

MAHARASHTRA POLLUTION CONTROL BOARD

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 awareness activity, MPCB in association with



Mumbai Police and the NGO "Awaaz Foundation" had organized a testing of fire crackers on **26.10.2010** at Bhakti Park, Wadala, 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 (A) 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:

Samples of crackers of different types from various companies available in market were procured. They were tested at Bhakti Park, Wadala, 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 mtr. distance from the fire crackers. The values of the noise monitoring are given below:

Testing of fire crackers at Bhakti Park, Wadala
dated 26.10.2010.

Sr.No.	Name of Company	Brand name 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	Gem Fire Works	Laxmi Bomb	119	142.4
2	Standard Fire Works	Kargil Bullet	103	139.5
3	Raj Industries, Buldhana	Border star Bomb	102.4	<u>147</u>
4	Shama Fire Works, Jalgaon	Vulcano	127.4	<u>147</u>
5	Standard Fire Works	Singing Bird	<u>130</u>	129
6	Standard Fire Works	AK-47	110	144.9
7	Gems Fire Works	60 multi colour shots	117.8	144.5
8	Standard Fire Works	Thunder Bomb	<u>130.6</u>	<u>147</u>
9	Coronation Fire Works	Whistling Pipe	90.9	102.9
10	Ajanta Fire Works	Cheetos	123.9	124.1
11	Standard Fire Works	Krishna Bomb	96	144.9
12	Standard Fire Works	Sky Buster-130	<u>125.3</u>	146
Crackers in Series			Max. allowable decibel= 105	Max. allowable decibel= 105
13	Shri Daivam Fire works, Shivkashi	2000 WALA	<u>119</u>	<u>142.4</u>
14	Coronation Booth	Lavangi	<u>108.8</u>	<u>141.3</u>
15	Anil Fireworks	Musical Mala	<u>110.4</u>	<u>115</u>