

Minutes of the 2nd Meeting of Sub Group Constituted to formulate draft noise standards for siren & sound signals, held on 17/01/2014 .

During the 2nd Sub-Group Committee Meeting held on 17/1/2014, the following Members were present.

1. Shri Dhanesh Manik
Professor,
IIT Bombay. Member
2. Ms.Sumaira Abdulali
Awaaz Foundation, NGO. Member
3. Dr Rohini Kelkar
Tata Memorial Hospital
Parel, Mumbai
4. Ms Neelima Naik
National Institute of Industrial Engineering
NITIE, Mumbai Member
5. Shri D. T. Devale
Sr.Law Officer
MPCB, Mumbai. Member
6. Shri V.M. Motghare,
Joint Director(APC),
MPCB, Mumbai. Member
7. Shri S.C. Kollur
Scientific Officer((JD[APC] Section).
MPCB, Mumbai. Member Convener

Sr.Law Officer welcomed the Members of the Sub-Group and informed that the monitoring of sound levels in respect of sirens & horns actually carried out before the Three Members Sub-Committee constituted by the Sub-Group on 16/1/2014 in the Transport Commissioner Office. The monitoring results are already circulated to all the Members of Sub-Group and the same were duly perused by the Members of the Sub-Group. Ms.Sumaira Abdulali, NGO informed that she had herself carried out noise monitoring in respect of 17 vehicles (auto-rickshaw, bikes & cars) at Carter Road, Bandra (W) at a distance of 3 mtrs. away from the said vehicles and she has observed that the noise levels were on higher side, all the bikes horn measured there, were over 100 dBA and the auto-rickshaw Noise Levels were 90 dBA and 96.4 dBA . The newspaper cutting of “ Times of India’ dtd.17/1/2014 in respect of Horny drivers overtake

WHO levels, city at risk, was perused. Therefore, while laying down standards for sirens & sound signals, care should be taken to ensure that stringent standards are laid down.

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Dr.Rohini Kelkar, Tata Memorial Hospital, Mumbai and Dr.Mohan Jagade, J.J. Hospital, Mumbai alongwith Ms.Sumaira Abdulali were of the view that health impact of noise levels will have to be taken into consideration and for that purpose, the Sub-Group can recommend to conduct Health Impact Study in respect of noise levels, more particularly in the crowded cities like Mumbai, Pune, Nagpur etc. through Public Health Deptt. with the help & assistance of Ali Yavar Jung National Institute For The Hearing Handicapped, Opposite of Lilawati Hospital Bandra (West), Mumbai and J.J.Hospital, Mumbai, it was also suggested that the target group can be the Traffic Police & Drivers of the vehicles. Prof.Neelima Naik, NITIE, Dr.Mohan Jagade, J.J. Hospital and Ms.Sumaira Abdulali, Awaaz Foundation, NGO pointed out that as per the noise levels measured and available data thereof, it is observed that the noise levels, more particularly use of horns & sirens are unbearable and exceeding the standards prescribed for motor vehicles at source i.e. 85 dBA and therefore, it becomes necessary to obtain actual monitoring noise levels on spot, more particularly, in respect of sirens & some horns.

Dr.Rohini Kelkar, Tata Memorial Hospital also agreed to the suggestions given by Ms.Sumaira Abdulali and stated that EPA Standards already provides for 85 dBA standards for motor vehicles at the manufacturing stage, which should be followed. Prof.Dhanesh Manik made available noise limits for vehicles applicable at manufacturing stage, which have been made applicable from 1/4/2005 and stated that these are the stringent noise limits, which have been made applicable w.e.f. 1/4/2005. However, he has made it clear that whatever standards are laid down at the manufacturing stage for motor vehicles, those are independent of horn/siren noise levels. He has further pointed out that at the International Level, horn & siren standards as prescribed, should be more than 10 dBA above the motor vehicle standards prescribed at the source. Therefore, it becomes necessary that at least 10 dBA above the existing standards of motor vehicles at manufacturing stage can be prescribed.

