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GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI
DEPARTMENT OF ENVIRONMENT AND FOREST
6th Level, C-Wing, Delhi Secretariat, New Delhi-110002

F. No.10(87)/Env/2025/750-772 Date: 30-04-2025

Administrative Order

Subject: Mandatory installation of mist spray/ similar system/ technology agnostic spraying system on electric poles/ other poles in the central verge along the road stretch in Delhi.

Delhi faces grave air pollution particularly in winter season and level of pollutants like Particulate Matter Concentration (PM2.5 and PM10) goes much beyond the prescribed standards for Ambient Air Quality.

The whole Union Territory of Delhi has been declared as an Air Pollution Control area, under the sub section (1) of section 19 of the Air (Prevention & Control of Pollution) Act, 1981 vide notification no. GSR 106 (E) dated 20.02.1987.

The Hon'ble Supreme Court of India, in its various orders concerning air pollution in Delhi-NCR, has emphasized the need for stringent measures to control deteriorating air quality levels. The Court has directed authorities to implement effective pollution control mechanisms, including the use water sprinklers for suppression of dust, in high-pollution zones to curb the harmful effects of suspended particulate matter and other pollutants.

There are 13 identified air pollution hotspots across Delhi based on consistently high levels of ambient air pollutants, particularly PM_{10} and $PM_{2.5}$. These hotspots represent areas with severe air quality deterioration due to factors such as high vehicular density, construction activities, road dust, industrial emissions, and localized sources of pollution.

In view of the deteriorating air quality levels and high levels of particulate matter in the ambient air in Delhi, there is an urgent need to take innovative control measures to mitigate air pollution with specific focus on air pollution hotspots.

The use of automated mist spray systems leads to generation of water droplets to supress dust, which is a dominant source of air pollution in Delhi.

Delhi Development Authority (DDA) and New Delhi Municipal Council (NDMC) have piloted such installation of mist spray system on electric pole along selected stretches and it was felt that the replication of such mist spray system as on large scale could have favourable impact on air pollution and is similar to water sprinklers and anti-smog guns which are being used. The electric poles installed in the central verge of road stretches could offer structurally suitable and spatially distributed locations for the installation of such mist spraying systems without requiring additional roadside infrastructure.

Now, therefore, in view of the above, following directions are hereby issued:

All road-owning agencies such as PWD, MCD, DDA, NDMC are hereby directed to ensure mandatory installation of mist spray systems / similar systems/ technology agnostic spraying systems using treated water on electric poles/ other poles located in the central verge along road stretches within their respective jurisdictions:

1. In or around the 13 identified air pollution hotspots in Delhi (as defined by EPCA) in the first phase on priority basis as detailed in Annexure 1.

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2. Submit a time bound action plan for installation of mist sprays / similar systems/ technology agnostic spraying systems on electric poles in other locations apart from the hotspots to be undertaken as phase 2 & 3 of activity. This may be submitted within 15 days from the date of notification.
3. The mist spray system/ similar system/ technology agnostic spraying system is to be operated throughout the year except monsoon season (from 15 June to 1st October) and the specifications are annexed as Annexure-II. Quarterly Action Taken Report on the status of implementation shall be submitted to this Department.

30/4/2025

(A. K. Singh)
Pr. Secretary (Environment)

F. No.10(87)/Env/2025/750-772

Dated: 30/04/25

Copy for compliance to:

1. Chairman Delhi Pollution Control Committee
2. Addl. Chief Secretary, General Administration Department. GNCTD
3. Vice Chairman, Delhi Development Authority.
4. Chairman, New Delhi Municipal Council.
5. Commissioner, MCD.
6. Secretary, PWD, GNCTD.
7. Secretary, Irrigation and Flood Control Department, GNGTD.
8. Chairman, NHAI.
9. Director General, CPWD.
10. Chief Executive Officer, Delhi Cantonment Board.
11. Managing Director, NCRTC.
12. Managing Director, DMRC.
13. Managing Director, DSIIDC.

