

ORDER

Sub: TNPCB - Retrofitting of Emission Control Devices/Equipment in DG sets with Capacity of 61 kW – less than 800 kW and 800 kW & above in the State of Tamil Nadu.

Ref: 1.CPCB notification on 'List of manufacturers certified for RECDs applicable to Diesel Genset Engines (Up to 800 kW) for different capacity ranges as of 09-04-2024'

2.CPCB Lr. No. EQ-11099/8/2021-AQM-HO-CPCB-HO-Part (5),
dated: 22.03.2024.

3. MoEF&CC Notification- G.S.R. 804(E), dated: 03.11.2022.

4. Commission for Air Quality Management in National Capital Region and Adjoining Areas for NCR Directions No.76 dated:29.09.2023.

Whereas, the Government of Tamil Nadu, Environment & Forests Department in G.O.Ms.No.4, EC, dated 28.09.1983, had declared the entire area within the State of Tamil Nadu as "Air Pollution Control Area" for the purpose of Air (Prevention and Control of Pollution) Act, 1981.

Whereas, the Government of India, Ministry of Environment, Forest & Climate Change has launched the **National Clean Air Programme** (NCAP) for the prevention, control and abatement of air pollution level in the Country at urban and rural level. The Government of India recognizes major sources of air pollution such as vehicular emissions, DG sets/HFO, construction dust etc. As per the NCAP, Govt. of India, Diesel Generator sets are recognized as a major source of air pollution in Indian cities.

Whereas, in the State of Tamil Nadu, Chennai, Madurai, Trichy and Thoothukudi Cities have been identified as Non-attainment cities which do not meet the National Ambient Air Quality standards. City Action Plans for improving ambient air quality in the above said Non - Attainment cities viz **Chennai, Madurai, Trichy and Thoothukudi** have been prepared and implemented as per the directions dated:08-10-2018 of Hon'ble NGT (Principle Bench) in the matter titled as "NCAP with multiple timelines to clean air in 102 cities to be released around August 15" in O.A. 681 of 2018.

Whereas, there is a plan for national level target of **30%** reduction of **PM_{2.5}** and **PM₁₀** concentration in the ambient air under the 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 the target of reduction needs to be increased, having regard to adverse effect on public health and in view of the constitutional mandate of the fundamental right to breathe clean air.

Whereas, it further states, that the air pollution caused by DG sets need to be a part of the action plans, which may, if necessary, require "retrofitting of **Emission Control Devices / Equipment** on generators already in use".

Whereas, the Board has issued circular no.TNPCB/Labs/DD(L)/02151/2019 dated 10.06.2020, mandating retrofit of DG sets having capacity of 125 kVA and above with emission control devices tested and type approved by any one of the CPCB recognized/approved laboratories.

Whereas, certified DG sets by CPCB approved laboratories of capacities of 125 kVA and above were non-available at that juncture and later list of manufacturers certified for Retrofit Emission Control Devices (RECDs) applicable to Diesel Genset Engines (Up to 800 kW) for different capacity ranges as of 09-04-2024 were posted on CPCB website dated 30.11.2023.

Whereas, now adequate number of type approved agencies are available for RECDs in DG sets issued vide **CPCB notification on 'List of manufacturers certified for RECDs applicable to Diesel Genset Engines (Up to 800 kW) for different capacity ranges as of 09-04-2024'**.

And whereas, CPCB has requested to consider taking measures to control ambient air pollution from DG sets emission in non-attainment cities vide **CPCB letter No. EQ-11099/8/2021-AQM-HO-CPCB-HO-Part (5), dated 22.03.2024**.

Now, therefore, with the above background, and in exercise of powers vested with the Board to give directions under **Section 17 (1)(j) read with section 31 (A) of Air (Prevention and Control of Pollution) Act, 1981 and the notification issued by the CPCB dated:22.03.2024 in F.No. EQ-11099/8/2021-AQM-HO-CPCB-HO-Part (5)**, all the industries and the establishments within the State of Tamil Nadu operating DG sets, are hereby directed to-

I. Capacity range of 61 kW – less than 800 kW

a) Retrofit all operational DG sets **which are older than five years** from date of manufacturing and up to its useful life (i.e. 15 years from the date of manufacturing or 50,000 hrs of operation, whichever is earlier) of capacity **61 kW - less than 800 kW** with an **Emission Control Device/ Equipment** having a minimum specified **Particulate Matter** capturing efficiency of at least 70%. The Emission Control Device/Equipment must be tested over a 5-mode Constant Speed Cycle (D2 Steady-state discrete mode test cycle specified in ISO-8178-Part 4) for equivalent kVA rating (published on the CPCB website from time to time) by one of the four Central Pollution Control Board, Govt of India, recognized /approved laboratories as given below:

