

MAHARASHTRA POLLUTION CONTROL BOARD

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No.MPCB/JD(APC)/NCAP/DG Set/B- 0090

Date: 02/06/2023

CIRCULAR

Sub: - Retro-fitting of Emission Control Device (RECD) for in-use Diesel operated internal combustion engines up to 800kW (1000KVA) gross mechanical power for generator set in the State of Maharashtra.

WHEREAS, the Hon'ble National Green Tribunal, Principal Bench, New Delhi in Original Application No.681/2018 vide order dated 06/08/2019 noted that the air pollution caused due to DG sets needs to be part of the action plans, which may, if necessary, retrofitting of emission control devices on generators already in use. CPCB consider this aspect.

AND WHEREAS, the Ministry of Environment, Forest & Climate Change, Government of India, has launched the National Clean Air Programme (NCAP) for the prevention, control, and abatement of air pollution levels in the country at an urban regional level. The Government of India, recognizes major sources of air pollution such as vehicles, diesel generators, construction dust etc. As per National Clean Air Programme (NCAP), Government of India the Diesel Generators sets as a major sources of air pollution in Indian cities and states.

AND WHEREAS, there is plan for national level target of 30% reduction of PM 2.5 and PM 10 concentration in the ambient air under the National Clean Air Programme (NCAP), Govt. of India, wherein the Hon'ble NGT vide order dated 06/08/2019 has observed that the timeline to reduce the air pollution by 30% needs to be reduced and target of reduction needs to be increased, having regard to adverse effect on public health and in view of constitutional mandate of fundamental right to breathe clean air. It further states that, the pollution caused by DG sets needs to be part of action plans, which may, if necessary, require retrofitting of "Emission Control Devices/ Equipment's on generators already in use".

AND WHEREAS, the National Clean Air Programme (NCAP) guides about the solutions to reduce particulate matter emission from in-use diesel generators, such as:

- Use Retrofitted Emission Control Equipment with diesel generators having a minimum specified particulate matter capturing efficiency of at least 70%.

Or

- Shift to gas-based generators either by retrofitting existing generators for partial usage of gas (a mixture of diesel and gas) or buying new gas-based generators.

The Retrofit Emission Control Devices (RECD) are certified by one of the following recognized and approved Agencies by the Central Pollution Control Board (CPCB) and as per the Guideline of "System and Procedure for Emission Compliance Testing of Retro-fit Emission Control Devices (RECD) for Diesel Power Generating Set Engines up to Gross Mechanical Power 800 kW" issued by CPCB as follows:

- a) Automotive Research Association of India (ARAI, Pune)
- b) International Centre for Automotive Testing (ICAT, Manesar)
- c) Indian Institute of Petroleum (IIP, Dehradun)
- d) Vehicle Research Development Establishment (VRDE, Ahmednagar).

For DG Sets above 1000 KVA retrofit emission control device/ equipment should be tested by one of the above CPCB approved labs over ISO 8178-5 mode D2 cycle for equivalent KVA rating for reduction of particular matter, Carbon Monoxide and hydro carbons by more than 70% equivalent engine should be considered if either the rated power or swept volume of the test engine is the range of $\pm 25\%$ of the rated power or swept volume of the engine for which the device is being used.

AND WHEREAS, the above guideline provided Exhaust Emission Limits, Applicability and Requirement to Retrofit Emission Control Devices (RECD) to be installed on all the Phase-I & Phase-II engines/engine families as mentioned below, which have completed five years from the date/month of engine manufacturing:

Phase-I Engines: The engines complying to emission limits as specified in CPCB Stage-1 /GSR 371 dated 17th May 2002 and the diesel genset engines manufactured/imported on or after 1.7.2004 till 1.7.2014 shall establish the compliance of minimum 70% reduction of Particulate Matter by using the retrofitted after treatment device/s without adversely affecting any other emission parameters.

Phase-II Engines: The engines complying to emission limits as specified in CPCB Stage-2 / GSR 771(E) dated 11th Dec 2013 and its amendment vide GSR 232(E) dated 31-Mar-2014, and the diesel genset engines manufactured/imported on or after 1.7.2014 shall establish the compliance of minimum 70% reduction of Particulate Matter by using the retrofitted after treatment device/s without adversely affecting any other emission parameters.

AND WHEREAS, the engines/generating sets manufactured & installed before 1.7.2004 or the engines which are not complying with either Stage-I and/or Stage-II emission limits, such engines are to be scrapped. No one shall sell/use/run the above engines/generating sets.

NOW THEREFORE, enforce upon all the Industries, Establishments, Projects, Buildings, Utilities, Airports, Railway Stations or any other places in the State of Maharashtra, where, Diesel Generator sets of capacity upto 800 KW (1000KVA) are in use shall comply with the said Circular within a period of 120 days from the date of issuance of this circular, which please note.


(Pravin Darade, IAS)
Member Secretary

Copy submitted to:

1. Hon'ble Chairman, MPCB, Sion, Mumbai - for favour of information

Copy to:

1. PSO /JD-APC / JD-WPC/ AST /RO-HQ, MPC Board - for information.
2. All Regional Officer/Sub-Regional Officers, MPCB – They are directed to circulate the said circular to all the stakeholders/Users, as per their jurisdiction and submit Action Taken Report.
3. EIC-For hosting on MPCB Website.