Copy To:

1. Pr. Secretary to Hon'ble Lt. Governor, GNCTD.
2. Secretary to Hon'ble Chief Minister, GNCTD.
3. Additional Chief Secretary, Urban Development Department, GNCTD.
4. Commissioner, Delhi Police.
5. Divisional Commissioner, Department of Revenue, GNCTD.
6. Pr. Secretary (Environment and Forest), GNCTD.
7. Member Secretary, Commission for Air Quality Management in National Capital Region and Adjoining Areas, STC Building, New Delhi.
8. Staff Officer to Chief Secretary, Delhi.
9. Secretary to Hon'ble Minister (Environment), GNCTD.

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(A. K. Singh)
Pr. Secretary (Environment)

Annexure- I

Hot Spot Delhi

S. No	Hot Spot Name	Address
1.	Dwarka	Sector 8, Dwarka, New Delhi, Delhi 110077
2.	Jahangirpuri	K Block, Near Babu Jagjeevan Ram Hospital, Bhalswa, Jahangirpuri, Delhi-110033
3.	Narela	Shahpur Garhi, Narela, New Delhi-110040
4.	Ashok Vihar	Ashok Vihar, Phase-III, Delhi-110052
5.	Vivek Vihar	C176, Block C, Vivek Vihar Phase I, Vivek Vihar, Delhi, 110095
6.	Mundka	Mundka Metro Residential Colony, Delhi-110041
7.	Rohini	PSP Area-IV, Dr. K.N. Katju Marg, Sector-16, Rohini, Delhi-110089
8.	Wazirpur	Wazirpur Industrial Area, Wazirpur, Delhi, 110052
9.	Okhla	Block A, Okhla Phase-II, Okhla Industrial Area, New Delhi-110020
10.	Bawana	Bawana Industrial Area, Pooth Khurd, New Delhi, Delhi 110039
11.	Anand Vihar	Anand Vihar ISBT, Delhi-110092
12.	Punjabi Bagh West	Sarvodaya Kanya Vidyalaya, No. 2, Near Central Market-110026
13.	R.K. Puram	Kendriya Vidyalaya, Sec-2, R.K. Puram, New Delhi-110022

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Annexure– II

Suggested technical specification for used by NDMC and DDA for mist sprays for illustrative purposes (departments to customize specifications and explore cost effective technologies available with similar specifications giving desired output, as per their area jurisdiction):

- Supplying, installation, testing and commissioning of Reverse Osmosis (RO) system shall have a capacity of 2000 litres per hour (LPH) (and output water TDS upto 50 PPM) and be equipped with all necessary components, including high-pressure pumps, membranes, filters, and associated piping for efficient operation.
- The system will include a high- pressure pump capable of delivering the required pressure for optimal membrane performance, typically around 10-15 bar, with corrosion- resistant materials to handle water conditions.
- The RO membranes shall be of high quality, TFC (Thin Film Composite) type, with a recovery rate of up to 75%, designed to remove dissolved solids, contaminants, and impurities, ensuring high-quality permeate water.
- The system will feature a pre-treatment stage with multi-media and activated carbon filter store move sediment, chlorine, and organic matter, ensuring the longevity of the membranes. It shall also include an anti-scalant dosing system to prevent membrane fouling. Post-treatment options, such as UV sterilization or ozonation, may be provided for disinfection purposes.
- The system shall be fully automated with a control panel for real-time monitoring, pressure gauges, flow meters, and safety features like low-pressure and high-pressure switches, ensuring smooth operation and protection of the components. The frame should be made from stainless steel for durability and corrosion resistance, and the entire system must be easy to maintain, energy-efficient, and compliant with international water treatment standards. Including supplying and fixing of all suitable accessories for installation etc. as required.

Technical Data		
S.No	Description	Detail
1	Designed Road Stretch	550 mtr
2	Nozzle on Each Pole	30 nos
3	Nos of Poles	14
4	Pole to Pole Distance	30 mtr
5	Each Nozzle Flow	2.8 lph
6	Each Pole Flow	84 lph
7	Total Flow of 14 Poles	1176 lph 19.6 lpm
8	Misting Pump Horsepower (HP)	5
9	Electricity Consumption Per Hour (Kw)	3.5

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