



Monitoring of Dust Mitigation Measures

“CONSTRUCTION AND DEMOLITION SITES”



DUST MITIGATION MEASURES REQUIRED TO BE UNDERTAKEN BY ALL PROJECT PROPONENTS, CONTRACTORS, BUILDERS, PERSON OR AUTHORITY UNDERTAKING CONSTRUCTION AND DEMOLITION ACTIVITY IN NATIONAL CAPITAL TERRITORY OF DELHI

Dust Control Measures in view of Directions dated 13.01.2020 of the Hon'ble Supreme Court of India in WP(Civil) 13029/1985 in the matter of MC Mehta vs UOI & Ors regarding deployment of Anti-Smog Gun(s), MoEF&CC, GOI Notification no. G.S.R.94(E) dated 25.01.2018 read along with Hon'ble National Green Tribunal order dated 4.12.2014 & 10.04.2015 in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others:



1. Dust/wind breaking walls of appropriate height around the periphery of the construction site.

Wind-breaker of appropriate height i.e. $\frac{1}{3}$ rd of the building height and maximum up to 10 meters shall be provided. This is meant for preventing blowing out dust side the boundaries of project which is emanated from construction activities like excavation and construction material handling and other dust causing activities. At any stage of construction the height of wind breaking wall should not be less than $\frac{1}{3}$ rd of the height of the structure of the building erected and ideally if height of the proposed building is 30 m or more, wind breaking wall of 10 m should be provided at the commissioning of construction activity.





2. Installation of Anti Smog Gun(s) (for ≥ 5000 sqmt construction area).

As per direction no. 69 dated 02.11.2022 issued by CAQM all the Construction and Demolition projects must deploy and ensure frequent and effective use of adequate nos. of Anti-Smog Guns in proportion to the area of construction for the project as under:

- At least 1 for a total construction area between 5000 - 10000 sqm.**
- At least 2 for a total construction area between 10001- 15000 sqm.**
- At least 3 for a total construction area between 15001- 20000 sqm.**
- At least 4 for a total construction area above 20,000 sqm.**



3. Tarpaulin or green-net on scaffolding around the area under-construction and the building.

Those scaffolding needs to be covered which are enveloping the area under finishing /construction. This is to restrain the dust caused during construction emanating to atmosphere.



4. All vehicles including carrying construction material and construction debris of any kind should be cleaned and wheels washed before leaving the construction site.

Vehicles leaving the sites carries the mud and dust with them if not cleaned before leaving the site. Provision for washing and cleaning of vehicles should be made at exit gates of construction site.





5. All vehicles carrying construction material and construction debris should be fully covered and protected so as to ensure dust from construction material or debris does not become air-borne in transportation.



6. All construction debris and construction material of any kind should be stored on the site and not dumped on public roads or pavements.





7. No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.

Cement, sand and other fine aggregates/construction material needs to be covered properly, excavated earth need sprinkling if coverage is not possible due to large surface area, cement should be stored in a ware house ideally.





8. *No grinding and cutting of building materials in open area. Wet-jet should be used in grinding and stone cutting.*



