

BEFORE THE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH, NEW DELHI

Appeal No. 12(T<sub>HC</sub>) of 2013  
And  
Original Application No. 17(T<sub>HC</sub>) of 2013  
And  
Original Application No. 32(T<sub>HC</sub>) of 2013

In the Matter of :-

Market Welfare Association Vs. District Magistrate &Ors.  
And  
Fashion Market Welfare Association  
Vs.  
District Magistrate, SAS Nagar &Ors.  
And  
Sadhu Singh &Ors. Vs. The Chief Administrator &Ors.

CORAM : HON'BLE MR. JUSTICE SWATANTER KUMAR, CHAIRPERSON  
HON'BLE MR. JUSTICE M.S. NAMBIAR, JUDICIAL MEMBER  
HON'BLE MR. DR. D.K. AGRAWAL, EXPERT MEMBER  
HON'BLE PROF. A.R. YOUSUF, EXPERT MEMBER

Present: Appellant:  
Respondent No.4:  
(In Appeal No. 12(T<sub>HC</sub>) of 2013 and  
O. A. No. 17(T<sub>HC</sub>) of 2013)

Appearance not marked  
Ms. Gurinderjit, Advocate

Mr. Vikas Malhotra and Mr. M.P.  
Sahay, Adv. for MoEF, Mr. R. N.  
Jindal, Director

Ms. Alpana Poddar, Adv. for CPCB

Date and Remarks	Orders of the Tribunal
Item No. 08-10  March 11, 2015	<p><u>Appeal No. 12(T<sub>HC</sub>) of 2013, Original Application No. 17(T<sub>HC</sub>) of 2013 and Original Application No. 32(T<sub>HC</sub>) of 2013</u></p> <p>Learned counsel appearing for CPCB submits that after deliberation with different Authorities and concerned States they have prepared the National guidelines for 'in-use generator sets (noise and emissions)'. Copy thereof has been placed on record. Since the guidelines have been prepared by the CPCB in exercise of their statutory powers, we direct the CPCB to put these guidelines on their website as well as direct all the States to ensure the implementation of these guidelines expeditiously and without default.</p> <p>In view of the above nothing survives in these cases. Consequently, Appeal No. 12(T<sub>HC</sub>) of 2013, Original Application</p>

		<p>No. 17(THC) of 2013 and Original Application No. 32(THC) of 2013 stand disposed of while leaving the parties to bear their own costs.</p> <p>.....,CP (Swatanter Kumar)</p> <p>.....,JM (M.S. Nambiar)</p> <p>.....,EM (Dr. D.K. Agrawal)</p> <p>.....,EM (Prof. A.R. Yousuf)</p>
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BEFORE THE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH  
NEW DELHI

APPEAL NO.12 (THC) OF 2013

AND

OA No.17(THC) of 2013

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OA No.32 (THC) of 2013

IN

MARKET WELFARE ASSOCIATION VS. DISTRICT MAGISTRATE & ORS.

AND

FASHION MARKET WELFARE ASSOCIATION Vs. DISTRICT MAGISTRATE SAS NAGAR & ORS.

AND

SADHU SINGH & ORS. VERSUS CHIEF ADMINISTRATOR & ORS.

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(S.S.Bala)  
Scientist 'E'

Delhi  
February 25<sup>th</sup>, 2015

NATIONAL GREEN TRIBUNAL  
NEW DELHI  
No. 905/2015

# **Guidelines for in-use Generator sets**

**(Noise and Emissions)**

## **IN-USE GENSETS: Guidelines for Noise and Emission Control**

Consequent upon recognizing a fact that genset is a source of air and noise pollution in urban India, the emission standards for petrol & kerosene gensets (up to 19 kilowatt) were notified on 5<sup>th</sup> October, 1999 which have been subsequently revisited and revised on 07.08.2013. The noise limits for petrol & kerosene genset are in place since 25.09.2000. Similarly, emission standards for diesel gensets (up to 800 kilowatt) were notified on 17.05.2002 which have been revisited and revised on 11.12.2013. The noise limits for diesel gensets are in place since 17.05.2002. These norms are enforced, at manufacturing stage, through notified institutes/laboratories, wherein Central Pollution Control Board functions as nodal agency. Emission norms for diesel gensets (above 800 kilowatt) have been separately notified on 11.07.2002 and being implemented. The standards are likely to be notified shortly for natural gas/LPG run gensets or diesel/petrol & natural gas/LPG gensets.

