

EMISSION LIMITS, APPLICABILITY AND OTHER REQUIREMENT

The Environment (Protection) Third amendment Rules, 2013 vide notification no. GSR 771(E) dated 11th Dec 2013 and its amendment vides GSR 232(E) dated 31-Mar-2014, at Serial no. "95. Emission limits for new diesel engine up to 800 kW for generator set (Genset) application", issued by Ministry of Environment and Forests, Government of India. The notification is reproduced here as such.

95. Emission limits for new diesel engine up to 800 kW for generator set (Genset) application.

The emission limits for new diesel engine up to 800 kW for generator set (hereinafter referred to as Genset) applications shall be effective from 1st July 2014 as specified in the Table below subject to the general conditions contained therein, namely:-

TABLE

Power Category	Emission Limits (g/kW-hr)			Smoke Limit (light absorption coefficient, m ⁻¹)
	NOx + HC	CO	PM	
Upto 19 kW	≤ 7.5	≤ 3.5	≤ 0.3	≤ 0.7
More than 19 kW upto 75 kW	≤ 4.7	≤ 3.5	≤ 0.3	≤ 0.7
More than 75 kW upto 800 kW	≤ 4.0	≤ 3.5	≤ 0.2	≤ 0.7

Notes:

1. The abbreviations used in the Table shall mean as under: NOx – Oxides of Nitrogen; HC – Hydrocarbon; CO – Carbon Monoxide; and PM – Particulate Matter.
2. Smoke shall not exceed above value throughout the operating load points of the test cycle.
3. The testing shall be done as per D2 – 5 mode cycle of ISO: 8178- Part 4.
4. The above mentioned emission limits shall be applicable for Type Approval and Conformity of Production (COP) carried out by authorized agencies.
5. Every manufacturer, importer or, assembler (hereinafter referred to as manufacturer) of the diesel engine (hereinafter referred to as 'engine') for genset application manufactured or imported into India or, diesel genset (hereinafter referred to as 'product'), assembled or imported into India shall obtain Type Approval and comply with COP of their product(s) for the emission limits which shall be valid for the next COP year or, the date of implementation of the revised norms specified above, whichever earlier.

Explanation- The term 'COP year' means the period from 1st July of a calendar year to 30th June of the following year

6. Stack height (in meters), for genset shall be governed as per Central Pollution Control Board (CPCB) guidelines.

General Conditions

1. Applicability.-

These conditions shall apply to all new engines for genset application and products manufactured, assembled or, imported into India, as the case may be:

Provided that these rules, shall not apply to, -

- (a) Any engine or, product, assembled or manufactured or imported, as the case may be, for the purpose of export outside India, or;
- (b) Any engine or product intended for the purpose of sample limited to four in number and to be exported back within three months, and not for sale in India.

2. Requirement of certification.-

Every manufacturer of engine or product, as the case may be, shall have valid certificate(s) of Type Approval and COP for each COP year for all engine models being manufactured or, for all engine or product models being imported, after the effective date for the emission limits, as specified above and the COP for the genset sold on or after 1st July 2014 shall be effective and in force as per revised emission norms with effect from 1st July, 2015, respectively

3. Sale, import or use of engine or product not complying with these rules.-

No person shall sell, import or use an engine for genset application or, a product which is not having a valid Type Approval certificate and certificate of COP referred to in condition 2.

4. Requirement of conformance labeling.-

- (1) All the engines, individually or as part of the product shall be clearly engraved 'Genset Engine' on the cylinder block.
- (2) The engine or the product shall be affixed with a conformance label meeting the following requirements, namely:-
 - (a) The label shall be durable and legible;
 - (b) The label shall be affixed on a part necessary for normal operation of the engine or the product and not normally requiring replacement during the life of the engine or the product.
- (3) The conformance label shall contain the following information, namely:-
 - (a) Name and address of the manufacturer of engine or product, as the case may be;
 - (b) Statement that the engine or product conforms to the Environment (Protection) Rules, 1986;
 - (c) Type Approval certificate number;
 - (d) Date of manufacture of engine and the product or in case of import, the date of import of the engine and the product; and
 - (e) Rated speed and corresponding gross power in kW.

5. Nodal Agency.-

- (1) The Central Pollution Control Board shall be the nodal agency for implementation of these rules.
- (2) In case of any dispute or difficulty in implementation of these rules, the matter shall be referred to the nodal agency.
- (3) The nodal agency shall constitute a Committee to advise it on all matters, including the disputed matters, related to the implementation of these rules.

6. Authorized agencies for certification.-

The following institutions are authorised to carry out such tests as they may deem necessary, for giving certificates of Type Approval and Conformity of Production tests for diesel engines or products and to give such certificates, namely:-

- 1) The Automotive Research Association of India, Pune (Maharashtra);
- 2) The International Centre for Automotive Technology, Manesar (Haryana);
- 3) The Indian Oil Corporation, Research and Development Centre, Faridabad (Haryana);
- 4) The Indian Institute of Petroleum, Dehradun (Uttarakhand); and
- 5) The Vehicle Research Development Establishment, Ahmednagar (Maharashtra).

7. Compliance and testing procedure.-

- (1) The Compliance and Testing Procedure, as published by the Central Pollution Control Board shall be followed by all concerned.
- (2) The authorized agencies for certification shall submit the testing and certification details in respect of the emission to the Central Pollution Control Board annually.

8. Fuel Specification.-

The specification of commercial fuel applicable for diesel gensets shall be the same as applicable for commercial High Speed Diesel applicable for diesel vehicles in the area where product would be operated, from time to time, as per policy of Government of India.

9. Engine component or parts identification.-

All the details of engine components or parts responsible for the emission performance shall be clearly marked in English language".

Reference:

“System & Procedure for Compliance to Emission Limit for Genset Application (Up to gross mechanical power 800kWm)”, published by Central Pollution Control Board, Ministry of Environment & Forests, Govt. of India