



राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्र  
वायु गुणवत्ता प्रबंधन आयोग  
Commission for Air Quality Management in  
National Capital Region and  
Adjoining Areas



F. No. A-110018/01/2021-CAQM/827(DT)

Dated: 02.06.2023

**Subject: Directions under Section 12 of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021 - Regulations for use of DG sets in NCR.**

WHEREAS, Ministry of Environment, Forest and Climate Change, Government of India, in exercise of the powers conferred under Section 3 of the Commission for Air Quality Management in National Capital Region and Adjoining Areas Act 2021, has constituted the Commission for Air Quality Management in National Capital Region and Adjoining Areas (hereinafter referred to as the Commission);

2. WHEREAS, under Section 12 (1) of the Act, the Commission is vested with powers to take all such measures, issue directions, etc., as it deems necessary or expedient for the purpose of protecting and improving the quality of the air in the National Capital Region and Adjoining Areas;

3. WHEREAS, Section 12 (2) (ix) of the Act 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;

4. WHEREAS, the Commission has repeatedly taken up the matter relating to air pollution with the State governments of Haryana, Rajasthan, Punjab, Uttar Pradesh and Government of NCT of Delhi and various organizations concerned of the Central and State Governments/ GNCTD and has issued various Directions, Advisories and Orders for effective

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implementation of measures for abating air pollution in NCR from time to time;

5. WHEREAS, the Commission has been highlighting that amongst others, uncontrolled use of Diesel Generator (DG) sets is a major contributing factor for deterioration of air quality in the region;

6. WHEREAS, in wake of generally prevailing adverse air quality in NCR during the winter season, the Commission vide its directions No. 54-57 dated 08.02.2022 clarified the emergency purposes /services for which DG sets could be used, even under the period of ban imposed under the Graded Response Action Plan (GRAP) and also permitted limited and regulated use of DG sets in the industrial sector even during the periods of restriction under the GRAP;

7. WHEREAS, the Commission vide its directions No. 68 dated 14.09.2022 also permitted regulated use of DG sets more than 800 kW gross power category subject to conditions stipulated therein;

8. WHEREAS, large number of diesel generator sets operating in the region, even during the periods other than the ban under the GRAP, cause heavy air pollution and are a matter of concern and thus with a view to regulating the use of DG Sets even for the periods when there is no ban or restrictions imposed under the GRAP, the Commission in furtherance to Direction No. 54 to 57 dated 08.02.2022, Direction No. 68 dated 14.09.2022 and Order dated 16.12.022 and subsequent corrigendum dated 23.01.2023, in exercise of its powers vested under Section 12 of the Commission for Air Quality Management in NCR and Adjoining Areas Act 2021, directed vide Direction No. 71 that w.e.f. 15.05.2023, even for periods other than ban/restrictions under the GRAP, any use of DG sets of capacity upto 800 kW shall be permitted for industrial and commercial sector in the entire NCR and residential etc., only subject to their conversion to dual fuel system (70% gas + 30% diesel) in areas where gas infrastructure and supply is available:

9. WHEREAS, large numbers of representations from industrial associations, commercial entities, business organizations and individuals

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were received in the Commission and the issues have been repeatedly raised during interactions including with the industrial associations and the Chambers of Commerce, citing various techno-commercial constraints towards implementing the above noted directions, with MSME associations across NCR in particular citing huge financial burden towards implementation of the regulations related to DG sets, also highlighting the following difficulties and constraints:

- (i) There are still not enough certified vendors for all capacities of DG sets up to 800 kW capacity. The only range of DG sets where design/vendor for ECDs has been certified is from 125 kW – 500 kW. It is also unlikely that RECDs would be certified for lower capacity range than 125 kW. Likewise, RECD development is still underway for capacities above 500 kW.
- (ii) On the matter of dual fuel kits for retro-fitment in DG sets, while there is no issue of availability of kits/ vendors in the market, the constraint is primarily on availability of gas supply dedicatedly for DG sets in such industrial units where the core processes are not on PNG but other approved fuels. The CGD agencies apparently are taking too long to process the request from such agencies to provide PNG and the charges for the same are also reported to be very high. There are still some areas where gas infrastructure itself is not available, however, if a dedicated PNG supply network is not available, the requirement of gas for such dual fuel conversion could be arranged through mobile gas cascades/ cylinders in such areas.
- (iii) Some sectors, particularly MSMEs cited a heavy financial burden on them on account of the directed retro-fitment of dual fuel kits as also the ECDs. It was reported, based on abstract estimates, that the cost of retro-fitment of both the systems as above would almost be equal to the cost of a new DG set particularly for lower capacity DG sets which are most predominantly used for industrial and other such applications in the NCR by the MSMEs.