9. Unpaved surfaces and areas with loose soil should be adequately sprinkled with water to suppress dust.



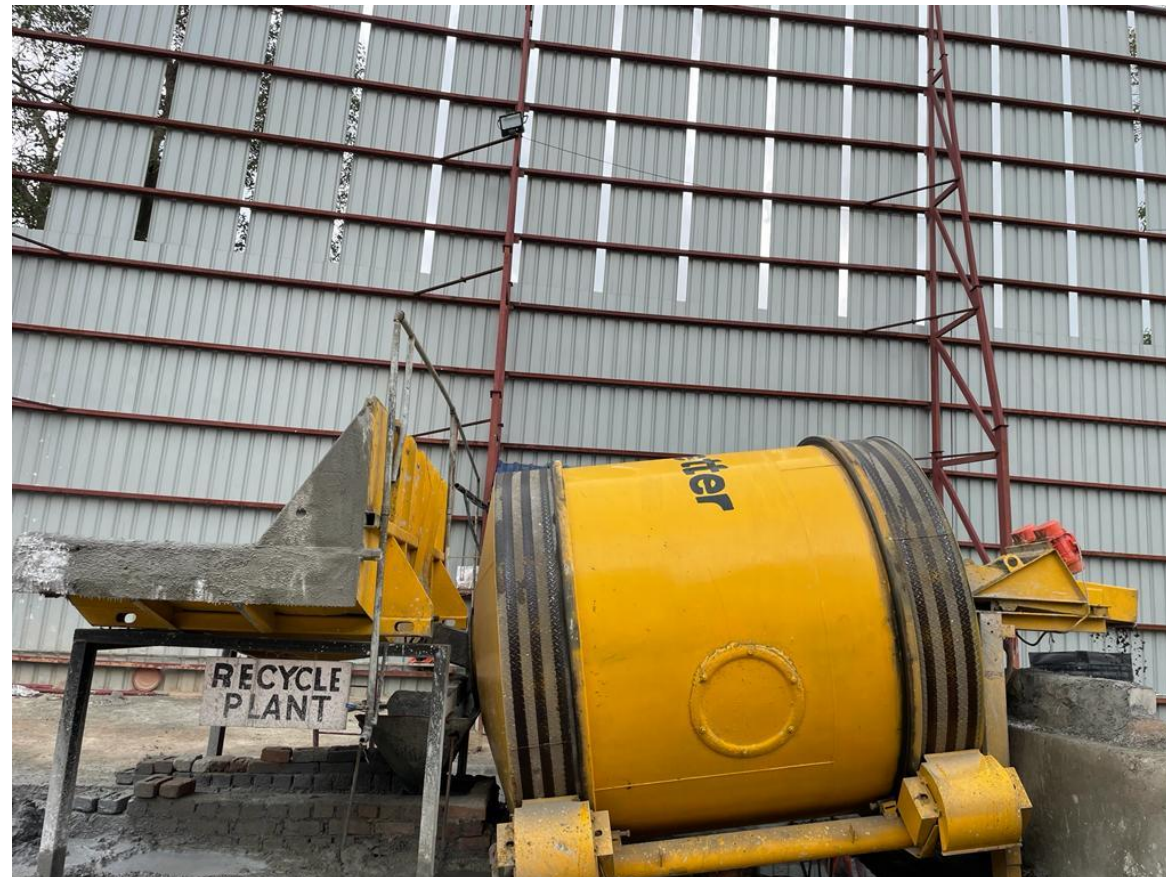


10. Roads leading to or at large construction sites must be paved and blacktopped i.e. metallic roads (for >20,000 sqmt built up area).

The vehicle movement at construction site or to construction site should be at slow speed on paved road to restrict the generation of dust. In case the roads are under maintenance or paving is under process, sprinkling and enhanced operation of Anti-Smog Gun should be implemented.



11. Construction and demolition waste should be recycled on-site or transported to authorized recycling facility and due record of the same should be maintained.

