner plants to operate in the region.Power and state governmen tsUrgent ban on furnace oil, pet coke, which are dirty industrial fuels with high Sulphur and heavy metals:MoEF&CC and state governmen tsStrict enforcement against illegal use of such fuels, including fuels which do not have specifications laid down or are included in the acceptable fuels asDPCC and state	the older and more polluting thermal power plants in NCR and to move to cleaner natural gas. Change the merit order dispatch policy of the Union government so as to incentivize cleaner plants to operate in the region.Power and state government tsMoPNG to provide plan with timelines by February 28, 2018Urgent ban on furnace oil, pet coke, which are dirty industrial fuels with high Sulphur and heavy metals:MoEF&CC and state government tsDone. State governmen ts of Delhi, Haryana, UP and Rajasthan to comply with SC order of October 24, 2017Strict enforcement against illegal use of such fuels, including fuels which do not have specifications laid down or are included in the acceptable fuels as mandated by state pollution control boardsDPCC and state pollution control boardsImmediate . State governme nt of Delhi, Rajasthan, UP and Haryana to issue notification under Section 19.1 and 19.3 of Air Act, 1980 by December 31,

2.7.10	Strict enforcement of air pollution control measures in all industries, includes those located in unauthorized areas.	DPCC and all state pollution boards	Immediate	Agreed
2.7.11	Stop unrestricted import of such fuels, which are high in pollution because of high Sulphur or toxins	Ministry of Commerc e	Immediate	The matter is under discussion with MOPNG and DGFT and will be finalized shortly
2.7.12	Ensure that the sale, transportation and distribution of such fuels follows CMVR strictly for hazardous goods and ensure that there is no sale in restricted regions	Oil marketing companies	Immediate	Agreed
2.7.13	Ensure calibration and working of Continuous Emission Monitoring System (CEMS) in all industries in NCR and provide information to monitoring agencies to begin and work out how this information can be provided to public as this will ensure that the system is operational	CPCB, DPCC and all state boards BRICK-KILNS	Immediate	Agreed
0714	Capyort all brick kilps	MOEFC	Done as per	Agreed
2.7.14	Convert all brick kilns to zigzag technology – from natural draft kilns to induceddraft kilns (zigzag technology).	C and state pollution control boards	following schedule. Only brick kilns which have converted to zig-zag technology and have been certified by	Agreed
		· · · · · ·	the state pollution	

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			control board will be allowed to operate during winter2017- 2018. By July 1, 2018, only brick kilns with zig-zag technology will be allowed to operate in NCR	
	11	NCINERATORS		
2.7.15	Implement emission norms for incinerators and examine the feasibility of less polluting alternatives.	Departmen t of Environment , CPCB, DPCC, SPCBs	Immediate	Completed
2.7.16	Implement CEMS for incinerators and provide data on emissions on an open platform progressively.		Immediate	June, 2018
2.7.17	Develop a siting policy for biomedical incinerators.		February 28, 2018	Completed
	WASTE-TO-I	ENERGY PLANTS	1	
2.7.18	Strict implementation of emission norms, use state of the art technology and provide emission data to State Pollution Control Boards.	State Pollutio n Control Boards	Immediate	March, 2018
2.7.19	Develop a siting policy for waste to energy plants	MOEFCC, CPCB, State Pollution Control Boards	December 31, 2017	Completed

2.8 Generatorsets

\$. No.	Action points	Agency responsible	Revised timeline for	
			implem entatio n	
2.8.1	Ensure that only those DG sets that meet the standards are allowed to operate.	CPCB, DPCC, SPCBs and Department of Environment	Immediate	Agreed
2.8.2	Operating time of DG sets should be regulated according to graded action plan.	CPCB, DPCC, SPCBs and Department of Environment	Done	Agreed
2.8.3	Only approved fuel should be allowed.	CPCB, DPCC, SPCBs and Department of Environment	Immediate	Agreed
2.8.4	Non-usage of DG sets in social events as per graded action plan.	CPCB, DPCC, SPCBs and Department of Environment	Done	Agreed
2.8.5	Alternate power systems should be promoted in cell towers, and use of DG sets discouraged.		Immediate	Agreed

