

Guidelines for Clean and Safe Construction **for Greater Chennai Corporation**

Construction activities such as demolition, excavation, hammering, crushing, mixing, material handling, vehicle movement, etc. are known to emit various pollutants, most commonly dust-containing particulate matter (PM10 and PM2.5), that, when resuspended, go on to affect air quality. Recognizing the significant impact of construction activities on air quality within Chennai, the Greater Chennai Corporation (GCC) has developed the Guidelines for Clean and safe Construction to mitigate air pollution, safeguard public health and ensure sustainable urban development. These guidelines are designed to mitigate air pollution arising from building constructions, Ready-Mix Concrete (RMC) or batching plants, and other construction works in Chennai.

The guidelines are as follows:

1. At project sites of site area up to one acre, the perimeter of the site shall be barricaded with tin/metal sheets of height 6 m to prevent spillage of dust and debris to exterior locations. **(High significance)**
2. At project sites of site area greater than one acre or building greater than 70 m and all RMC plants, the perimeter of the site shall be barricaded with tin/metal sheets of height 10 m to prevent spillage of dust and debris to exterior locations. **(High significance)**
3. All structure(s) to be demolished/ constructed shall be covered with high-density fabric/ tarpaulin/double-layered green net to prevent spillage of resuspended dust particles. Adequate sprinkling/ anti-smog guns focused on the dust-emitting source shall also be undertaken to control dust generation during demolition/ construction activities. **(High significance)**
4. There shall be continuous manual /mechanical water sprinkling /water fogging focused towards activity to prevent dust emissions during critical dust-generating activities like demolition, excavation, cutting, drilling, polishing, mixing and any similar dust-generating activity to prevent resuspension of dust. **(High significance)**
5. All construction material, excavated earth and C&D waste shall be stored on the site, not dumped on public roads or pavements and shall be covered with high-density polyethylene sheet/ tarpaulin of at least 200 GSM to avoid wind-blown dust resuspension. **(High significance)**
6. The constructor shall undertake regular housekeeping of the site multiple times throughout the day by brooming, cleaning, and sprinkling to ensure minimization of dust particles. **(Medium significance)**
7. Any waste materials generated during construction may be transported to designated areas on sites by use of covered trays, dust chutes etc. to prevent resuspension by exposure to wind. Properly covered lift shafts under construction shall also be alternatively used as dust chutes. **(High significance)**
8. All leftover construction material/ construction and demolition waste generated on-site may be treated in accordance with C&D Waste Management guidelines of the GCC and be segregated and transported to GCC-designated C&D Waste Management facilities as soon as possible as directed by the C&D waste management guidelines of GCC. **(High significance)**

9. All vehicles transporting materials and C&D waste shall not be overloaded to avoid spillage and shall have their storage areas completely covered from top and sides with tarpaulin to prevent resuspension of dust by exposure to wind. Ensure covering remains secured in place during transport. **(High significance)**
10. Manual /mechanical wheel washing shall be undertaken for all vehicles immediately before their exit from the site. Periodic cleaning of entry/exit points and approach roads shall be undertaken to prevent the spread of dust/muck by vehicles onto adjoining roads. **(High significance)**
11. The constructor shall deploy CCTV monitoring at high-rise building project sites (building height above 18.5 m) to ensure that personnel are following appropriate air pollution mitigation measures. CCTV footage shall be made available to GCC authorities for inspection as and when required. **(High significance)**
12. The constructor shall deploy sensor-based air pollution monitors at high-rise building project sites (building height above 18.5 m), with at least two sensors placed on the perimeters in upwind and downwind directions respectively. The constructor shall act immediately upon recording high pollution levels on sites. Monitoring records shall be made available to GCC authorities for inspection as and when required. **(High significance)**
13. DG sets operational zed on sites shall run on clean fuels such as LPG/ PNG / Electricity, dual fuel mode, or be equipped with Emission Control Devices, and be operated in accordance with MoEFCC guidelines. **(High significance)**
14. Security measures (Alarm System, Safety measures) must be in place in constructions sites like large apartments, commercial complexes. **(High significance)**
15. All vehicles transporting materials and/or C&D waste shall possess valid Pollution Under Control (PUC) certification. **(High significance)**
16. The constructor shall designate a site engineer/ environment engineer/ project manager or any other appropriate site personnel at the managerial level to develop an air pollution mitigation plan for the lifecycle of the project and oversee its implementation. **(Medium significance)**
17. Site personnel, labour, and any other staff shall be sensitized by the constructor towards the reduction of air pollution by careful conduct of all construction-related activities. The constructor shall also install informational boards/ posters at the site for visual reference of workers on site. **(Low significance)**
18. Proper Personal Protective Equipment (PPE), such as respiratory masks, goggles, and protective gear, should be made available to protect workers from breathing in dangerous airborne particles. **(Medium significance)**

Penalties for violators:

- a) GCC may undertake spot inspections at sites to ensure mitigation measures are being adhered to, and the constructor shall endeavour to provide access to site and project records as and when demanded.
- b) Any constructor found violating aforementioned guidelines shall be penalized as given below:

S No	Area of Project	Penalties for High Significant Category violators	Penalties for Low & Medium Significant Category violators
1	Violations for built-up area (BUA) > 20,000 sq m	Rs. 5,00,000/-	Rs.1,00,000
2	Violations for Built up area (BUA) above 500 sq m and up to 20,000 sq m BUA	Rs. 25,000/-	Rs.10,000
3	Violations for plot Built up area (BUA) 300 sq m and upto 500 sq m	Rs. 10,000/-	Rs.1000

In case of medium/ low significant violations, notice for rectification of violations will be issued to the construction site and 15 days of time will be given to rectify issues. If repairs are not rectified after 15 days, a fine will be imposed according to the Construction site area. After that, a grace period of 7 days will be given to them after which, if the repairs are not rectified, the notice will be issued to stop the construction activities in the site.

In case of high significant violations, notice for rectification of violations will be issued to the construction site and 15 days of time will be given to rectify issues. If repairs are not rectified after 15 days, a fine will be imposed according to the Construction site area. After that, a grace period of 7 days will be given to them after which, if the repairs are not rectified, the notice will be issued to stop the construction activities in the site.