

Ministry of Environment and Forests

Notification

New Delhi, the 17th May, 2002

G.S.R. 371(E):— In exercise of the powers conferred by sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

1.

1. These rules may be called the Environment (Protection) second Amendment Rules, 2002.
2. They shall come into force on the date of their publication in the Official Gazette.

2. In the Environment (Protection) Rules, 1986 (herein after referred to as the said rules), in Schedule I, ?

1. against serial number 47, item (d) relating to Diesel generators for domestic purposes and the entries relating thereto shall be omitted;
2. serial number 83 relating to standards/Guidelines for control of noise pollution from Stationary Diesel Generator(DG) sets and the entries relating thereto shall be omitted;
3. after serial number 93 relating to Primary Water Quality Criteria for Bathing Waters and the entries relating thereto, the following serial numbers and entries shall be inserted, namely:-

"94. NOISE LIMIT FOR GENERATOR SETS RUN WITH DIESEL

1. Noise limit for diesel generator sets (upto 1000 KVA) manufactured on or after the 1st July, 2003.

The maximum permissible sound pressure level for new diesel generator (DG) sets with rated capacity up to 1000 KVA, manufactured on or after the 1st July, 2003 shall be 75 dB(A) at 1 metre from the enclosure surface.

The diesel generator sets should be provided with integral acoustic enclosure at the manufacturing stage itself.

The implementation of noise limit for these diesel generator sets shall be regulated as given in paragraph 3 below.

2. Noise limit for DG sets not covered by paragraph 1.

Noise limits for diesel generator sets not covered by paragraph 1, shall be as follows:

- i. Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the users end.
- ii. The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/acoustic treatment. Under such circumstances the performance may be checked for noise reduction upto actual ambient noise level, preferably, in the night time). The measurement for Insertion Loss may be done at different points at 0.5 m from the acoustic enclosure/room, and then averaged.
- iii. The DG set shall be provided with proper exhaust muffler with insertion loss of minimum 25 dB(A).
- iv. These limits shall be regulated by the State Pollution Control Boards and the State Pollution Control Committees.
- v. Guidelines for the manufacturers/users of Diesel Generator sets shall be as under:
 1. The manufacturer shall offer to the user a standard acoustic enclosure of 25 dB(A) insertion loss and also a suitable exhaust muffler with insertion loss of 25 dB(A).
 2. The user shall make efforts to bring down the noise levels due to the DG set, outside his premises, within the ambient noise requirements by proper siting and control measures.
 3. Installation of a DG set must be strictly in compliance with the recommendations of the DG set manufacturer.
 4. A proper routine and preventive maintenance procedure for the DG set should be set and followed in consultation with the DG set manufacturer which would help prevent noise levels of the DG set from deteriorating with use.

3. LIMITS OF NOISE FOR DG SETS (UPTO 1000 KVA) MANUFACTURED ON OR AFTER THE 1ST JULY, 2003

i. Applicability

1. These rules apply to DG sets upto 1000 KVA rated output, manufactured or imported in India, on or after 1st July, 2003.
2. These rules shall not apply to:

- a. DG sets manufactured or imported for the purpose of exports outside India; and
- b. DG sets intended for the purpose of sample and not for sale in India.

ii. **Requirement of Certification**

Every manufacturer or importer (herein after referred to as "supplier") of DG set (herein after referred to as "product") to which these regulations apply must have valid certificates of Type Approval and also valid certificates of Conformity of Production for each year, for all the product models being manufactured or imported from 1st July, 2003 with the noise limit specified in paragraph 1.

iii. **Sale, import or use of DG sets not complying with the rules prohibited**

No person shall sell, import or use of a product model, which is not having a valid Type Approval certificate and Conformity of Production certificate.

iv. **Requirement of Conformance Labelling**

1. The supplier of the 'product' must affix a conformance label on the product meeting the following requirements:
 - a. The label shall be durable and legible.
 - b. The label shall be affixed on a part necessary for normal operation of the 'product' and not normally requiring replacement during the 'product' life.
2. The conformance label must contain the following information:
 - a. Name and address of the supplier (if the address is described in the owner's manual, it may not be included in the label).
 - b. Statement "This product conforms to the Environment (Protection) Rules, 1986".
 - c. Noise limit viz. 75 dB(A) at 1 m.
 - d. Type approval certificate number.
 - e. Date of manufacture of the product.

v. **Nodal Agency**

1. The Central Pollution Control Board shall be the nodal agency for implementation of these regulations.
2. In case of any dispute or difficulty in implementation of these regulations, 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 regulations.

vi. **Authorized agencies for certification**

The following agencies are authorized to carry out such tests as they deem necessary for giving certificates for Type Approval and Conformity of Production testings of DG sets and to give such certificates:-

1. Automotive Research Association of India, Pune
2. National Physical Laboratory, New Delhi
3. Naval Science & Technology Laboratory, Visakhapatnam
4. Fluid Control Research Institute, Palghat
5. National Aerospace Laboratory, Bangalore

vii. **Compliance and Testing Procedure**

The compliance and testing procedure shall be prepared and published by the Central Pollution Control Board, with the help of the certification agencies.

