MAHARASHTRA POLLUTION CONTROL BOARD

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No.:MPCB/PAMS/B- 616x

10/10/2008.

To, The Chief Controller of Explosives, Department of Explosives, 5th floor, CGO Complex, Seminary Hall, Nagpur.

Sub: Report on testing of fire crackers for noise levels carried out at Wadala Truck Terminus, Mumbai, on 6th October, 2008.

Sir,

The Maharashtra Pollution Control Board in association with Mumbai Police and AWAAZ Foundation, a non-governmental organization has carried out noise level monitoring of commonly available fire crackers on October, 6, 2008 at Wadala Truck Terminus, Opp.Imax Theatre, Mumbai. The Print and Electronic media representatives were also present. The fire crackers of different make, manufactured by various units were tested for noise level in an open space at the above location. The results of these tests are enclosed in a form of statement indicating name of the company, type of fire crackers, date and year of manufacturing and the noise levels observed, for your ready reference.

The monitoring results indicate that some fire crackers particularly the Sutali Bomb and also multiple crackers in series are not meeting the stipulated standards. Many of them were not showing their chemical contents.

The Hon'ble Supreme Court of India in Writ Petition No.(Civil) 72/1998 vide judgement dated 18.7.2005 directed that, every manufacturer shall, on the box of each fire cracker, mention details of its chemical contents and the same should satisfy requirement as laid down by the Department of Explosives. In case of non-compliance, the manufacturer shall be held liable.

You are therefore requested to take necessary action against the manufacturer of the fire crackers who are not complying the noise standards in compliance to the GSR 682 (A) on noise standards for fire crackers dtd. 5th October, 1999 under Environmental Protection Act and also the directions given by Hon'ble Supreme Court of India. If any additional information is required kindly let it be known to the undersigned.

Yours faithfully,

(Sanjay Khandare, IAS) Member Secretary

Copy submitted to:

Secretary, Environment Department

Joint Commissioner of Police, Crime, Mumbai Police Police Commissioner Office Compound, Dr.D N Road, Mumbai 400 001.

TESTING OF FIRE-CRACKERS TO ASSESS THE COMPLIANCE OF NOISE LEVEL STANDARDS PRESCRIBED UNDER ENVIRONMENT (PROTECTION) RULES, 1986.



MAHARASHTRA POLLUTION CONTROL BOARD KALPATARU POINT SION (E), MUMBAI- 400 022

Website: http://mpcb.mah.nic.in
October 8, 2008

TESTING OF FIRE-CRACKERS TO ASSESS THE COMPLIANCE OF NOISE LEVEL STANDARDS PRESCRIBED UNDER ENVIRONMENT (PROTECTION) RULES, 1986.

1. Introduction:

Bursting of fire crackers create significant noise pollution during the Diwali Festival. MPCB for last few years is trying to create public awareness towards the high noise levels generated during the bursting of the crackers and its associated adverse health impacts. As a part of this activity, MPCB in association with Mumbai Police and the NGO "Awaaz" had organized a testing of fire crackers on 06.10.2008 at Wadala Truck Terminus, to assess the compliance of noise levels standards prescribed under Environment (Protection) Rules, 1986.

Noise standards for fire crackers have been notified vide GSR No.682 (E) dated 5th October, 1999 under the Environmental (Protection) Act. As per this notification, the manufacture, sale or use of fire crackers generating noise levels exceeding 125 dB (AI) or 145 dB (C)_{pk} at 4 meters distance from the point of bursting are prohibited for individual fire crackers. For fire crackers in series, these noise limits are suitably made more stringent depending upon the number of crackers in series.

2. **Observations:**

Crackers of different types from various companies available in market were procured. They were tested at Wadala Truck Terminus where open space was available with firm ground surface. Type I noise meters were used, one for peak measurements and another for impulse measurements. The noise measurements were made at 4 m distance from the fire crackers. The findings of the noise monitoring are summarized below:

Testing of fire crackers at Wadala Truck terminus dated 06.10.2008.

| Sr.No. | Name of Company | Type of fire cracker | Sound pressure level IMPULSE (Max) in dB(A) | Sound pressure level PEAK (Max) in dB(C) |
|--------------------|--------------------|---------------------------------|--|---|
| Single Crackers | | | Max. allowable decibel= 125 | Max. allowable decibel= 145 |
| 1 | Anil | Electric (Big) | 94.6 | 120.0 |
| 2 | Anil | Electric (Small) | 104.0 | 120.4 |
| 3 | Anil | Maroons | 103.0 | 126.0 |
| 4 | Anil | Two Sound | 114.0 | 124.2 |
| 5 | Star | Star Border Bomb(sutli bomb) | 130.0 | 137.0 |
| 6 | Sony | Lalkila | 110.0 | 117.6 |
| 7 | Anil | Rocket Bomb | 91.0 | 96.8 |
| 8 | Charminar | Rambo Sutli Bomb | 128.0 | 130.4 |
| 9 | Anil | Mini Siren | 89.6 | 89.0 |
| 10 | Standard | Fire Ball | 106.0 | 110.0 |
| 11 | Sony | Miami Nights | 114.0 | 122.6 |
| 12 | Standard | Colour Thunder Bolt Gold | 117.0 | 124.0 |
| 13 | Raju kanna | Mirchi Red | 113.0 | 126.4 |
| 14 | Anil | Musical Mala | 104.0 | 96.0 |
| 15 | Rajkamal | Twelve Feathers of Phoenix | 105.0 | 118.2 |
| 16 | Jasmin | Flower Pots | 81.0 | 79.0 |
| Crackers in Series | | | Max. allowable decibel= 105 | Max. allowable decibel= 105 |
| 17 | Standard | Redfort Standard- 1000 | 124.0 | 121.0 |
| 18 | Standard | Redfort Standard- 5000 | 118.0 | 121.8 |

3. Findings and further actions:

It is observed that Sutli Bomb type of fire crackers are exceeding the prescribed noise standards. The other products meet the noise standards, though the noise levels are significantly high, more than 80 dB(A). First time, packagings of the fire crackers were displaying the prescribed noise limits. However, the chemical composition of the fire crackers was available only on very few types of crackers. Similarly the fire crackers in series were exceeding the prescribed noise standards of 105 dB(A).

The above referred notification of noise standards for fire crackers is to be implemented by the Department of Explosives and these findings will be communicated to the Department of Explosives for further necessary action. A copy of the report will also be submitted to Mumbai Police and Environment Department.
