

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

F. No.10(39)/Env/2021/Pt-4/ 321 — 335

Date - 29/05/2025

Subject: Directions u/s 5 of the Environment (Protection) Act, 1986 on mandatory installation of anti-smog guns on high rise buildings (all commercial complexes, all malls, all hotels and office buildings, educational institutions/universities (G+5 and above) in Delhi.

Whereas Delhi faces grave air pollution particularly in winter season and level of pollutants like Particulate Matter Concentration (PM_{2.5} and PM₁₀) goes much beyond the prescribed standards for Ambient Air Quality.

And whereas, 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.

And whereas, 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 of anti-smog guns, in high-pollution zones to curb the harmful effects of suspended particulate matter and other pollutants.

And whereas, CAQM vide its direction no. 69 dated 02.11.2022 and vide the comprehensive policy to curb air pollution in the National Capital Region formulated by the Commission in July 2022, towards management of construction and demolition activities to reduce dust, stipulated deployment of adequate number of anti-smog guns in C&D projects sites.

And whereas, an analysis of ambient air quality data indicates a progressive increase in particulate matter concentrations during the winter period from October to January every year. In 2024, Annual City average of PM₁₀ and PM_{2.5} was 225 (µg/m³) and 110 (µg/m³) respectively which is already above the defined National Ambient Air Quality standards (NAAQS). From October 2024 till January 2025, maximum level of PM₁₀ was recorded as 420 µg/m³ while maximum PM_{2.5} was recorded as 271 µg/m³. As a result, air quality is significantly impacted, with the Air Quality Index (AQI) frequently reaching the "Very Poor" to "Severe" category, posing severe public health and environmental risks. From October to January, the number of days with poor air quality progressively increased. From October 2024 till January 2025, air quality remained compromised, with 33 no. of days recorded in the "Poor" category (AQI=201 to 300), 72 no. of days in the "Very Poor" category (AQI= 300 to 400) and 14 no. of days in "Severe" category (AQI>401).

The persistent degradation in air quality during the winter months underscores the urgent need for stringent mitigation measures to address the increasing pollution levels. The persistent degradation in air quality during the winter months underscores the urgent need for stringent mitigation measures to address the increasing pollution levels.

And whereas, in view of the deteriorating air quality levels and high levels of particulate matter (PM₁₀ and PM_{2.5}) in the ambient air in Delhi, there is an urgent need to take preventive and control measures to mitigate air pollution. Spraying of water from a height such as from high-rise buildings such as commercial complexes, hotels, government

buildings, and private institutions/universities is considered as one of the ways for curtailing suspended dust.

And whereas, the use of anti-smog guns has been recognized as an effective measure for suppressing airborne dust and particulate matter, thereby contributing to the reduction of air pollution.

And whereas, during winters 2023, 98 anti-smog guns were deployed on top of high-rise buildings such as (in government and private high-rise buildings). Similar exercise had been done in 2024 with deployment of 156 anti-smog guns in government and private high-rise buildings. But it is seen that there is a need to bring all the buildings in Delhi which hold potential towards deployment of anti-smog gun on the top and thus play a large feasible role in managing localised air pollution, particularly in reducing particulate matter. The nature of buildings which may be targeted for deployment is already documented in form of suggested guidelines and circulated by Office of Hon'ble Lieutenant Governor in 2022 and reproduced below:

Suggested Guidelines for Installation of Anti-Smog Guns on High Rise Buildings

- a. The mounting wheeled trailer may be dispensed with and the equipment may be fitted on a simple bracket fixed to the parapet wall of the high rise building.
- b. The aperture of the nozzle may be reduced to 5 to 20 microns (instead of 30 to 50 microns) so as to effectively coagulate dust particles contributing to 2.5 and 10 PM.
- c. The throw distance (horizontal) should be 75 to 100 meters.
- d. The consumption of water may not exceed 1000-1200 litres/hour and 10000 liters in a day with 8 hours of running.
- e. The sound decibels due to use of air blower to be reduced to minimum.
- f. A suitably air quality monitor equipment should be integral to the overall system.

Additional Recommendations:

- a. The size of the water droplets coming out of the nozzle should be further reduced to have a mist effect.
- b. The equipment should be used preferably between 7 and not higher than 10 storeyed buildings to have optimal impact at ground level.
- c. The equipment should be used intermittently during the periods of maximum pollution between 6:30 am to 9:30 am, 5:30 pm to 8:30 pm and 1:30 am to 4:30 am rather than running it throughout the day.
- d. In addition, the equipment should preferably run in bursts of a few minutes between intermittent halt periods. This will facilitate better coagulation of suspended impurities and will also reduce electricity and water consumption.

Now, therefore, in view of the above, in exercise of the powers conferred under Section 5 of the Environment (Protection) Act, 1986 read with notification No.SO 667 (E) issued by Ministry of Home Affairs, Government of India dated 10.09.1992, following directions are hereby issued:

To deploy and operate the prescribed numbers of anti-smog guns as per guidelines (Annexure-I) on high-rise buildings in Delhi throughout the year except monsoon season (from 15 June to 1st October) on the categories of buildings specified as under:

- 1. All commercial complexes having built up area more than 3,000 sq. m.***
- 2. All malls having built up area more than 3,000 sq. m.***
- 3. All hotels having built up area more than 3,000 sq. m.***
- 4. Office buildings and other institutions (with G+5 and above).***

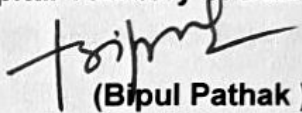
5. Any other structure which may be prescribed from time to time.
6. All residential houses, societies and complexes are exempted.