2.9 Open burning (including solid waste and agriculturalresidues)

S. No.	Action points	Agency responsible	Revised timeline for implementatio n	
2.9.1	SC order dated 16.12.2015 has directed a complete ban on garbage burning in the entire NCR region. This is being monitored by Delhi and NCR state governments. Take stringent action against open burning of biomass / leaves / tyres etc. to control such activities	Department of Environment, SPCBs DPCC, municipal bodies, DPGS	Immediate	Agreed
2.9.2	Ensure proper collection of horticulture waste (biomass) and composting-cum- gardening approach; municipal zonal offices should be responsible for controlling burning of leaves and garbage on roads / parks. All horticulture agencies should have compost pits in parks.	Municipal bodies and other park owning bodies like DDA in Delhi	Immediate	Agreed

			leave e diate	Agrood
2.9.3	Implement citizen		Immediate	Agreed
	reporting app		Delhi Govt.	
	reporting of garbage		Deini Govi.	
	/ municipal solid			×
2	waste burning			
	through mobile-		<i>a</i> :	
	based applications			
	and other social	 ¹⁶ A 3 		
	media platforms			
	linked with Central			
	and state-level			
	control rooms for			
	accountability. Build			
	an awareness			
	campaign through			
	RWAs, Eco Clubs and		54	12
	municipal			
	authorities.			l
		EM AND BIOMASS		Agroad
2.9.4	Ensure strict	State	Ongoing	Agreed
	enforcement of ban	governments in		8
	on burning of	NCR and		
	agriculture waste and	Punjab		
	crop residues			
	in Punjab and Haryana.		<u> </u>	
2.9.5	To increase subsidy for	State	Ongoing	Agreed
	purchase of	governments in		
	equipment that	NCR and		
	eliminates the need	Punjab		
	for burning stubble			
	and			
	straw.			A sure o d
2.9.6	Enforce the series of	State	Ongoing	Agreed
	directives from the	governments in		
	Hon'ble Supreme	NCR and		-
	Court and NGT on	Punjab		
	ban on agricultural			
	burning and			
	recycling and reuse			
	of			
	this waste.]
		EPISODIC EVENTS		1 A
2.9.7	Fire crackers	Department	Immediate	Agreed
	Implement and	of	÷	
	monitor the SC order	Environment,		
	of	SPCBs DPCC,		s.
	September 12, 2017	DCP		1

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2.10 Domestic chulha burning and open eateries

S. No.	Action points	Agency responsible	Revised timeline for implementatio n	
2.10.1	In slums and low- income neighbourhoods, as well as roadside eateries/dhabas/ resturauntsetc promote and give access to LPG and electricity. Link commercial license to clean fuels.	Department of Environment, MoPNG	Immediate	Agreed
2.10.2	Prohibit use of coal in hotels and restaurants, eliminate use of kerosene for cooking in NCR and incentivize move to LPG.	MoPNG and state governments	Immediate	Agreed
2.10.3	A targeted programme can be developed with the Union Ministry of Petroleum and Natural Gas for wider distribution of LPG.	MoPNG and state governments	Immediate	Agreed

2.11 Control measures for road dust

S. No.	Action points	Agency responsible	Revised timeline for implementation	*
2.11.1	•SC direction dated December 16, 2016 has directed repair and building of pavements and vacuum cleaning of roads. This needs to	Department of Environment, municipal bodies, DDA, PWD, CPWD, DSIIDC,	Immediate and intensify during implementatio n of GRAP	Agreed

be expedited and	DTTDC Road-		
implemented across	owning	100 No.	
NCR. Based on this,	agencies,		a
the following may be	Police Dept.		
carried out:	Forest Dept.		
 Implement street 			
design guidelines for			<i>a</i>
footpaths and cycle			
tracks with adequate			
vegetative buffers		- 5 - 6	
and paving of roads.			
Take steps for			
· ·			
blacktopping /			
pavement of road	N N		
shoulders to avoid			
road dust.			
•Phase-in			
mechanical /			
vacuum-based street			
sweeping wherever			3
feasible; introduce			
wet / mechanized			
vacuum sweeping of			5
roads.			6
 Implement 		ve ^{r a}	
truckloading			
guidelines; use of			
appropriate			
enclosures for haul			
trucks; gravel paving			× .
for all haul routes.			
•Sprinkling of recycled			
water (without			2
	2	2	
compromising other			
uses); introduce			
water fountains at			
major traffic		а. Ф. "	
intersections,	a 1. /		
wherever feasible.			
•Maintain pothole-			
free roads for free			
flow of traffic to			
reduce emissions and			
dust.			
 Increase green 			
cover in Delhi.	2		
Undertake greening			
of open areas,			
gardens, community			
places, schools and			
	L		

	 housing societies. 		
2.11.2	•Enforcement of air pollution control in concrete batching (use of water spray and wind breakers, bag filter at silos and	Immediate	Agreed
	enclosures, hoods, curtains etc.)		

