ENVIS NEWSLETTER
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ENVIS Centre, Environment Department, Government of Maharashtra, Mumbai

Diwali Festival of Noise?

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Editorial

Diwali is a festival of lights, which can in short be described as “victory of good over evil”. Other than joy and the festivities it brings, the festival of lights has also been widely regarded as contributing towards two types of pollutions – noise and air. Levels of SPM, PM10 and SOx, NOx in the atmosphere are good indicators of air quality and these usually almost double and sometimes treble during Diwali. In addition, as Diwali happens to fall towards the beginning of the winter season when temperature starts dropping, the lower temperature and decreased wind velocity during these times affect pollutant dispersal and hence do little to dilute the already raised levels of pollutants. This in turn is enough to cause respiratory distress to even otherwise healthy individuals.

Not just atmospheric pollutants, but the noise levels of the bursting of crackers too are a parameter that deserves special mention. Diwali is a festival to enjoy and celebrate, but let us not celebrate at the cost of someone else’s ill health and discomfort. No doubt, with time, environmental awareness about pollution is on the rise and cracker sales too are dipping. Let us also contribute actively by making it more of a festival of lights than a festival that concentrates more on noisy firecrackers.

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Introduction

India is described as a land of numerous religions and innumerable languages; it might well be described as a land of festivals. And during counting the festivals of India, any one would start from Diwali first because it is celebrated throughout the length and breadth of India. It is rightly said,

‘Deepeana Dipitam Iti, Pa alnena Palitam,
Aayurdaayakam, Walnana Arijitam
Layayogena lipsitam Iti Deepawali
Deepawali Prakashyeta Khalu Sarvam’

It means Diwali take the humanity towards Eternal Light and lamps lit may chases away the darkness of ignorance and welcome the bright light of enlightenment.

However recently, Loudspeakers, firecrackers, and loud musical instruments with rise in use of modern technologies appear to be one of the biggest culprits of noise pollution during Diwali in our country.

This issue deals with the monitoring of noise levels at different locations in Mumbai during Diwali festival to spread awareness among public at large. The monitoring was carried out at commercial, residential and silence zones in various parts of Mumbai.

Diwali is said to be festival of light, it is celebrated in every part of the country with great enthusiasm, but the environmental degradation that occurs during that period lasts for longer time. The temporary joy of bursting firecrackers is soon replaced by the intense air and noise and loitering of toxic garbage. It contains harmful chemicals that are associated with respiratory disorder, while noise from firecrackers can cause headache and nervous system problems in human beings while birds and animals have to cope with the blasts and noxious smoke.

Noise is defined as unwanted or disturbing sound. Sound is a form of energy that is emitted by a vibrating body and on reaching the ear causes the sensation of hearing through nerves.

It is usually made up of a wide range of different frequencies. The spread of sound energy across the audible frequency “spectrum” (about 20Hz – 20 kHz) is one factor that helps to make it identifiable to the human ear. The human ear is a very sensitive system with an extensive dynamic range. To accommodate this very large range, sound levels are measured using the decibel (dB) scale. 1

Impacts of Noise

Noise is one of the environmental pollutants, which are linked with several health hazards. Prolonged exposure to such noise has ill effects on humans as well as on animals.

Some of the adverse effects of noise pollution are summarized below.

Nuisance: It creates annoyance to the receptors due to sound level fluctuations. Aperiodic sound (noise) due to its irregular occurrences causes displeasure to hearing and causes nuisance

Physiological effects: The physiological features like increased pulse amplitude, blood pressure, heartbeat rate, blood cholesterol are attributed to noise pollution

Loss of hearing: Long exposure to high sound levels cause loss of hearing. This is mostly unnoticed, but has an adverse impact on hearing function.

Loss of concentration: The working performance of workers/individual is likely to suffer when exposed to high level of noise.

Nervous system: It causes pain, buzzing in the ears, feeling of tiredness, thereby affecting the functioning of human system. One of the short time reaction is the change in blood circulation.

Insomnia: It affects sleeping there by inducing the people to become restless and lose concentration and presence of mind during their activities.


**Damage due noise vibration:** The buildings structure and materials may get damaged by exposure to infrasonic / ultrasonic waves and even get collapsed.

**Permissible levels of sounds:**

Central Pollution Control Board (CPCB) has specified the sound level limits across the country. They have been categorized into groups, which represent depending upon the location.


**Ambient Air Quality Standards in respect of Noise Pollution (Regulation & Control) Rules, 2000**

<table>
<thead>
<tr>
<th>Area Code</th>
<th>Category of Area</th>
<th>Limits in dB(A) L Area Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Industrial area</td>
<td>Day time: 75</td>
</tr>
<tr>
<td>B</td>
<td>Commercial area</td>
<td>Day time: 65</td>
</tr>
<tr>
<td>C</td>
<td>Residential area</td>
<td>Day time: 55</td>
</tr>
<tr>
<td>D</td>
<td>Silence Zone</td>
<td>Day time: 50</td>
</tr>
</tbody>
</table>

**Note:**
- **Daytime is reckoned from 6 A.M. To 10 P.M.**
- **Nighttime is reckoned from 10 P.M. and 6 A.M.**
- *Silence zone is referred as areas within 100 meters around premises such as hospitals, educational institutions and courts. The Silence zones are to be declared by the Competent Authority.*
- **Use of vehicular horns, loudspeakers and bursting of crackers shall be banned in these zones.**
- **Mixed categories of areas should be declared as one of the four above mentioned categories by the Authority and the corresponding standards shall apply.**