95. EMISSION LIMITS FOR NEW DIESEL ENGINES (UP TO 800 KW) FOR GENERATOR SETS (GENSETS) APPLICATIONS

1. **Emission Limits**

The emission limits for new diesel engines up to 900 kw, for gensets applications shall be as given in the Table below:

Table

Capacity of diesel engines	Date of implementation	Emission Limits (g/kw-hr) for				Smoke Limit (light absorption coefficient, m ⁻¹)(at full load)	Test cycle	
		NOx	HC	CO	PM		Torque %	Weighting factors
Upto 19 kw	1.7.2003	9.2	1.3	5.0	0.6	0.7	100	0.05
	1.7.2004	9.2	1.3	3.5	0.3	0.7	75	0.25
>19 kw upto 50 kw	1.7.2003	9.2	1.3	5.0	0.5	0.7	50	0.30
	1.7.2004	9.2	1.3	3.5	0.3	0.7	25	0.30
>50 kw upto 260 kw	1.7.2003	9.2	1.3	3.5	0.3	0.7	10	0.10
> 260 kw upto 800 kw	1.7.2004	9.2	1.3	3.5	0.3.	0.7		

2. Applicability

These rules shall apply to all new diesel engines for genset applications (herein after referred to as 'engine') manufactured in India and all diesel engines for genset applications and diesel gensets (herein after referred to as 'product'), imported into India, after the effective date:

Provided that these rules shall not apply to:

- a. any engine manufactured or engine or product imported for the purpose of export outside India, or;
- b. any engine or product intended for the purpose of sample only and not for sale in India.

3. Requirement of certification

Every manufacturer of engine or every importer of engine or product must have valid certificates of Type Approval and certificates of Conformity of Production for each year, for all engine models being manufactured or for all engine or product models being imported, after the effective date with the emission limit as specified in paragraph 1.

4. Sale, Import or "use of engine or product not complying with these rules

No person shall sell, import or use of an engine or a product which is not having a valid Type Approval certificate and Conformity of Production certificate as per paragraph 3.

5. Requirement of conformance labelling

- i. All the engines (individually or as part of the product) shall be clearly engraved 'Genset Engine' on the cylinder block.
- ii. The engine or the product must be affixed with a conformance label meeting the following requirements:-
 - 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.
- iii. The conformance label must contain the following information:
 - a. name and address of the engine manufacturer or the engine or product importer (if the address is given in the owner's manual, it may not be included in the label);
 - b. statement that 'this engine or product conforms to the Environment (protection) Rules, 1986';
 - c. type approval certificate number;
 - d. date of manufacture of engine or in case of import, the date of import of the engine or the product.

6. Compliance with BIS specifications

All engines up to 20 kw (individually or as part of the product) shall carry ISI mark and meet relevant BIS specifications (IS 1000 1).

7. Nodal agency

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

8. Authorized agencies for certification

The following agencies are authorized to carry out such tests as they deem necessary for giving certificates of Type, Approval and Conformity of Production tests for Diesel engines and to give such certificates:-

- . Automotive Research Association of India, Pune.
- i. Vehicle Research and Development Establishment, Ahmednagar.

9. Compliance and testing procedure

The compliance and testing procedure shall be prepared and published by the Central Pollution Control Board with the help of the Certification Agencies.

10. Fuel Specification

The specification of commercial fuel applicable for -diesel gensets shall be the same as applicable for commercial HSD(High Speed Diesel) applicable for diesel vehicles in the area, from time to time."

3. In the said rules, in Schedule VI, in Part E relating to NOISE STANDARDS, in clause B, the entry "(d) Diesel generator for domestic purposes" shall be omitted.

[F. No. Q-15022/2/2001-CPA]

C. VISWANATH, Jt. Secy.

Note:- The principal rules were published in the Gazette of India vide number S.O.844(E) 19th November, 1986 and subsequently amended vide S.O.433(E) dated 18th April, 1987, S.O.64(E) dated 18th January, 1988, S.O.3(E) dated 3rd January, 1989, S.O.190(E) dated 15th March, 1989, G.S.R. 913(E) the 24th October, 1989, S.O.12(E) dated the 8th January, 1990, G.S.R.742(E) dated the 30th August, 1990, S.O.23(E) dated the 16th January, 1991, G.S.R. 93(E) dated the 21st February, 1991, G.S.R. 95(E) dated the 12th February, 1992, G.S.R. 329(E) dated the 13th March, 1992, G.S.R. 475(E), dated the 5th May, 1992, G.S.R. 797(E) dated the 1st October, 1992, G.S.R. 386(E) dated the 28th April, 1993, G.S.R., 422,(E) dated the 19th May, 1993, G.S.R. 801(E) dated the 31st December, 1993, G.S.R. 176(E) dated the 3rd April, 1996, G.S.R. 631(E) dated the 31st October, 1997, G.S.R. 504(E) dated the 20th August, 1998, G.S.R. 7(E) dated the 2nd January, 1999, G.S.R. 682(E) dated the 5th October, 1999, G.S.R - 742(E) dated the, 25th September, 2000, G.S.R. 72(E) dated 6th February, 2001 and G.S.R.54(E) dated 22.1.2002.