In the matter of Appeal no. 12(THC) of 2013: Market Welfare Association Vs. District Magistrate & Ors; O.A. No. 17(THC) of 2013: Fashion Market Welfare Association Vs. District Magistrate & Ors, SAS Nagar & Ors; and O.A. No. 32(THC) of 2013: Sadhu Singh & Ors. Vs. The Chief Administrator & Ors., Hon'ble National Green Tribunal (PB) has directed CPCB to prepare guidelines for compliance monitoring and measures to be taken for controlling the pollution by in-use gensets. The Hon'ble Tribunal specifically desired to know life time of locally manufactured gensets and diesel gensets used for agriculture purpose in addition to possibility of checking emission standards as done in vehicles. As a matter of fact, every engine is subjected to wear and tear, which leads to deterioration in its performance i.e. higher noise levels and emission. Generally public complaints are received for gensets having capacity less than 60 kilowatt or so, installed at market places or in residential areas. In the instant case, the Market Welfare Associations of Mohali have installed diesel gensets for their members and power so generated, being used by the shop keepers in case of power failure.

The Punjab Pollution Control Board (PPCB) prescribed emission limits to these Market Welfare Associations for gensets while in-use which is not envisaged in the Environment (Protection) Rules, 1986. These associations have provided stacks of appropriate height to channelize smoke/emission as reported. The associations were not able to comply with the said stipulations for emission prescribed by PPCB. Market associations raised the issue before Hon'ble Punjab and Haryana High Court. The cases were transferred to the National Green Tribunal by the Hon'ble High Court in 2013. Union of India (UOI) through this Ministry was impleaded as one of the respondents, at a later stage.

The concept of monitoring of a genset during its use is a copy of concept of PUC certificate, for (in-use) vehicles, as applicable. Vehicle can be taken to PUC certificate booth or booth/van can be parked on road side for testing of a vehicle but, testing machines cannot be lifted to basement(s) or top floor(s) for monitoring where generators are installed. Each genset manufactured after May 2005 would be complying with emission and noise norms, at manufacturing stage, as per prevalent notified standards. The issue of noise standards for in-use gensets i.e. standards/guidelines to control noise problem has reportedly been discussed in 21<sup>st</sup> meeting of the 'National Committee on Noise Pollution Control' held on 26.09.2014 in the Central Pollution Control Board.

NGT vide its order on 24.10.2013 asked the Member Secretary, PPCB for a meeting with CPCB and Ministry to finalize the policy as to how best can the DG set be subject to emission standards without asking for providing porthole, monitoring platform Etc. First meeting of officials of CPCB, PPCB and the MoEF&CC was held in the Ministry in the Chamber of Dr. Rashid Hasan, Advisor on 07.11.2013 and second meeting in the office of Member Secretary, CPCB on 15.01.2014 in the matter. CPCB organized a meeting of officials of CPCB, SPCB and MoEF&CC on 01.09.2014. A draft guidelines has been developed. Another meeting has been organized on 23.01.2015 in the Ministry in the matter.

Member Secretary, CPCB appeared personally on 21.04.2014 in the matter and submitted before NGT that CPCB would be able to evolve appropriate methodology for checking the emission of DG sets. NGT directed that on receipt of such report or recommendations from CPCB, MoEF&CC would take official view of the matter. CPCB undertook emission monitoring of a few in-use gensets and submitted the report to Hon'ble NGT (PB), New Delhi on 22.05.2014.

On suggestion of the Ministry, the draft guidelines have been circulated by CPCB among various State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs) for inputs. A few SPCBs/PCCs have provided their comments in the matter. Some of them are not in agreement to the recommendations of 'National Committee on Noise Pollution Control' in respect of noise limits. Issues have been decided. Following guidelines for installation of gensets, Do's & don't for Operation & Maintenance, Common facility for power back up; active life of Gensets, and Phasing out of Gensets are suggested.