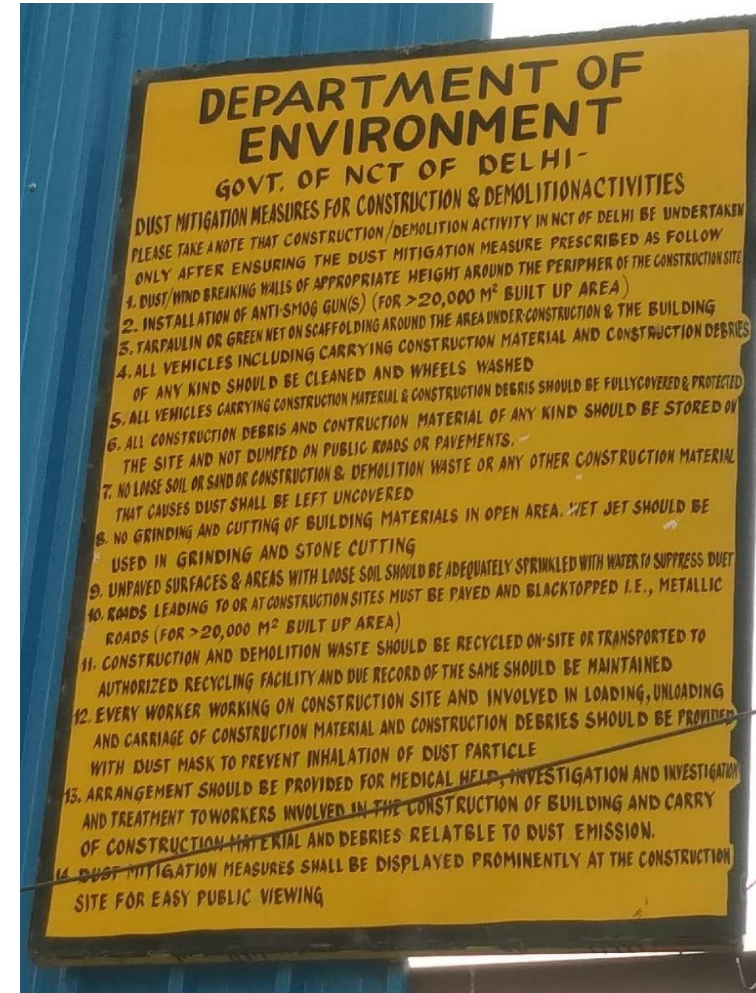
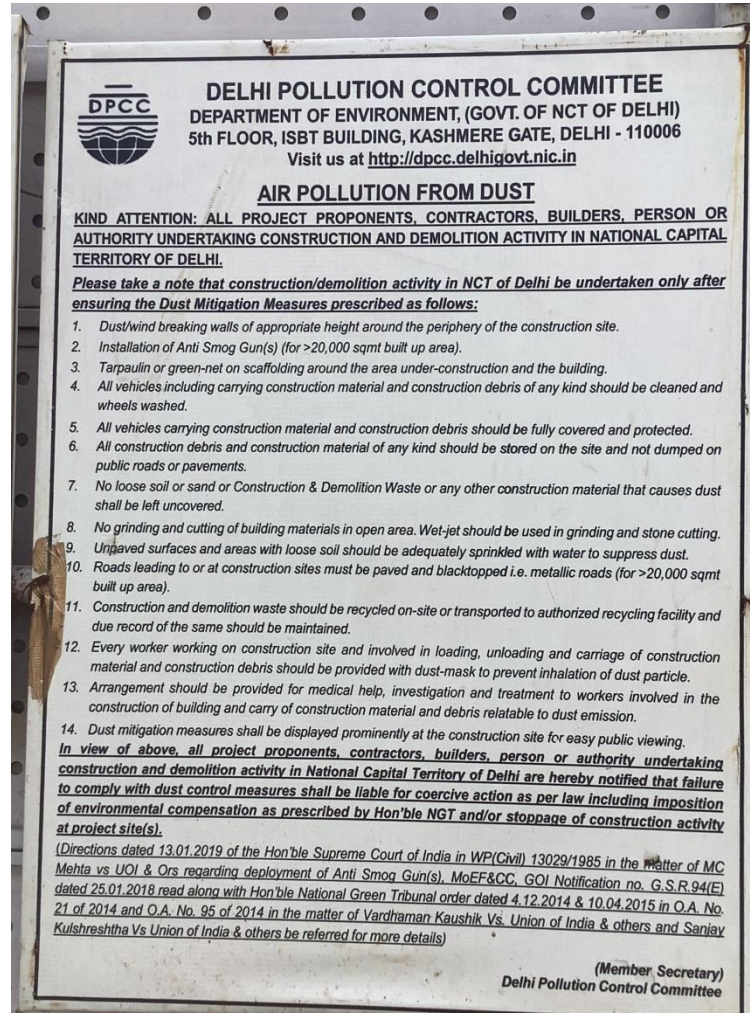


12. Every worker working on construction site and involved in loading, unloading and carriage of construction material and construction debris should be provided with dust-mask to prevent inhalation of dust particle.





14. Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.





DUST POLLUTION CONTROL SELF ASSESSMENT PORTAL IN PURSUANCE OF DIRECTIONS OF COMMISSION FOR AIR QUALITY MANAGEMENT (CAQM) IN NATIONAL CAPITAL REGION AND ADJOINING AREAS

Delhi Pollution Control Committee has developed an online mechanism through a Web Portal called “Dust Pollution Control Self-Assessment” at <http://dustcontroldpcc.delhi.gov.in> for self-assessment by construction agencies with respect to dust pollution in their sites in pursuance of directions dated 11.06.2021 by Commission for Air Quality Management (CAQM) in National Capital Region and Adjoining Areas.

The above said mentioned directions envisage the following compliances by project proponents:

1. All current/ upcoming projects (on plot area equal to or greater than 500 square meters) of construction and demolition for civil structures are required to mandatorily register at the web portal.
2. To self-monitor/ self- audit their activities on the parameters mandated/ directed for compliance and to take necessary steps, if required, to improve the status of compliance.
3. The project proponents are required to carry out self- audit / self-determination for dust control measures on the parameters provided on the Web Portal and upload a self-declaration on a fortnightly basis.
4. The provision of video fencing with remote connectivity of the projects (within the municipal area of NCR and plot area equal to or greater than 500 Sq.m) is part of portal.
5. Reliable low cost PM2.5 and PM10 sensors are to be installed at the project site and linked to a cloud storage platform with a live Dash Board in the Web portal

The Commission for Air Quality Management in National Capital Region and Adjoining Areas vide its Direction No. 75 dated 27.07.2023 has ordered that revised Graded Response Action Plan (revised in July 2023) shall come in to effect from 01.10.2023 and directed strict implementation of the aforesaid revised GRAP, Stage –I of which envisages not to permit C&D activities in respect of such projects with plot size equal to or more than 500 Sqm which are not registered on the “Web Portal” of the respective state/GNCTD for remote monitoring for dust mitigation measures in accordance with the above said direction dated 11.06.2021 issued by the commission.



The “**Dust Pollution Control Self Assessment, DPCC**” envisages the response (Yes/ No) with respect to following **27 Points**:

01

Whether PM2.5& PM10.0 sensors installed at project site?

02

Whether continuous dust/wind breaking walls, tarpaulin or green-net, wind-fencing or scaffolding sheet of appropriate height have been provided around the periphery of the construction site and also tarpaulin or green-net on scaffolding around the area under-construction and the building?

03

Whether building material is covered during transportation?

04

Whether Anti-Smog Gun(s) has been installed at the construction site?



05

Whether wind fences/screens and/or enclosures/coverings for storage piles being utilized? No loose soil or sand or construction & Demolition Waste or any other construction material that causes dust shall be left uncovered

06

Whether no grinding and cutting of building materials in open area and wet-jet is being used ?

07

Whether unpaved surfaces and areas with loose soil are adequately sprinkled with water to suppress dust? Ideally site to be fitted with fine water spraying nozzle system?

08

Whether all vehicles including carrying construction material and construction debris of any kind cleaned and wheels / under body washed before leaving the construction site?



09

Whether DG set installed (with acoustic enclosure & stack height)?

10

Whether video-fencing with remote connectivity installed at project site?

11

Whether proper collection, segregation, disposal & recycling of C&D Waste is ensured and due log book of the same is maintained?

12

Whether mixing processes is carried out in enclosures?



13

Whether steps have been taken to ensure that debris/ construction material is not dumped in public roads/ undesignated sites?

14

Whether dust mitigation measures be displayed prominently at the construction site for easy public viewing?

15

Whether roads leading to or at construction sites are paved and blacktopped i.e., metallic roads?

16

Whether options employed for C&D waste recycling?

