

DUST POLLUTION

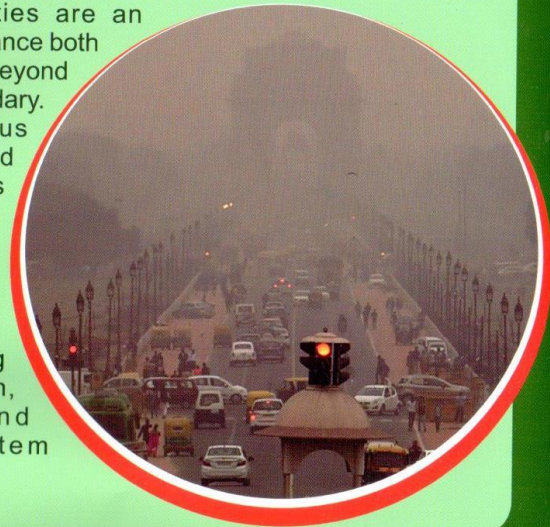
PROTECT
YOUR
CITY

Department of Environment
Government of NCT of Delhi
www.environment.delhigovt.nic.in

1. What is Dust:

Dust in general, is fine particles of matter in atmosphere which come from various source such as soil, construction and demolition activities, vehicle movement etc.

Dust is characterized by a concentration, size and properties of dispersed particles. Dust emissions in the form of particulate matter arising from Construction and Demolition activities are an environmental nuisance both within the site and beyond the plant site / boundary. Dusts from various Construction and Demolition activities release wide range of particle sizes and material types and can cause both serious health problems ranging from eye irritation, nose, mouth and respiratory system problem.



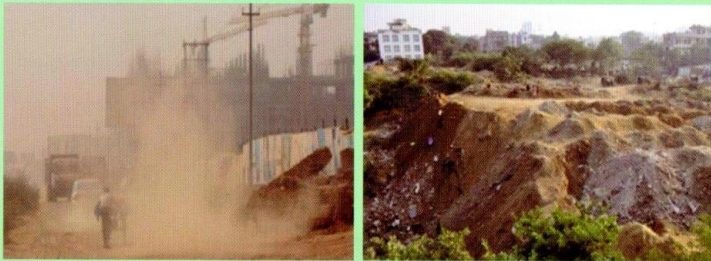
2. Prescribed Standards for Particulate Matter:

Pollutant	Time Weighted Average	Concentration in Ambient Air	
		Industrial, Residential, Rural & Other Area	Ecologically Sensitive Area (notified by Central Government)
Particulate Matter (size less than 10 μm) or PM ₁₀ $\mu\text{g}/\text{m}^3$	Annual	60	60
	24 Hours	100	100
Particulate Matter (size less than 2.5 μm) or PM _{2.5} $\mu\text{g}/\text{m}^3$	Annual	40	40
	24 Hours	60	60

Source: NAAQS notification dated 18.11.2009.

3. Sources of Dust:

- Demolition of existing and old structures;
- Renovation of existing buildings (residential or commercial);
- Construction of new buildings (residential or commercial or hotel or school etc.);
- Excavation/ reconstruction of asphalt/ concrete roads;
- Construction of new fly over bridges/ under bridges/ sub-ways etc.;
- Renovation/ Installation of new water/ telephone/ internet/ sewer pipe lines etc.
- Silt collection and disposal system.
- Particles from wear of brakes, tyres and clutches, road surface abrasion and re-suspension of accumulated dust particles on the road surface and kerbside in the wake of passing traffic.



4. Harmful Health Effects of Dust Pollution:

- Dust induced eye irritation, coughing, sneezing etc.
- Allergy
- Decreased lung function
- Increased episodes of asthma attacks etc.
- Children and Old age people are most affected.