2.12 Control measures for construction dust

S. No.	Action points	Agency responsibl e	Revised timeline for implementation	
2.12.1	SC order dated 16.12.2015 directed the Delhi govt to ensure measures are taken to mitigate dust pollution from construction. The EPCA has given a concise check list for inspection of construction sites. This should be implemented. Undertake control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units. Penalties have also been enhanced. Needs enforcement.	Municipal bodies, PWD, CPWD, DSIIDC, DTTDC, road owning agencies	Immediate	Agreed

2.12.2	For material handling and construction demolition, it should be obligatory on part of the developers to provide evidence of debris disposal at designated sites. Promote recycling of construction material.	Municipal bodies, PWD, CPWD, DSIIDC, DTTDC, road owning agencies	Immediate	Agreed

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ANNEXURE - II

Central Pollution Control Board Ministry of Environment, Forest & Climate Change (Govt. of India)

Graded Response Action Plan for Delhi & NCR

In pursuant to the Hon'ble Supreme Court's order dated December 02, 2016 in the matter of M. C. Mehta vs. Union of India regarding air quality in National Capital Region of Delhi, a Graded Response Action Plan has been prepared for implementation under different Air Quality Index (AQI) categories namely, Moderate & Poor, Very Poor, and Severe as per National Air Quality Index. A new category of "Severe+ or Emergency" has been added. Ministry of Environment, Forests & Climate Change has notified for implementation of Graded Response Action Plan through Environment Pollution (Prevention & Control) Authority vide S.O. 118 (E) dated January 12, 2017 (copy enclosed).

Severe + or Emergency (ambient $PM_{2.5}$ or PM_{10} concentration values of $300 \mu g/m^3$ or $500 \mu g/m^3$ respectively persist for 48 hours or more)	Agency responsible/Implementing Agency
Stop entry of truck traffic into Delhi (except essential commodities)	Municipal Corporations and Traffic Police of Delhi and NCR Towns
Stop construction activities	Delhi Pollution Control Committee/Municipal Corporations of Delhi and NCR towns
Introduce odd and even scheme for private vehicles based on license plate numbers and minimize exemptions	Secretary cum Commissioner of Transport Department, NCT of Delhi, and Transport Commissioners of NCR towns
Task Force to take decision on any additional steps including shutting of schools	
Severe (ambient PM _{2.5} or PM ₁₀ concentration value is more than 250 μg/m ³ or 430μg/m ³ respectively)	Agency responsible/Implementing Agency
Close brick kilns, Hot Mix plants, Stone Crushers	Chairpersons Delhi Pollution Control Committee, State Pollution Control Boards of Haryana, Rajasthan, and Uttar Pradesh
	Superintendent of Police and Deputy Commissioner of respective districts
Shut down Badarpur power plant and maximize generation of power from existing natural gas based plants to reduce operation of coal based power plants in the NCR.	Chairpersons Delhi Pollution Control Committee, State Pollution Control Boards of Haryana, Rajasthan, and Uttar Pradesh

Commissioners of NCR towns Chairperson, Delhi Metro (DMRC) Chairpersons, State Transport O Severe (ambient PM _{2.5} or PM ₁₀ concentration value is more than 250µg/m³ or 430µg/m³ respectively)	Corporations		
(DMRC) Chairpersons, State Transport C Severe (ambient PM _{2.5} or PM ₁₀ concentration value is more than 250µg/m³ or 430µg/m³	Corporations		
Severe (ambient PM _{2.5} or PM ₁₀ concentration Agency responsible/Impleme value is more than 250µg/m ³ or 430µg/m ³			
value is more than 250µg/m ³ or 430µg/m ³	enting Agency		
Increase frequency of mechanized cleaning of roadAll road owning agencies inand sprinkling of water on roads. Identify roadCorporations of NCT of Dellstretches with high dust generation.Public Works Departments and Authority of India	ni and NCR towns,		
Very Poor (ambient PM _{2.5} or PM ₁₀ concentration value is between 121-250µg/m ³ or 351-430 µg/m ³ respectively)	enting Agency		
Stop use of diesel generator setsChairpersons Delhi PollutionStatePollution Control BoRajasthan, Uttar Pradesh			
Enhance parking fee by 3-4 times Municipal Commissioner	Municipal Commissioner		
Municipal Corporations of NC towns	T of Delhi and NCR		
Increase bus and metro services by augmenting Principal Secretary, Departmet contract buses and increasing frequency of service NCT of Delhi	ent of Transport of		
Delhi Transport Corporation (I	DTC)		
Delhi Integrated Multi-modal (DIMTS)	Transit System Ltd		
Delhi Metro Rail Corporation ((DMRC)		
State Transport Corporations in			
Stop use of coal/firewood in hotels and open Municipal Corporations of NC eateries towns	T of Delhi and NCR		
Residential Welfare Associations and individual house owners to provide electric heaters during winter to security staff to avoid open burning by them			
Alert in newspapers/TV/radio to advise people Chairpersons, Delhi Pollution with respiratory and cardiac patients to avoid polluted areas and restrict outdoor movement. Chairpersons, Delhi Pollution State Pollution Control Bo Rajasthan, and Uttar Pradesh			
Moderate to poor(ambient PM2.5 or PM10 concentration value is between 61-120 μg/m3 or 101-350 μg/m3 respectively)Agency responsible/Implement	enting Agency		
Stringently enforce/stop garbage burning in Municipal Commissioner			

