

## NOISE POLLUTION AND CONTROL

### Noise Limits for Diesel Generator Sets

The Ministry of Environment & Forests has notified noise limits for diesel generator sets (upto 1000 KVA) applicable at the manufacturing stage vide GSR 371(E), dated 17.5.2002 and its amendments. As per this notification the new diesel generator sets (upto 1000 kVA) manufactured on or after 1.1.2005 shall be provided with integral acoustic enclosures at the manufacturing stage and shall comply with noise limit of 75 dBA at 1 m (Sound Pressure Level). The Central Pollution Control Board is the nodal agency for implementation of the Rules at the manufacturing stage. All manufacturers / importers are required to take Type Approval of each of their model and get the verification of Conformity of Production done every year from one of the notified Certification Agencies. Accordingly, the '*System and Procedure for Compliance with the Noise Limits for diesel generator sets (upto 1000 kVA)*' has been developed by CPCB in consultation with the certification agencies and issued.

#### Status of Type Approval (TA) Certificates Issued to Manufacturers

Certification Agency	No. of genset manufacturers which has been issued TA certificates as on 31.12.2006
ARAI, Pune	96
NAL, Bangalore	15
FCRI, Palghat	11
NPL, New Delhi	15
NSTL, Vishakapatnam	-
Total	137

The notification also prescribes that for the existing generator sets (upto 1000 KVA), as well as, all generator sets more than 1000 kVA that the noise level shall be controlled by providing an acoustical enclosure or by treating the room acoustically at the user's end. It further prescribes that the aforesaid 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. At the user's end the State Pollution Control Boards / Pollution Control Committees shall implement the relevant portion of the Rules.

## Noise Pollution related Court Cases and Their Status

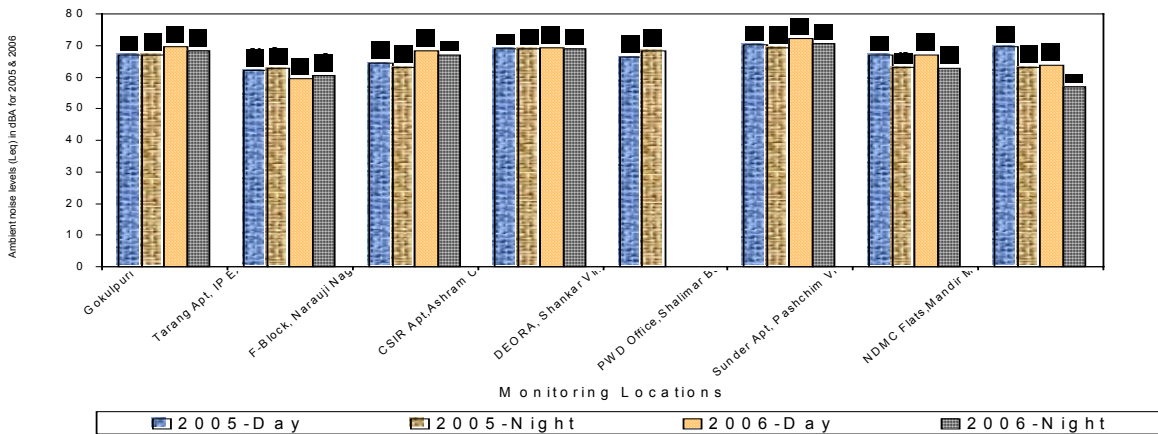
The Ministry of Environment & Forests, Govt. of India notified the revised noise limits for diesel generator sets (upto 1000 kVA) vide GSR 371 (E), dated May 17, 2002 (and its amendments). The noise limits became effective from 1.1.2005. This notification has been challenged by some genset manufacturers in various Courts. The status of the Court cases as on 31.12.2006 is presented below:

S. No	WP(C) No.	Matter	Remarks
1.	SLP 12253/2005 Hon'ble Supreme Court	M/s Jakson & Co Vs Union of India & CPCB	Case pending
2.	SLP 12501/2005 Hon'ble Supreme Court	Indian Genest Manufacturers Association Vs Union of India & CPCB	Case pending
3.	2094/2005 Calcutta High Court	M/s Jeevan Diesels & Electricals Ltd. Vs Union of India & Another	Case disposed off on 25.08.2006