**1. Installation of Gensets**

- i. Gensets be installed with stand alone or isolated foundation with proper anti-vibration packing/pad, etc;
- ii. Smoke of a gensets be channelized/emitted in a manner that it is not a nuisance in the neighbourhood;
- iii. Genset be installed in the basement, roof top, ground floor, front/back offset of the premises/building, in, in order of priority. However, due care be taken so that it is not a nuisance in the neighbourhood; and
- iv. The developer for new market/malls, high rise building or a gated green field colony shall necessarily install a source of standby power back up and installation of genset by individuals be prohibited. Developer shall necessarily install a system to harvest solar or wind energy, as applicable as a source of electricity apart from solar geysers.

**2. Phasing out old Generator sets**

Phasing out of old generators as per following schedule may be enforced by concerned SPCB/PCC, area SDM and Police.

- i. Any generator set having engines not engraved with manufacturer's name and date of manufacturing not to be allowed to operate on or after 01.06.2015;
- ii. Any diesel generator set without certified acoustic enclosure as per GSR 371(E), dated 17<sup>th</sup> May 2002 not to be allowed to operate on or after 01.06.2015; and
- iii. Generator sets manufactured on or after 17<sup>th</sup> May 2002 be scrapped and dismantled after its useful life, i.e., 15 years from the date of manufacturing or 50,000 hours of operation, which ever earlier.

**3. Phasing out age old Diesel Gensets for agricultural applications**

Gensets being operated for agricultural applications are away from habitation. The phasing out of diesel gensets may be undertaking as per the following:

- i. Any genset being used for agriculture purpose, having engines not engraved with manufacturer's name and date of manufacturing not to be allowed to operate after 01.06.2016;

- ii. Any diesel generator set without certified acoustic enclosure as per GSR 371(E), dated 17<sup>th</sup> May 2002 not to be allowed to operate on or after 01.06.2016; and
- iii. All gensets manufactured on or after 17<sup>th</sup> May 2002 be discarded after its useful life i.e., 16 years from the date of manufacturing or 60,000 hours of operation, whichever earlier.

#### **4. Maintenance of Diesel Gensets.**

It is the responsibility of genset owner to maintain the genset. Proper maintenance as per following can reduce the pollution level and increase the Genset life.

##### **i. Do 's**

- Inspect the pre cleaner for dirt /dust accumulation and it may be cleaned once in a week;
- Check vacuum indicator for red band and clean the outer element only by compressed air, with pressure not more than 60 psi, if required;
- Drain the water and sediment from water separator and fuel tank before starting;
- Maintain coolant condition as per specifications;
- Check lube-oil pressure every morning after starting;
- Check engine log book of previous shift and reset the engine, if required;
- Clean the engine externally every day;
- Check any leakage of engine oil, coolant and fuel before start up and top up the engine oil, if required;
- Prime the engine before starting;
- Check battery condition and electrical connection before starting as per O&M manual;
- Start the engine and operate it without load/idle idle for 2-3 minutes for any leakage or abnormal sound. Do corrections, if necessary;
- Start the engine on electrical mode and check for proper functioning of safety controls;
- Idle the engine for three minutes before shut off;
- Carry out recommended schedule maintenance checks; and
- Use genuine parts while replacing them during break down or preventive maintenance.



## Don't

- Operate the engine with choked or ruptured air cleaner element;
- Operate the engine with vacuum indicator removed;
- Remove inner element for cleaning;
- Operate the engine without diesel tank cap and strainer;
- Operate the engine without radiator pressure cap;
- Operate the engine without thermostat;
- Operate the engine with lubricating oil level below 'L' mark or above 'H' mark;
- Crank the engine more than 30 seconds continuously;
- Operate the engine with dirty radiator core;
- Over extend the filters and lubricating oil change period;
- Allow dirt or any debris to enter oil system during oil change;
- Operate the engine without support of exhaust and intake piping;
- Operate the engine with low oil pressure or with high coolant temperature.

5. **CPCB Proposal for Continued action plan:** Meanwhile, CPCB in association with the manufacturers and in consultation with "Standing Committee on emission for off-Road Vehicles and construction equipments" may explore the methods of monitoring of in-use generator sets. A study project will simultaneously be undertaken to suggest emission limits and noise limits for in-use diesel Gensets.
6. **Conclusion:** Fixing of life of genset i.e. 15 years for residential and commercial purpose and 16 years for agricultural purpose would help in controlling air and noise pollution due to use of gensets, since, it is a difficult proposition to monitor noise and emission levels at par with the PUC certificate system, as applicable for in-use vehicles.

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