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landfills and other places and impose heavy fines on person responsible	Municipal corporations of Delhi and NCR towns
Close/stringently enforce all pollution control regulations in brick kilns and industries	Chairpersons, Delhi Pollution Control Committee, State Pollution Control Boards of Haryana, Rajasthan, and Uttar Pradesh
Moderate to poor(ambient $PM_{2.5}$ or PM_{10} concentration value is between 61-120 µg/m ³ or 101-350 µg/m ³ respectively)	Agency responsible/Implementing Agency
Stringently enforce pollution control in thermal power plants through PCB monitoring	Plant in-charge of power plants in NCR, and Delhi Pollution Control Committee and State Pollution Control Boards of Haryana, Rajasthan and Uttar Pradesh
Do periodic mechanized sweeping on roads with heavy traffic and water sprinkling also on unpaved	Municipal Commissioner, Municipal Corporations of NCT of Delhi and NCR towns
roads every two days	Commissioners, Traffic Police of Delhi and NCR towns to identify roads with heavy traffic and provide information to respective Municipal Commissioners
	Chief Engineers of officers in charge of CPWD, PWD of Delhi and NCR towns to identify unpaved roads with heavy traffic and provide information to respective Municipal Commissioners
Strict vigilance and no tolerance for visible emissions – stop plying of visibly polluting vehicles by impounding or heavy fine.	Commissioner or Officer in Charge, Transport Department and Traffic Police of NCT Delhi and NCR towns
Strict vigilance and enforcement of PUC norms	
	Commissioner or Officers in charge of Police Departments of Delhi and NCR towns
Deploy traffic police for smooth traffic flow at identified vulnerable areas	Commissioners Traffic Police of Delhi and NCR Towns
Strictly enforce Supreme Court order on diversion of non-destined truck traffic and ensure only trucks registered after 2005 are allowed entry into Delhi	Municipal Corporations of NCT of Delhi and NCR towns
	Traffic Police of NCT of Delhi and NCR towns
Strictly enforce Supreme Court ban on firecrackers	Chief Controller of Explosives Petroleum and Explosive Safety Organizations (PESO)

Ensure fly ash ponds* are watered every alternate day during summer months (March – May).	Commissioner of Officer in charge of licensing in the police departments of Delhi and NCR Plant in charge of Power Plants in Delhi and NCR towns
day dailing summer months (trutter truty).	
Moderate to poor(ambient $PM_{2.5}$ or PM_{10} concentration value is between 61-120 µg/m ³ or 101-350 µg/m ³ respectively)	Agency responsible/Implementing Agency
Information dissemination Social media, mobile Apps should 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 actions that will be taken by government based on the level of pollution.	Chairpersons, Delhi Pollution Control Committee, State Pollution Control Boards of Haryana, Rajasthan, and Uttar Pradesh



DELHI POLLUTION CONTROL ČOMMITTEE DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI 5TH FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-06 visit us at : http://dpcc.delhigovt.nic.in

F.No. DPCC/RDPC/18 (1) (b) / 2016/ 5/69 ~ 5/97 Dated: 06.11.2017

Sub: Minutes of Meeting to Review the Progress made / Action taken for compliance of the Directions issued by CPCB u/s 18(1) (b) of Air Act, 1981 for improving the air quality in Delhi and NCR, <u>held on 10.10.2017 at 4 PM</u> at Delhi Secretariat.