1. Automotive Research Association of India (ARAI), Pune (Maharashtra)
2. International Centre for Automotive Technology (ICAT), Manesar (Haryana)
3. Indian Institute of Petroleum (IIP), Dehradun (Uttarakhand);or
4. Vehicle Research Development Establishment (VRDE), Ahmednagar (Maharashtra)

(or)

b) Shifting to gas based generators by employing new gas based generators or use of Dual fuel system for in-use DG sets of less than 800 kW capacity up to its useful life as mentioned above

(or)

c) Shifting to gensets strictly meeting emission norms as per GSR 804(E) dated 03.11.2022.

II. Capacity range of 800 kW and above.

To adopt any emission control mechanism, strictly subject to compliance of emission standards as notified **vide statutory Direction No:76 dated:29.09.2023 (issued by Commission for Air Quality Management in National Capital Region and Adjoining Areas)** for DG sets of 800 kW and above for **the entire state of Tamil Nadu.**

This above directions are to be complied within a period of **180 days** from the date of issuance of this order by all stake holders in the non-attainment cities viz Chennai U.A. (Urban Agglomeration), Madurai U.A, Trichy U.A & Thoothukudi and other places within one year from the date of issuance of this order.

It is therefore, enjoined upon all the Industries and the establishments in the State of Tamil Nadu operating DG sets of 61 kW – less than 800 kW and 800 kW & above to comply with the above said directions in the stipulated time period, failing which action as warranted under the provisions of Environment (Protection) Act, 1986 and Air (Prevention and Control of Pollution) Act, 1981 shall be initiated.

""Manufacturers of Retrofit Emission Control Devices (RECD), in whose name the Type Approval certificate is issued, are required to submit quarterly reports through real-time monitoring of diesel generator (DG) sets. Failure to do so will result in non-compliance status.""

Issued with the approval of Competent Authority.

Sd/-Dr.Jayanthi.M,
Chairperson

//Forwarded by Order//


Deputy Director (Labs)

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23/8/24*

To

To ACEE to issue the notification through OCMMS for Industries and Establishments

Copy to:

- 1 All the JCEEs, Tamil Nadu Pollution Control Board for kind information and necessary action
- ✓ 2 JCEE VI requested to display the notification in Board's website for public view
- 3 PA to the Chairperson
- ✓ 4 PS to the Member Secretary



Central Pollution Control Board

List of manufacturers certified for Retrofit Emission Control Devices (RECDs) applicable to Diesel Genset Engines (Up to 800 kW) for different capacity ranges as of 09.04.2024.

Sr. No.	Name of RECD manufacturers	Applicability for following Range of In-Use Diesel Genset Engines (kW)*	Certification Agency
1	M/s. PI Green Innovations Pvt. Ltd.	~ 204 - 298 kW	ARAI
		~ 319 - 569 kW	ARAI
		~ 300 - 799 kW	ARAI
2	M/s Platino Automotive Pvt. Ltd.	~ 228 - 250 kW	ARAI
		~ 256 - 438.2 kW	ICAT
3	M/s. Chakr Innovation Pvt. Ltd.	~ 228 kW	ARAI
		~ 294 - 448 kW	ICAT
		~ 61 - 113.3 kW	ICAT
		~ 75 - 114.7 kW	ICAT
		~ 500.3 - 765.8 kW	ICAT
		~ 499.3 - 663.6 kW	ICAT
4	M/s Automoto Genset Solutions LLP	~ 110.2 - 242.7 kW	ICAT
5	M/s Vasthi Instruments Pvt. Ltd.	~ 110.6 - 249.4 kW	ICAT
6	M/s Maxmoc Motor Works India Pvt. Ltd.	~ 109.8 - 248.6 kW	ICAT

* During Type Approval testing, the RECD + Engines combination are tested for mechanical gross power in KW as per the System & Procedure Document. Corresponding KVA rating shall be checked and verified with data plates affixed on In-Use Engines as well as DG sets for the correctness.

ARAI- The Automotive Research Association of India, Pune, Maharashtra

ICAT- International Centre for Automotive Technology, Manesar, Haryana