Dr.Rohini Kelkar and Ms.Sumaira Abdulali were of the considered opinion that Sub Group should not consider prescribing standards above whatever standards laid down for the motor vehicles at the manufacturing stage. In fact, horns & sirens distinct sound signals should have been very well considered in the existing noise standards for motor vehicles at source. Ms.Sumaira Abdulali expressed serious concern about noisy Mumbai and other cities due to various sources of noise pollution. Ms.Neelima Naik, NITIE was of the opinion that the background noise levels are already on higher side and therefore, while laying down the standards for siren & horns with sound signals shall be considered. It becomes necessary to ensure that proper signal is given to the by-passers and

other vehicles to get freeway and in order to avoid any sort of mishappening. Therefore, sound signals should be “**A Clear-cut Message**” to the by-passers. She was of the considered view that as recommended by Prof.Dhanesh Manik, it should be above 10 dBA of the noise standards prescribed for motor vehicles at source.

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JD(APC) expressed view that whether uniform noise standards should be prescribed for horns & sound signals for different kind of vehicles or whether different standards on the lines of EPA Rules can be prescribed for different kinds of vehicles will have to be decided. **It was unanimously decided that uniform standards not exceeding 85 dBA should be prescribed for all types of vehicles whichever may be the kind of sound signals. It was also decided that sirens & horns as provided under present Noise Pollution (Regulation & Control) Rules, 2000 as amended from time to time, should be prohibited in the silence zone and during night in the residential zone.**

Shri S.C. Kollur, Scientific Officer expressed difficulties in monitoring the noise levels of horns independent of the motor vehicles standards prescribed at source in the field in view of the existing very high background levels on road and therefore, it becomes very difficult to fix responsibility on a particular vehicle. He was also of the considered view that use of sirens & horns with pre-set timer in seconds will avoid repeated honking un-necessarily. He, opined that installation of horns/sirens inside the bonnet of the vehicles shall be made mandate to avoid excess dBA levels in ambient.

Sr.Law Officer specifically pointed out that though multi-toned horns are banned, giving a succession of different notes or with any other sound-producing device giving an unduly harsh, shrill, loud or alarming noise, as per Sub-Rule 3 of 119 of Central Motor Vehicles Rules, 1989, nothing contained in the said Rule (Sub-Rule 2) shall prevent the use of vehicles used as Ambulance or Fire Fighting Vehicles etc., of such sound signals as may be approved by the Registering Authority in whose jurisdiction such vehicles are kept. **It was therefore decided that for the vehicles used by the Police Officers or Operators of construction equipments vehicles or officers of Motor Vehicle Deptt., such sound signals, which are different than the normal horns can be approved by the Registering Authority, however, uniform standards should be imposed on such distinct sound signals subject to dBA levels limiting to 85 dBA maximum.**

Prof.Dhanesh Manik pointed out that the main problem is in respect of tampered horns, which are responsible for exceeding the noise standards. He has suggested that if these tampered horns are banned & removed immediately once those are noticed, the vehicles may not cross the standards prescribed at the manufacturing stage. It was, therefore, suggested that Pollution Under

Control Centers (PUC) can be authorized to check the noise generated from the horns & sirens once in a year or as per the surprise check, if any vehicle is found to be exceeding noise levels due to tampered horns or installation of horns other than approved by the Competent Authority at the manufacturing stage, then, such vehicle owners should be directed to the PUC Centers for further check-up and only after check-up should be allowed to be used horns. Tampered horns can be directed to be removed.

MPCB and Awaaz Foundation measured the decibel level of a Motor Vehicle Department's vehicle & an Ambulance and Fire **Tender** in accordance with the decision of the 1st Committee Meeting, because it was found that the

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siren of the police vehicle was measured 82.9 dBA. The Ambulance measured 99.1 dBA and the Fire **Tender** measured 101.7 dBA. The Motor Vehicle Department's vehicle siren was fitted inside the bonnet. The siren of the Ambulance and fire tender fitted outside the body of the vehicle on top & in the front respectively. All three sirens had distinct sound signals, commonly used for the particular type of vehicle.

It was also decided that installation of the sirens within vehicle will itself bring down its use to minimum. Similarly, as per checking of the horns and as per the Technology Assessment Program document published by the National Institute of Justice, USA, the installation of sirens inside the vehicles by the front side of the driver under the bonnet, not only reduce the noise levels at the road side, but its use also will be minimized. It was also recommended that the horns will have a signal at a lower decibel within the vehicle inside the driver's cabin.

It was also decided that since the present practice is that uniform standards are laid down at the National level under the provisions of the Environment (Protection) Act, 1986 for various sources of environmental pollution including noise, in order to avoid any inconsistent approach, the draft standards shall be forwarded to the CPCB for taking further decision as to whether those standards are to be prescribed at the National level or State level.