Please find enclosed herewith copy of Minutes of the Meeting to Review the Progress made / Action taken for compliance of the Directions (41 Points) issued by Central Pollution Control Board (CPCB) u/s 18(1) (b) of Air Act, 1981 for improving the air quality in Delhi and NCR, held on 10.10.2017 at 4 PM at Delhi Secretariat.

The said Minutes have also been emailed to all concerned .

It was also decided in the said meeting that All the Departments/ Organizations shall provide Name & Designation of Nodal Officer & Alternate Representative from their Department / Organization along with his / her Mobile Number and Email ID for better communication and Action Taken Report and also to ensure their participation in the future review meetings on the said matter.

You are requested to take necessary action as mentioned in the said Minutes and Annexure "B" of the Minutes and send the Updated Action Taken Report to this office and also through email on dpcc.rdpc@gmail.com at the earliest preferably within 7 days.

Dupar 1881 (D.K. Singh)

Sr. Env. Engineer (RDPC) Mobile No. 9717593512

Enclosure : Minutes of Meeting Dated 10.10.2017

To,

- 1. The Vice Chairman, Delhi Development Authority (DDA), C-3 Block, Vikas Sadan, INA, New Delhi-110023.
- 2. The Principal Secretary, General Administration Department (GAD), GNCTD, 2nd Level: Delhi Secretariat, I.P. Estate : New Delhi-110002
- 3. Chief Executive Officer, Office of Cantonment Board, Sadar Bazar, Delhi Cantt-10.
- 4. The Divisional Commissioner, Office of the Divisional Commissioner Delhi, Government of NCT of Delhi, 5- Sham Nath Marg, Delhi-110 054.
- Development Commissioner, Development Department, Govt. of NCT of Delhi 5/9, Under Hill Road, Delhi-110 05.
- 6. The Sec-Cum-Commissioner, Head of Department, Food Supplies and Consumer Affairs Deptt. K- Block Vikas Bhawan, IP ESTATE, New Delhi-2
- The Secretary, Directorate of Education, Government of NCT of Delhi, Old Secretariat, Delhi-110 054

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8. 9. 10. The Chairman, New Delhi Municipal Council, Palika Kendra, Parliament Street, New 11. The Commissioner, South Delhi Municipal Corporation. 9th Floor, Dr. S.P.M. Civic 12. The Commissioner, North Delhi Municipal Corporation,4th Floor, Dr. S.P.M. Civic

Centre, Minto Road, New Delhi - 100 002 13. The Commissioner, East Delhi Municipal Corporation, 419, Udyog Sadan, Patparganj Industrial Area, New Delhi - 110 096.

Under Hill Road, Delhi-54.

Estate, New Delhi-110002

Centre, Minto Road, New Delhi - 100 002

Delhi-110001

- 14. The Joint Commissioner of Police, Delhi Traffic Police, Police Headquarters, MSO Building, I.P.Estate, New Delhi-110002
- 15. The Managing Director, Indian Oil Corporation Ltd, Corporate Office, 3079/3, J B Tito Marg, Sadiq Nagar, New Delhi - 110049
- 16. The Managing Director, Bharat Petroleum, Bharat Bhavan, 4 and 6 Currimbhoy Road, Ballard Estate, Mumbai 400001
- 17. The Managing Director, IBP Co Limited, IBP House, 34-A, Nirmal Chandra Street, Nirmal Chandra Street, Kolkata, West Bengal- 700013
- 18. The Managing Director, Hindustan Petroleum Corporation Limited. 3rd floor, Petroleum House, 17, Jamshedji Tata Road, Mumbai - 400020.
- 19. The Chairman, National Highways Authority of India(NHAI), G 5&6, Sector-10, Dwarka, New Delhi - 110 075
- 20. The Chief Executive Officer, Delhi Parks & Gardens Society (DPGS), Govt. of National Capital Territory of Delhi, 6th, Level C-Wing, Delhi Secretariat, I.P. Estate, New Delhi-02.
 - 21. The Chief Executive Officer, BSES Yamuna Power Limited, Shakti Kiran Building, Karkardooma, Delhi -110032
- 22. The Chief Executive Officer, BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, Delhi -110019
- 23. The Chief Executive Officer, Tata Power Delhi Distribution Limited (TPDDL), Hudson Lane, Kingsway Camp, Delhi -110009
- 24. The Director, Department of Environment, Govt. of NCT of Delhi, 6th, Level C-Wing, Delhi Secretariat, I.P.Estate, New Delhi-02.