## Ambient Noise Monitoring in Residential Areas along Major Roads in NCT Delhi

The objective of this study was to assess traffic noise exposure on residents living adjacent to major roads in NCT Delhi. In this study continuous ambient noise monitoring for 16 hours day time and 8 hours night time was carried out in eight locations during September – November, 2005 and 2006. The monitoring results are presented in figure below:

Ambient Noise Levels in Residential Areas along Major Roads in Delhi due to Traffic for Years 2005 & 2006



The Noise Pollution (Regulation & Control) Rules, 2000, specifies the ambient noise standard for residential area for day time (06:00 A.M to 10:00 P.M) and night time (10:00 P.M to 06:00 A.M) as 55 dB(A) and 45 dB(A) respectively. The monitoring results indicates that the ambient noise levels for both day time as well as night time at all eight locations are much higher than the prescribed standards.

### **Noise Level Testing of Fire-Crackers**

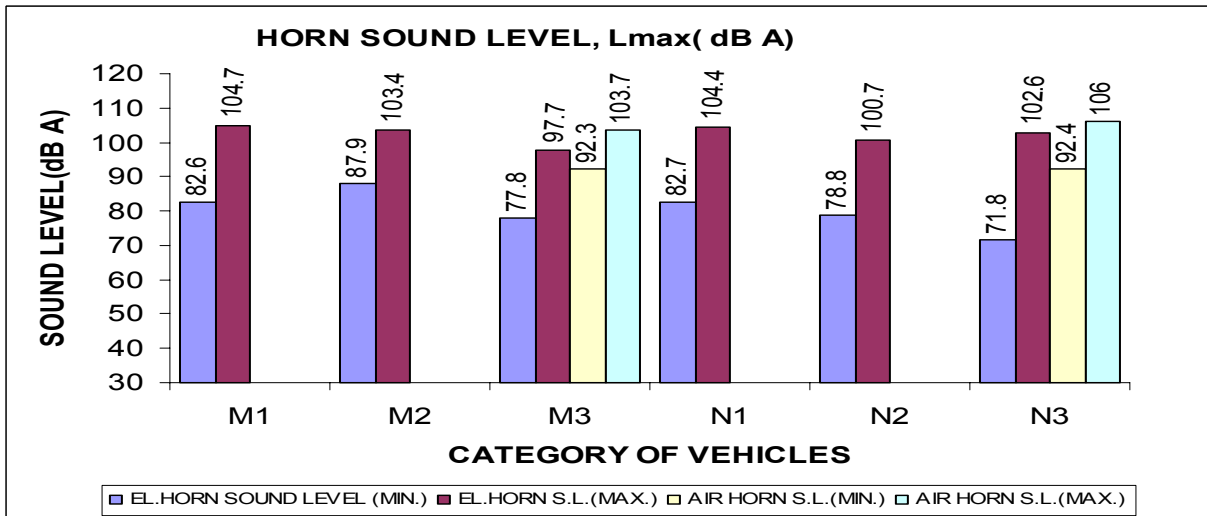
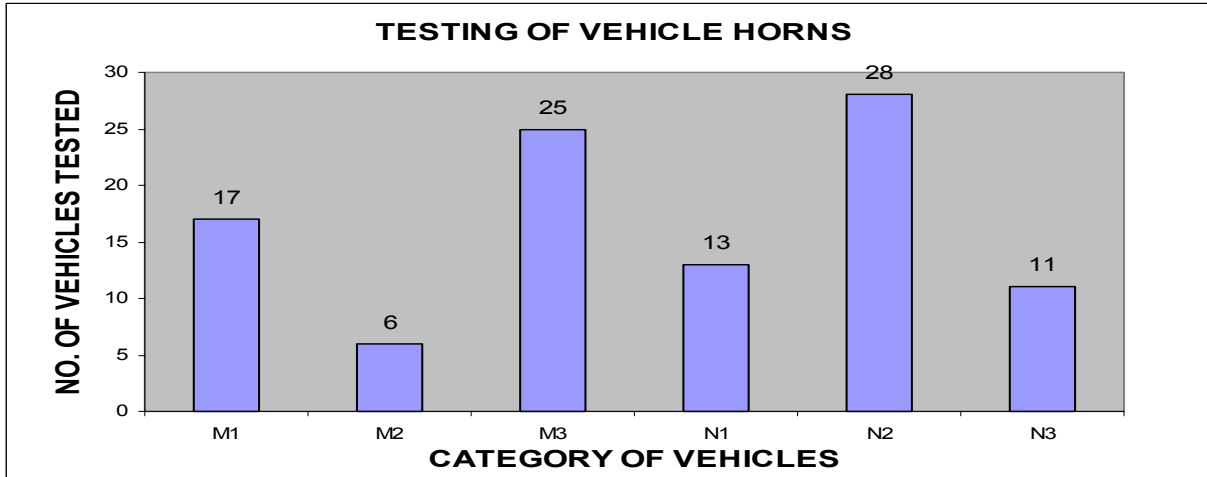
Fire-cracker samples were collected from the manufacturing units in Sivakasi and tested at National Aerospace Laboratory (NAL), Bangalore for noise limit compliance. Most of the fire cracker samples exceeded the noise limit.