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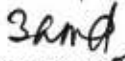
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- (iv) The potential for lowering of emissions through retro-fitment of dual fuel kits or through RECDs appears to be comparable across various capacities of DG sets.
- (v) A large number of portable DG Sets (below 19 kW capacity) are reported to be available in NCR across various sectors including individual residential units and shops etc. There are technical constraints and issues including commercial availability of ECDs/ dual fuel kits for such low-capacity DG sets, along with prohibitive costs for such low-capacity DG sets.
- (vi) MoEFCC, based on CPCB's recommendations have notified standards of emissions for new DG sets in November, 2022, which would come in force for new DG sets to be manufactured post 01.07.2023. The design parameters and standards of emission as per this revision are much stringent and even tighter with respect to the quality of emissions that is envisaged out of retro-fitment of the dual fuel mode and fitment of RECDs.

10. WHEREAS, in view of the above noted technical, commercial and practical aspects and the constraints involved in emission control arising from DG sets and considering the practical aspects of implementation of Directions and need to achieve better compliances as well as to reduce pollution arising out of large scale use of DG sets across the various sectors including industrial, commercial, institutional and residential units/ premises, there appears to be adequate rationale to revisit / review the extant directions on the regulated use of DG sets;

**11. NOW, THEREFORE, in modification of all extant directions / orders / guidelines on the regulations for DG sets, the Commission directs for adoption of the following revised Schedule for regulated operations of DG sets across all sectors in the NCR including Industrial, Commercial, Residential and Office establishments etc.:**

  
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S. No.	Capacity Range of DG sets	System to be adopted for control of emissions	Regulations for use
1.	Power generating sets of all capacities running on LPG/ Natural Gas/ Bio-gas/Propane/Butane	None	No restrictions (Even during periods under GRAP)
2.	Portable DG sets (below 19 kW)	None	No restrictions during the periods, other than restrictions under GRAP.  Not to be permitted during periods of restriction under GRAP.
3.	19 kW to less than 125 kW	Dual fuel mode (Natural Gas & Diesel)	No restrictions during periods other than under GRAP.  To be permitted to run for maximum 2 hrs. in a day during restrictions under GRAP subject to methodical maintenance of log of operation of DG sets, preferably in a digital mode.
4.	125 kW to less than 800 kW	Dual fuel mode <b>and</b> Retro-fitted ECDs through certified vendors / agencies	No restrictions (Even during periods under GRAP)
5.	800 kW and above	Dual fuel mode <b>or</b> Any other emission control device/ System  Strictly subject to compliance for stack emissions as in the footnote.	No restrictions during periods other than under GRAP.  To be permitted to run for maximum 2 hrs. in a day during restrictions under GRAP subject to methodical

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			maintenance of log of operation of DG sets, preferably in a digital mode.
6.	New power generating sets of all capacities up to 800 kW procured to the standards as in MoEFCC notification No.Q-15017/05/2012-CPW and GSR 804(E) dated 03.11.2022	None	No restrictions.  (Even during periods under GRAP)

**Note: Standards for stack emissions for 800 kW and above capacity DG sets**

S.No	Parameter	Emission Standards
i.	PM (at 15% O <sub>2</sub> )	50 mg / Nm <sup>3</sup>
ii.	NO <sub>x</sub> (at 15% O <sub>2</sub> )	650 mg / Nm <sup>3</sup>
iii.	CO (at 15% O <sub>2</sub> )	100 mg / Nm <sup>3</sup>
iv.	Stack height	<p><b>Maximum of the following (in mtr)</b></p> <p>a) Minimum 6 m above the building where DG set is installed.</p> <p>b) 30 m.</p> <p>For example, if the building height where such DG sets are installed is 20 mtrs, stack height for DG sets should be 30 mtrs. from ground level; while</p> <p>if the building height itself is 27 mtrs, the minimum stack height for the DG sets should be 33 mtrs. from the ground level.</p>

**12. It is hereby directed that the above noted schedule for regulation of DG sets would come in force in the entire NCR strictly w.e.f 01.10.2023 and Retro-fitment, of dual fuel kits or ECDs, wherever**

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warranted, must be targeted to be completed latest by 30.09.2023, failing which the use of the Diesel genset shall not be permitted under any circumstances, anywhere in the entire NCR.

13. NCR State PCBs/ DPCC shall ensure compliance of above directions through suitable consent mechanisms and periodic monitoring.

  
(Arvind Nautiyal)  
Member- Secretary  
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To,

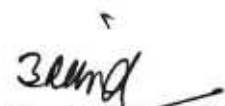
1. The Chief Secretary, Government of NCT of Delhi
2. The Chief Secretary, Government of Haryana
3. The Chief Secretary, Government of Rajasthan
4. The Chief Secretary, Government of Uttar Pradesh

Copy to:

1. Chairman, DPCC
2. Chairman, HSPCB
3. Chairman, RSPCB
4. Chairman, UPPCB
5. Chairman, CPCB.

Copy also to:

1. The Chairperson and all Members, CAQM.

  
(Arvind Nautiyal)  
Member- Secretary