17

Whether every worker working on the construction site and involved in loading, unloading and carriage of construction material and construction debris are provided with dust-mask to prevent inhalation of dust particles?

18

Whether arrangement provided for medical help, investigation and treatment to workers involved in the construction of building and carry of construction material and debris relatable to dust emission?

19

Whether material drop height is minimized at the transfer point and enclosure around transfer point provided?

20

Whether designing layout of the construction site to minimize fugitive dust generation potential, including access roads, entrances and exits, storage piles, vehicle staging areas, and other potential sources of dust emissions.



21

Whether pre-fabricated materials and modular construction units are being used?

22

Whether proper shape storage piles provided so that they do not have steep sides or faces?

23

Whether stabilized earthworks with stone / soil / geotextiles / Vegetation / compacting?

24

Whether treated water is used to mitigate dust & wet process for Sand and grit blasting and facade cleaning generation on construction site?



25

Whether dust suppressants are being used?

26

Whether distances travelled for delivery of materials minimized?

27

Whether vehicles used for transport of materials have valid PUC certificate?

Points 1-14 : Mandatory

Points 15-27 : Desired

There is a provision of grading of registered project on the basis of marks obtained for compliance of each of the 27 points.



Criteria for Number of Anti-Smog Guns at Construction and Demolition Projects

As per direction no 69 dated 02.11.2022 issued by CAQM all the Construction and Demolition projects must deploy and ensure frequent and effective use of adequate nos. of Anti-Smog Guns in proportion to the area of construction for the project as under:

- At least 1 for a total construction area between 5000 - 10000 sqm*
- At least 2 for a total construction area between 10001- 15000 sqm*
- At least 3 for a total construction area between 15001- 20000 sqm*
- At least 4 for a total construction Area > 20,000 sqm*



IN NUTSHELL THE CONSTRUCTION PROJECTS ARE REQUIRED TO TAKE FOLLOWING STEPS WHILE UNDERTAKING THE CONSTRUCTION/ DEMOLITION ACTIVITIES:

- A. Adherence to the dust control norms prescribed in view of MoEF&CC, GOI Notification no. G.S.R.94(E) dated 25.01.2018 read along with Hon'ble National Green Tribunal order dated 4.12.2014 & 10.04.2015 in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others**
- B. Deploy Anti Smog Gun(s) if total construction area is more than or equal to 5000 sqm.**
- C. All projects (on plot area equal to or greater than 500 square meters) of construction and demolition for civil structures are required :**
 - 1. To mandatorily register at the web portal
 - 2. To provide PM 2.5 and PM 10 sensors linked to a cloud storage platform with a live Dash Board in the Web portal to represent the ambient air quality monitoring.
 - 3. To provide video fencing with remote connectivity which should cover the complete site and active construction being carried out at site along with dust control measures implemented.
 - 4. To upload fortnightly self-audit preferably in 1st week and 3rd week of every month without fail.
 - 5. In case the construction of the project has been completed, closure report for the same may be updated on the web portal.



Revised Graded Response Action Plan (GRAP)

The Commission for Air Quality Management in National Capital Region and Adjoining Areas vide its Direction No. 75 dated 27.07.2023 has ordered that revised Graded Response Action Plan (revised in July 2023) shall come in to effect from 01.10.2023 and directed strict implementation of the aforesaid revised GRAP, Stage –I of which envisages not to permit C&D activities in respect of such projects with plot size equal to or more than 500 Sqm which are not registered on the “Web Portal” of the respective state/GNCTD for remote monitoring for dust mitigation measures in accordance with the above said direction dated 11.06.2021 issued by the commission.