Copy to:

- 1. Member Secretary, DPCC.
- 2. PS to Secretary (Environment) Cum Chairman, DPCC , for kind information to Chairman, Please.
- 3. Dr. MP George, Incharge Air Lab, DPCC
- 4. SEE (CMC-I), DPCC.
- 5. SEE (WMC-II), DPCC.

Aupar 1881

(D.K. Singh) Sr. Env. Engineer (RDPC)

Commissioner of Transport, Transport Department, Govt. of NCT of Delhi, 5/9,

The Secretary, Public Works Department (PWD), 5th Level, Delhi Secretariat, I.P.

Minutes of Meeting to Review the Progress made / Action taken for compliance of the Directions issued by CPCB u/s 18(1) (b) of Air Act, 1981 for improving the air quality in Delhi and NCR, <u>held on 10.10.2017 at 4 PM</u> at Delhi Secretariat.

The meeting to review the progress made / action taken for compliance of the Directions issued by Central Pollution Control Board (CPCB) u/s 18(1) (b) of Air Act, 1981 for improving the air quality in Delhi and NCR was held on 10.10.2017 at 4:00 PM at Delhi Secretariat and the said meeting was taken by Special Secretary (Environment) cum Member Secretary, DPCC since the Secretary (Environment) cum Chairman, DPCC was preoccupied in some urgent work.

Representatives / Officers from various Departments / Organizations attended the said meeting and Attendance Sheet is enclosed as <u>Annexure " A"</u>.

No representative of East Delhi Municipal Corporation (EDMC), Public Works Department (PWD) and Delhi Parks & Gardens Society (DPGS) was present in the said meeting. It was decided that letter be issued to these departments to ensure participation of the Nodal Officer / Representative their department in future meetings.

It was informed that DPCC has already issued Directions for Closure on 03.10.2017 to Badarpur Thermal Power Station for not operating the said power station w.e.f 17.10.2017 to 15.03.2018.

41 Action Points of the Directions issued by CPCB u/s 18(1) (b) of Air Act, 1981 vide letter dated 29.12.2015 for improving the air quality in Delhi and NCR were discussed one by one and action taken report was sought from the concerned departments / organizations. Only some of the departments (New Delhi Municipal Council, Traffic Police, Transport Department, North Delhi Municipal Corporation & Food Supplies and Consumer Affairs Deptt.) could provide their action taken report prior to / during the said meeting and therefore it was decided that all the concerned Departments / Organizations shall provide their action taken report through email to DPCC (on email ID : dpcc.rdpc@gmail.com) soon. However besides above mentioned Departments only Delhi Cantonment Board and Hindustan Petroleum Corporation Limited (HPCL) could provide the action taken report and rest of the Departments / Organizations are yet to provide their latest action taken report to DPCC.

W.R.T Action Point No. 38 "Ensure DG sets meeting the standards only be allowed to operate" it was decided that DISCOMS(BSES Yamuna, BSES Rajdhani and Tata Power Delhi Distribution Limited) in Delhi be also included in the agencies for taking necessary action and letter be issued to DISCOMS for taking necessary action against the DG Sets for violations.

Based on the discussions held in the said meeting and Action Taken Report submitted by the Departments/ Organizations, Decisions taken in respect of 41 Action Points of the Directions issued by CPCB are given in the Table enclosed as <u>Annexure "B"</u>.

It was also decided that All the Departments/ Organizations shall provide Name & Designation of Nodal Officer & Alternate Representative from their Department / Organization along with his / her Mobile Number and Email ID for better communication and Action Taken Report and also to ensure their participation in the future review meetings on the said matter.

The meeting ended with a vote of thanks to the Chair.

Annexuze "A"

Attendance Sheet for the Meeting of Secretary (Environment) Cum Chairman, DPCC, to review the Progress made / Action Taken for compliance of the directions issued by Central Pollution Control Board (CPCB) u/s 18(1) (b) of Air Act, 1981 for improving the air quality in Delhi and NCR held on 10.10.2017 at 5 P.M in the Conference Room No 3 at Level g, C Wing, Delhi Secretariat , I.P.Estate , Delhi -110002 SI I

	SI.	Name of Offic	cer Designa	tion 0			-110002	
	<u>No.</u> 1.		Organi	zation	Contact I	No.	Email	Signature
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