### **Airport Noise Monitoring Procedure**

The '*Draft Procedure for Monitoring Ambient Noise Levels due to Aircrafts around Airports*' has been prepared by CPCB based on the study of prevalent noise monitoring procedure practiced internationally and also based on noise monitoring conducted in and around IGI International Airport. The procedure was deliberated upon at the 14<sup>th</sup> and 15<sup>th</sup> Meetings of the National Committee on Noise Pollution Control, held at CPCB, Delhi during August 2006 and December 2006. The objective of this document is to specify suitable requirements and procedures for airport authorities and other agencies to carry out ambient noise monitoring around airports.

### **Motor Vehicle Horn Noise**

A study was carried out by CPCB on horn noise level for commercial vehicles at Motor Vehicle fitness Centre of the Dept. of Transport, Govt. of Delhi at Burari, New Delhi and also at Tata Motors Service Centre, Delhi. The noise measurement was carried out as per AIS 014:200.1 The total no. of vehicles covered in the survey was 100 i.e. 72 at vehicle fitness centre, Burari, Transport Department, Govt. of Delhi and 28 at TATA Motors, Service Centre, Patparganj, Delhi. Number & types of vehicle horns tested and sound levels in dB(A) recorded.



Legends:

*Category M1 means a motor vehicle used for the carriage passengers and their luggage and comprising no more than 8 seats in addition to driver's seat.*

*Category M2 means a motor vehicle used for the carriage passengers and their luggage and comprising more than 8 seats in addition to driver's seat and having a maximum mass not exceeding 5 tonnes.*

*Category M3 means a motor vehicle used for the carriage passengers and their luggage and comprising no more than 8 seats in addition to driver's seat and having a maximum mass exceeding 5 tonnes.*

*Category N1 means a motor vehicle used for the carriage goods and having a maximum mass not exceeding 3.5 tonnes.*

*Category N2 means a motor vehicle used for the carriage goods and having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tonnes.*

*Category N3 means a motor vehicle used for the carriage goods and having a maximum mass exceeding 12 tonnes.*

## **National Committee on Noise Pollution Control**

The 14<sup>th</sup> and 15<sup>th</sup> Meetings of the National Committee on Noise Pollution Control were held on August 30, 2006 and December 9, 2006. Major issues discussed were as follows:

- Initiation of formulation of noise limits for Off-Road vehicles and Construction Equipments at the manufacturing stage.
- All installations of DG sets of 5 KVA and above may be brought under the purview of consent conditions to be implemented by the State Boards.
- Revision of 'System & Procedure for Compliance with Noise Limits for DG Sets (upto 1000 kVA
- Awareness Programme to educate public against noise pollution.
- Preparation of 'Procedure for Monitoring Ambient Noise Levels due to Aircrafts around Airports'