COMMISSION FOR AIR QUALITY MANAGEMENT
IN NATIONAL CAPITAL REGION AND ADJOINING AREAS

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F.No.A-110016/12/2020/CAQM-C&D/ 448-450 Dated: 11.06.2021

Directions under Section 12 of Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2021.

Monitoring of Dust Control measures at Construction and Demolition sites in the National Capital Region: "Web Portal"

Whereas, The Commission for Air Quality Management in National Capital Region & Adjoining Areas has been constituted again and has started functioning pursuant to the new Ordinance. Section 30 of the above referred Ordinance 2021 provides that anything done or any action taken under the erstwhile Ordinance 2020 shall be deemed to have been done or taken under the corresponding provisions of the Ordinance 2021;

WHEREAS, dust from the Construction and Demolition (C&D) activities is a major and consistent source of Air Pollution in the National Capital Region and contributes adversely to $PM_{2.5}$ and PM_{10} levels and thus, is a great cause of in abatement of Air Pollution;

WHEREAS, Government of India, Ministry of Environment, Forest & Climate Change in exercise of powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986, vide Notification No. GSR 317(E) dated 29/03/2016 has notified "Construction and Demolition Waste Management Rules, 2016", inter alia, elaborating the duties of waste generators, service providers and their contractor, local authorities, SPCBs / SPCCs and CPCB etc. for management and control of dust from the C&D activities;

WHEREAS, Central Pollution Control Board has issued "Guidelines on dust

mitigation measures in handling construction material and C&D Wastes, 2017", which, inter-alia, include identification of major dust generating activities during handling of construction material and C&D wastes, compositions of construction material and C&D wastes and dust abatement measures in handling of construction material and C&D wastes viz-a-viz during transportation, off-site / on-site storage, at-site construction / demolition / renovation activities etc.;

WHEREAS, the dust mitigation measures, inter alia, prescribe for wet suppression, wind reduction by raising barricade, dust barrier sheets on scaffolding around the construction and demolition building, use of covering sheets on construction material that are easily air-borne, proper covering of C&D debris that are dumped at temporary storage sites, adequate covering on construction works, proper disposal of C&D waste material, adequate and proper covering of the trucks / vehicles carrying construction / demolition material, cleaning of such vehicles before it is permitted to ply on the road after loading / unloading of such material etc.;

WHEREAS, non-adherence of the dust mitigation measures mandated under the extant rules / guidelines leads to situations where the dust from the C&D sites disperse in the air and contributes to the levels of PM_{10} and $PM_{2.5}$ thus, making the air more polluted;

WHEREAS, the Commission is of the view that to tackle the problem of dust resulting from construction, re-modeling, repair and demolition of any civil structure of individual or organization or authority generating construction and demolition waste such as building material, debris, rubble, etc., such activities are required to be regularly monitored and inspected, inter-alia, for compliance of various dust control measures;

WHEREAS, in view of the serious adverse impact of the dust emanating from construction, re-modeling, repair and demolition of civil structures etc., the Commission issued directions dated 23/12/2020 that required CPCB, SPCBs

concerned and DPCC to conduct field visits / inspections, for compliance of dust mitigation measures and to submit fortnightly reports;

WHEREAS, from the reports received, inter alia, emerged that the compliance of dust control measures needs to be further strengthened with adequate focus on increased frequency of inspections.

WHEREAS, the Commission is of the view that monitoring of compliance of dust mitigation measures of a large number of Construction & Demolition activities in progress and further increasing in the National Capital Region, may not be achieved through physical inspections alone.

WHEREAS, Introduction of an online mechanism for monitoring and reporting of the compliance of dust mitigation measures by the project proponents is essentially called for so as to make them accountable.

WHEREAS, the Commission vide letter of even number dated 27/01/2021 issued advisory to the State Governments/ GNCTD to take appropriate action for introduction of an online mechanism to monitor and ensure compliance of dust mitigation measures at the Projects / C&D sites. The State Governments / GNCTD were accordingly requested to share with the Commission, the timelines by which the Web Portal with the requisite features for effective online monitoring of dust mitigation measures will be developed and operationalized.

WHEREAS, the action taken / response of the State Governments / GNCTD has not been received.

WHEREAS, considering the adverse impact of uncontrolled dust emanating from the C&D activities, on the Air Pollution in the National Capital Region, the Commission is of the view that concerted and focused approach is required and an efficient mechanism is to be put in place on urgent basis.

WHEREAS, Section 12 (2) (v) of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2021, empowers the Commission to issue directions for restriction of areas in which any industries,

operations or processes or class of industries, operations or processes, that have implication on air quality in the region, shall not be carried out or shall be carried out subject to certain safeguards.

WHEREAS, Section 12 (2) (vii) of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2021, empowers the Commission for inspection of any premises, plant, equipment, machinery, manufacturing or other processes, materials or substances and giving, by order, of such directions to such authorities, Officers or persons as it may consider necessary to take steps for the prevention, control and abatement of Air Pollution in the Region.