5. Existing Regulation/Acts/Rules related to Dust Pollution Control:

- Environment (Protection) Act, 1986 and Rules/ Notification there under
- Air (Prevention and Control of Pollution) Act, 1981
- Orders of Hon'ble National Green Tribunal (NGT) in OA 21/2014 titled Vardhman Kaushik Vs UOI and Ors and other orders of Hon'ble courts
- Fine / environment compensation as per order of Hon'ble NGT

- | | |
|----|---|
| a. | On spot fine for violations at construction site: <ul style="list-style-type: none">i. If the offending construction in plot upto 100 sq. mt. the environmental compensation would be Rs. 10,000/-ii. If the offending construction in more than 100 sq. mt. but upto 200 sq. mt., the environmental compensation would be Rs. 20,000/-iii. If the offending construction is in a plot more than 200 sq. mt. But less than 500 sq. Mt. the environmental compensation would be Rs. 30,000/-iv. If the offending construction is in a plot area of more than 500 sq. mt. the environmental compensation would be Rs. 50,000/-v. Wherever the constructed area is more than 20,000 sq. mt. the environmental compensation would be Rs. 5 Lakhs. |
| b. | Fine of Rs. 5,000/- on dumping of construction and other waste material in public places. |
| c. | Fine of Rs. 5,000/- for each violation during carriage and transportation of construction material, debris through trucks or other vehicles. |
| d. | Ban on dumping of construction material into the Yamuna with imposition of a fine of Rs 50,000/- on the violators. |

(Refer website: <http://www.greentribunal.gov.in/>)

6. Some Mitigation Measures to control Dust Pollution:

a) Dust pollution Control measures at construction site- Storage of construction material and C&D wastes:

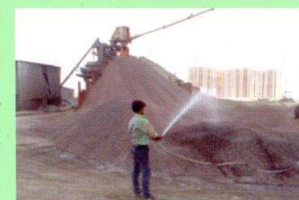
- Store the sand and other fine aggregates in demarcated areas with a covering.
- Store the loose cement in silos and other fine material in sealed bags.
- Raise barricade along the perimeter and Mount dust barrier sheet extarpaulin / plastic on scaffolding around the construction / demolition building – particularly side facing residential areas.
- Locations of storage / dumping wastes within site to be such to ensure minimum dust dispersal during handling (loading / unloading).
- Ensure no storing / dumping C&D wastes / construction material on metalled (pucca) roads.
- Cordon off sites of demolition activities and take adequate measures to reduce dispersal of dust beyond site limits.
- Sprinkle water / fine spray from nozzles to suppress dust re-suspension at site.
- Simultaneously develop of green buffer at construction site (preferably shrubs & trees that have low uptake of water).



b) Dust Pollution Control during transportation of Construction material and C&D wastes:

- Cover the C&D material by a sheet made of either jute, tarpaulin, plastic or any other effective material.
- Do not overload Trucks / lorries.
- Ensure minimization of dispersal of dust borne particles during unloading activities of construction material at site / off site by using water sprinklers or covering by a sheet made of either jute, tarpaulin, plastic or any other effective material.
- Roads surfaces to be well maintained to avoid jerk to transport vehicles.

- Bound or enclose the equipment / machineries include transporting (conveyor belt) crushing / hammering etc and use of water sprinklers to suppress dust emissions.
- Maintain the transport vehicles (PUC compliance).
- Damp the routes of transport vehicles within construction site by water (preferably treated waste water) sprinklers.
- Provided necessary safety equipment such as face masks, gloves etc to workers.



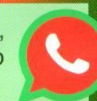
(Source: Central Pollution Control Board <https://goo.gl/bKqzo5>)

7. Whom to Approach

- All Municipal Corporations (East Delhi Municipal Corporation, South Delhi Municipal Corporation, and North Delhi Municipal Corporation), New Delhi Municipal Council, Delhi Cantonment Board, Delhi Development Authority, Public Works Department,
- SDM and Tehsildars of all the Districts (Revenue Department)
- Delhi Pollution Control Committee
- Delhi Traffic Police

8. What a Citizen can do on finding violation:

To receive the public complaints in order to control dust pollution, Delhi Pollution Control Committee (DPCC) has opened whatsapp account with mobile number "9717593574" and "9717593501".



Your efforts and alertness can make a lot of difference towards controlling Dust Pollution.

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