Urban Local Bodies, to identify such entities, widely circulate the directions and ensure the implementation of the direction within six months from the date of issue. Quarterly Action taken Report (in attached proforma), alongwith list of violators, shall be submitted to this department with copy to Delhi Pollution Control Committee and Department of Revenue, GNCTD, for necessary action under section 5 of Environment Protection Act, 1986 through Delhi Pollution Control Committee and Department of Revenue, GNCTD. **Annexure 1** enclosed in these directions contains guidelines for Installation of Anti-Smog Guns on High Rise Buildings.

Delhi Pollution Control Committee is also directed to widely publicise this direction and monitor the impact of such Anti Smog guns on top of High Rise buildings on the air quality as indicated through empirical data in the nearby CAAQMS.

The violation of the directions issued under Section 5 of the Environment (Protection) Act, 1986 shall be punishable under Section 15 of the said Act.

By order and in the name of the
Lieutenant Governor of National Capital Territory of Delhi


(Bipul Pathak)
Additional Chief Secretary (Environment)

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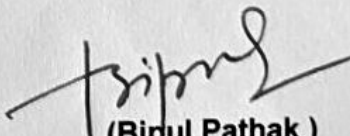
Dated:

Copy for compliance to:

1. Commissioner, Municipal Corporation of Delhi.
2. Chairman, Delhi Pollution Control Committee.
3. Additional Chief Secretary, General Administration Department. GNCTD.
4. Chairman, New Delhi Municipal Council.
5. Divisional Commissioner, Department of Revenue, GNCTD.
6. Chief Executive Officer, Delhi Cantonment Board.
7. Director, Directorate of Higher Education, GNCTD.
8. Director, Department of Training & Technical Education, GNCTD.

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. Member Secretary, Commission for Air Quality Management in National Capital Region and Adjoining Areas, STC Building, New Delhi.
6. Staff Officer to Chief Secretary, Delhi.
7. Secretary to Hon'ble Minister (Environment), GNCTD.


(Bipul Pathak)
Additional Chief Secretary (Environment)

Guidelines for Installation of Anti-Smog Guns on High Rise Buildings

- a. The mounting wheeled trailer shall be dispensed with, and the equipment shall be fitted on a simple bracket fixed to the parapet wall of the high-rise building.
- b. The aperture of the nozzle shall be 5 to 20 microns (instead of 30 to 50 microns) so as to effectively coagulate dust particles contributing to 2.5 and 10 PM.
- c. The throw distance (horizontal) should be 75 to 100 meters.
- d. The consumption of water shall not exceed 1000-1200 litres/hour and 10000 litres in a day with 8 hours of running.
- e. The sound decibels due to use of air blower shall be reduced to minimum.
- f. A suitable air quality monitor equipment should be integral to the overall system.
- g. The size of the water droplets coming out of the nozzle should be further reduced to have a mist effect.
- h. The equipment should be used intermittently during the periods of maximum pollution between 6:30 am to 9:30 am, 5:30 pm to 8:30 pm and 1:30 am to 4:30 am rather than running it throughout the day.
- i. In addition, the equipment should preferably run in bursts of a few minutes between intermittent halt periods. This will facilitate better coagulation of suspended impurities and will also reduce electricity and water consumption.
- j. Prescribed number of Anti-Smog Guns to be deployed on High -Rise Buildings in proportion to the built-up area is given below:

Built up area	Number of Anti-Smog Guns to be deployed
Less than 10000 sqm	At least 03
10001-15000 sqm	At least 04
15001-20000 sqm	At least 05
20000 – 25000 sqm	At least 06

- k. Thereafter for each 5000 sqm additional antismog gun would be installed.
- l. Water used for Anti-Smog Guns should be treated water.

Quarterly Action Taken Report (ATR)

(As per directions for deployment and operation of Anti-Smog Guns on All Public/Private commercial complexes, all malls, all hotels in Delhi)

Name of the Departments: (DPCC/MCD/NDMC/DCB):

I. Abstract:

Total Number of High-Rise buildings	Number of High-Rise Buildings where prescribed numbers of Anti-smog Guns is installed	Number of High-Rise Buildings where Installation of prescribed numbers of Anti-smog Guns is in progress

II. Details of High-Rise Buildings:

S. No	Name of High-Rise Building	Geocoordinates	Built up area	Number of Anti-Smog Guns installed	Number of Anti-Smog Guns to be installed

Signature & Official Seal

Quarterly Action Taken Report (ATR)

(As per directions for deployment and operation of Anti-Smog Guns on office buildings, educational institutions/universities (G+5) in Delhi)

Name of the Departments: (DPCC/GAD/MCD/NDMC/DCB/Higher Education/Training and Technical Education):

I. Abstract:

Total Number of High-Rise buildings (G+5 and above)	Number of High-Rise Buildings (G+5 and above) where prescribed numbers of Anti-smog Guns is installed	Number of High-Rise Buildings (G+5 and above) where Installation of prescribed numbers of Anti-smog Guns is in progress

II. Details of High-Rise Buildings:

S. No	Name of High-Rise Building (G+5 and above)	Geocoordinates	Built up area	Number of Anti-Smog Guns installed	Number of Anti-Smog Guns to be installed

Signature & Official Seal