WHEREAS, Section 12 (2) (xi) of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2021, empowers the Commission to issue directions in writing to any person, officer, or any authority and such person, officer or authority shall be bound to comply with such directions.

NOW THEREFORE for strict implementation of the Construction and Demolition Waste Management Rules 2016 and various dust mitigation measures mandated / directed / ordered from time to time by the Authorities concerned under the State Governments / GNCTD, the Commission for Air Quality Management in National Capital Region and Adjoining Areas Ordinance, 2021, hereby issues the following directions:

1) An online mechanism through a web portal be put in place by the DPCC / SPCBs for monitoring of compliance of dust mitigation measures by the Project Proponents, within the Municipal areas of NCR.
2) All current / upcoming projects (on plot area equal to or greater than 500 square meters) of construction and demolition for civil structures under the territorial jurisdiction of Urban Local Bodies in the National Capital Region be required to mandatorily register at the web portal.

3) An exhaustive check-list, based on various guidelines on dust mitigation measures, notified / published / directed etc. from time to time by the Authorities concerned, be consolidated and standardized for monitoring compliance of dust mitigation measures in the NCR through an online mechanism.

4) An illustrative / indicative list of dust control / mitigation measures required to be put in place attached as **Annexure** may be referred for appropriate inclusion in the exhaustive checklist suggested at point No.3 above.

5) The check-list as stated in point No.3 read with point No.4 above, be duly incorporated in the "Web Portal", to facilitate the Project Proponents to self-monitor / self-audit their activities on the parameters mandated / directed for the compliance and to take necessary steps, if required, to improve the status of compliance.

6) The project proponents be 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.

7) 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 square meters) be incorporated in the web portal for monitoring purposes.

8) Reliable low cost $PM_{2.5}$ and PM_{10} sensors be installed at the project site and linked to a cloud storage platform with a live Dash Board in the Web portal.

9) The link to the dash board of the web portal be made available to CPCB, government agencies as well as to the administrative departments of the agencies concerned, dealing with such projects.

Direction No. 11

10) The CPCB / DPCC/ SPCBs to carry out, scheduled visits, with prior intimation, on the construction sites for the verification of degree of compliance and self-declaration / self-audit.

11) The CPCB / DPCC/ SPCBs to also carry out surprise inspections to assess the compliance of the dust control measures at such sites and for taking appropriate action for levying environmental compensation and / or stoppage / closure of work.

The above directions of the Commission be complied with on top priority. The status / progress of implementation may be appraised to the Commission on a monthly basis.

Encl.: **As above**

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To:

The Chief Secretary, Government of Haryana

Copy to:

1. The Additional Chief Secretary, Environment, Government of Haryana
2. The Chairman, Central Pollution Control Board
3. The Member Secretary, Haryana State Pollution Control Board

(Arvind Kumar Nautiyal)

Annexure

An illustrative / tentative list of Dust Control / Mitigation Measures
Applying treated water to mitigate dust generation on construction site. (water can be applied by a variety of methods for instance Anti Smog Guns, Trucks, water pills, water cannons, hoses, fire hydrants, sprinklers etc.).
Use of dust suppressants: (i) liquid polymer emulsions (ii) agglomerating chemicals (e.g., lignosulfonates, polyacrylamides); (iii) cementitious products (e.g. lime based products, calcium sulphate); (iv) petroleum based products (e.g. petroleum emulsions); and (v) chloride salts (e.g. calcium chloride and magnesium chloride).
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.
Use of pre-fabricated materials and modular construction units.
Minimize distances travelled for delivery of materials.
Use of scaffolding sheets/nets, wind fencing for dust control.
Stabilize completed earthworks with stone / soil / geotextiles / Vegetation / compacting.
Reduce wind-blown dust generation activities during windy conditions.
Utilize enclosures/covering for storage piles e.g. tarpaulins, plastic, agri-shed nets fences / screens.
Proper shape storage piles so that they do not have steep sides or faces.
Properly scheduling of the delivery of landscaping materials in order to minimize the storage time on site.
Covering of building materials during transportation.
Remove material from truck underbodies and tyres prior to leaving the site as well as implement techniques to periodically remove mud/dirt from paved streets.
Ensuring proper collection, segregation and disposal of C&D Waste and maintenance of log book for disposal.
Options employed for C&D waste recycling.

Direction No. 11

Pre-emptive steps taken to avoid dumping of C&D waste on undesignated sites.
Minimize material drop height at the transfer point and ensure enclosure around transfer point.
Surface improvements to unpaved road surfaces & proper maintenance thereof.
Applying water spray in conjunction with cutting, grinding & drilling.
Apply wet process for Sand and grit blasting and façade cleaning.
Ensure Mixing processes in enclosures.