Public Notice issued by Delhi Pollution Control Committee

DELHI POLLUTION CONTROL COMMITTEE
 DEPARTMENT OF ENVIRONMENT, (GOVT. OF NCT OF DELHI)
 5th FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI 110006
 Visit us at: <https://www.dpcc.delhigovt.nic.in>

ATTENTION:
MANDATORY REGISTRATION AND TO UPLOAD SELF-ASSESSMENT/ AUDIT ON PORTAL BY ALL PROJECT PROPONENTS, CONTRACTORS, BUILDERS, PERSON OR AUTHORITY UNDERTAKING CONSTRUCTION AND DEMOLITION ACTIVITY IN NATIONAL CAPITAL TERRITORY OF DELHI

Please take a note that Construction and Demolition activity in NCT of Delhi be undertaken only after ensuring Dust Mitigation measures prescribed vide directions dated 13.01.2020 of the Hon'ble Supreme Court of India in WP(Civil) 13029/1985 in the matter of MC Mehta vs UOI & Ors regarding deployment of Anti-Smog Gun(s), MoEF&CC, GOI Notification no. G.S.R.94(E) dated 25.01.2018 read along with Hon'ble National Green Tribunal order dated 4.12.2014 & 10.04.2015 in O.A. No.21 of 2014 and O.A. No. 95 of 2014 in the matter of Vardhaman Kaushik Vs. Union of India & others and Sanjay Kulshreshtha Vs Union of India & others.

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The above said mentioned directions envisage the following compliances by project proponents:

- All current/ upcoming projects (on plot area equal to or greater than 500 square meters) of construction and demolition for civil structures are required to mandatorily register at the web portal.
- To self monitor/ self-audit their activities on the parameters mandated/ directed for compliance and to take necessary steps, if required, to improve the status of compliance.
- The project proponents are required to carry out self-audit / self-determination for dust control measures on the parameters provided on the Web Portal and upload a self-declaration on a fortnightly basis.
- The provision of video fencing with remote connectivity of the projects (within the municipal area of NCR and plot area equal to or greater than 500 Sq.m) is part of portal.
- Reliable lowcost PM2.5 and PM10 sensors are to be installed at the project site and linked to a cloud storage platform with a live Dash Board in the Web portal.

The Commission for Air Quality Management in National Capital Region and Adjoining Areas vide its directions no. 52 dated 20.12.2021 has already ordered that for the projects located in the jurisdiction of NCTD, the proponents of G&D projects at plot area exceeding 500 Sq. m or above shall immediately register their projects on the "Web Portal" for online remote monitoring by the agencies concerned and as per the targeted action plan for management of dust from G&D projects outlined in CAQMA Policy to curb Air Pollution in National Capital Region published in July, 2022, all the Construction and Demolition projects have to adopt effective dust control measures and deployment of anti-smog guns in proportion to the area of construction as prescribed under:

Alert 1 for a total construction area between 5000 -10000 sqm;
 Alert 2 for a total construction area between 10005-15000 sqm;
 Alert 3 for a total construction area between 15005-20000 sqm;
 Alert 4 for a total construction Area > 20,000 sqm

In view of above, all project proponents, construction, builders, person or authority undertaking construction and demolition activity in National Capital Territory of Delhi are hereby directed to immediately register their projects on Web Portal and upload self-assessment/audit for the purpose of online remote monitoring by the agencies concerned and to take a note that prescribed dust mitigation measures are to be ensured.

Non-compliance in this respect shall invite coercive action for violation of the directions of Commission for Air Quality Management including Imposition of Environmental Compensation and/ or stoppage of construction activity at project sites.

DPCC_pollution (Member Secretary)
 Delhi Pollution Control Committee

Delhi Pollution Control Committee (DPCC) has issued Public Notices in various Newspapers on 09.10.2021, 21.01.2022, 31.02.2022, 13.03.2022, 01.10.2022, 03.10.2022, 23.11.2022, 27.11.2022, 04.12.2022, 11.12.2022, 18.12.2022 & 25.12.2022 directing all project proponents, contractors, builders, person or authority undertaking construction and demolition activity in National Capital Territory of Delhi to immediately register their projects on Web Portal and upload self-assessment/audit for the purpose of online remote monitoring by the agencies concerned and to take a note that prescribed dust mitigation measures are to be ensured.



Thanks