Therefore, the following recommendations are made by the sub-group.

1. The Sub-Group recommends that Multi-toned horns, which are banned and being enforced under the Motor Vehicles Rules, 1989 should also be continued as banned as part of noise standards too, as per provisions of the Noise Pollution (Regulation & Control) Rules, 2000.
2. The Sub-Group recommends to lay down uniform standards not exceeding 85 dBA to be prescribed for all types of vehicles at the manufacturing stage of horns.

3. The Sub-Group further recommends that sirens & horns should be continued to be prohibited in the silence zone and during night time in the residential zone. It is further recommended that during day time in the residential zone, the use of horns shall be minimized only with a view to give proper signal to the by-passers on the road and in order to avoid any sort of accident etc.
4. The Sub-Group has come to the conclusion that distinct sound signals are necessary for different kinds of vehicles, however, it should be uniform for each category of vehicle. For eg. for two-wheelers, it should be uniform though distinct from the heavy vehicles. Similarly for three-wheelers, it should be uniform, though distinct from other vehicles such as two-wheelers, four-wheelers etc. However, the standards prescribed for all

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- these vehicles should not be exceeding 85 dBA measured at a distance 3 mtrs. away from the source.
5. The Sub-Group observed that for certain special category of vehicles, which are being used for Police Officers or Operators of construction equipments vehicles or officers of Motor Vehicle Deptt. or Ambulances, sirens/distinct sound signals are necessary. However, use of such siren or distinct signals shall be made only in the circumstances of the necessity and exigencies. Here also, the Sub-Group is of the view that for different kinds of specialized vehicles, distinct sound signals can be prescribed. However, uniform standards for different kinds of vehicles/sound signals shall be prescribed subject to dBA levels limiting to 85dBA max. measured at a distance 3 mtrs. away from the source.
 6. The Sub-Group recommends to consider installation of sirens at the front side of the vehicles under the bonnet of vehicles in the vehicle itself, which will definitely minimize use of sirens and also reduce noise levels outside the vehicle on road.
 7. The Sub-Group recommends that taking into consideration prevailing practice of laying down uniform standards at National level and also having laid down uniform standards for different kinds of vehicles at the manufacturing stage itself, it will be more appropriate that draft standards are submitted to the Central Pollution Control Board for further finalization and onward submission to Ministry of Environment & Forests, Govt. of India to lay down uniform standards at National level.
 8. The Sub-Group also recommends that Guidelines can be laid down at the National level for use of horns, fixation / installation of horns and its prohibition in certain circumstances as well as replacement of old out of

use horns including tampered horns and checking of the horn conditions by Pollution Control Check Centers or otherwise, with surprise checking thereof in appropriate cases.

9. The Sub-Group also recommends that Guidelines can be laid down at the National level for use of horns, fixation/installation of horns and its prohibition in certain circumstances as well as replacement of old out of use horns including tampered horns and checking of the horns conditions by Pollution Under Control Centers (PUC) or otherwise, with surprise checking thereof in appropriate cases. Owner of such vehicle should be fined heavily to curb these practices.
10. The Sub-Group recommends prescribing method of measurement of sound signals being emitted from horns & sirens, the agencies, which approves the meters which measures the sound. This should be done under the Central Motor Vehicle Rules by the Ministry of Road Transport and Highways, Gol . The method of measurement could be such that as can be conveniently used during on road checking of vehicles.

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11. The Sub-Group recommends that a corresponding sound signal at a lower decibel level should be placed inside the Driver's Cabin of every vehicle, to be automatically activated whenever the horn is used.
12. The Sub-Group recommends conducting Health Impact Study for Traffic Police and Drivers of Vehicles in respect of noise levels, particularly, in crowded cities like Mumbai, Pune and Nagpur etc. through Public Health Deptt., with the help & assistance of Ali Yavar Jung National Institute For The Hearing Handicapped and J.J.Hospital, Mumbai.

Shri M. Shrinivasulu, Deputy General Manager, Homologation Management and Regulation, the Automotive Research Association of India pointed out by e.mail dtd.21/1/2014, that the requirement for testing of horns is carried out as per IS Standards. Further testing of vehicles after installation of such devices is carried out as per AIS. He suggested that in case, the Committee desires any changes in these two standards, it can be referred to Ministry of Road Transport and Highways, Gol as a Nodal Agency dealing with construction & approval of vehicles.

The Meeting was terminated with the vote of thanks to the chair.