**National Ambient Air Quality Standards**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Parameters</th>
<th>Daily (24hr) Maximum concentration in residential area µg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sulphur dioxide (SO₂)</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Oxides of Nitrogen (NOx)</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>Respirable Particulate Matter</td>
<td>100</td>
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</table>

**Noise Standards for Firecrackers:**

Fireworks may contain chemicals such as potassium nitrates, potassium chlorate, potassium perchlorate, charcoal, sulfur, manganese, sodium oxalate, aluminum, iron dust powder, zinc, strontium, and barium nitrate, etc. Depending upon their composition, they produce toxic chemical gases and sound, which further leads to air and noise pollution. Short-term but high emissions of trace elements from fireworks can induce severe respiratory health effects such as asthma, bronchitis and chronic lung diseases.

In order to curtail the noise pollution "The Noise Standards" for fire-crackers have been notified under the Environment (Protection) (Second Amendment) Rules, 1999 as follows:

A. i. The manufacture, sale or use of fire-crackers generating noise level exceeding 125 dBA(I) or 145 dBC(pk) at 4 meters distance from the point of bursting shall be prohibited.

   ii. For individual firecracker constituting the series (joined firecrackers), the above mentioned limit be reduced by 5 log₁₀ (N) dB, where N = number of crackers joined together.

B. The broad requirements for measurement of noise from fire-crackers shall be:

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3. Central Pollution Control Board, Noise Standards, Report on Ambient Noise Monitoring in Metroplollitization city by MPCA
4. The chemistry of fireworks: www.scienceinschool.org, www.ch.ic.ac.uk and Air pollution from fireworks during festival of lights (Deepawali) in Howrah, India - a case study
5. Ambient Air Quality during Diwali Festival over Kolkata – A Mega-City in India
6. Noise standards for Fire crackers by mpcb.gov.in and cpcb.nic.in
(i) The measurements shall be made on a hard concrete surface of minimum 5 meter diameter or equivalent.

(ii) The measurements shall be made in free field conditions i.e., there shall not be any reflecting surface up to 15 meter distance from the point of bursting.

(iii) The measurement shall be made with an approved sound level meter.

C. The Department of Explosives shall ensure implementation of these standards.

D. The fire-crackers for the purpose of export shall be exempted from the sub-paragraphs A, Band C above, subject to the compliance of the following conditions, namely:-

i. the manufacturer shall have an export order;

ii. the fire-crackers shall conform to the level prescribed in the country to which it is exported;

iii. they shall have a different packing color code, and

iv. there shall be a declaration on the box "not for sale in India" for export

C. The Department of Explosives shall ensure implementation of these standards.

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i. the manufacturer shall have an export order;

ii. the fire-crackers shall conform to the level prescribed in the country to which it is exported;

iii. they shall have a different packing color code, and

iv. there shall be a declaration on the box "not for sale in India" for export

Note: dB (AI): A –weighted impulse Sound Pressure level in decibel dB (C) pk: C - weighted Peak Sound Pressure level in decibel

Noise Monitoring at various locations in Mumbai during Diwali festival

Maharashtra Pollution Control Board (MPCB) with the association of Police department and several NGO’s have been monitoring the noise levels at various locations all over Mumbai during diwali festivals7.

Bursting of firecrackers plays a key role in causing noise pollution and leading to relentless health impacts. In order to create public awareness MPCB carried out testing of noise level from firecrackers in compliance with prescribed standards under Environment (Protection) Rules, 1986. Different varieties, crackers brands and noise intensity were measured in various cities of Maharashtra such as Mumbai, Pune, Nagpur, Nashik, Kolhapur and Aurangabad. Testing at the above said locations, Type - I noise meters were used, one for peak measurements and another for Impulse measurements. It was observed that various locations, brands of crackers have violated the standard for impulse and peak and are not complied with the Environment (Protection) Noise Rules 1986, amended in 1999.

Violations observed for the crackers, which are in series :-

<table>
<thead>
<tr>
<th>Place</th>
<th>No of tested brands</th>
<th>Violation of standard</th>
<th>Total no. of violations</th>
<th>Testing date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Impulse</td>
<td>Peak</td>
<td></td>
</tr>
<tr>
<td>Mumbai</td>
<td>6</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Nagpur</td>
<td>3</td>
<td>nil</td>
<td>2</td>
<td>09.10.2013</td>
</tr>
<tr>
<td>Pune</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>11.10.2013</td>
</tr>
<tr>
<td>Nashik</td>
<td>3</td>
<td>nil</td>
<td>1</td>
<td>14.10.2013</td>
</tr>
<tr>
<td>Kolhapur</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>11.10.2013</td>
</tr>
<tr>
<td>Aurangabad</td>
<td>4</td>
<td>nil</td>
<td>1</td>
<td>07.10.2013</td>
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<tr>
<td>Total</td>
<td>25</td>
<td>13</td>
<td>16</td>
<td>17</td>
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Violations observed in individual crackers :-

<table>
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<th>No of tested brands</th>
<th>Violation of standard</th>
<th>Total no. of violations</th>
<th>Testing date</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Impulse</td>
<td>Peak</td>
<td></td>
</tr>
<tr>
<td>Mumbai</td>
<td>10</td>
<td>1</td>
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<tr>
<td>Nagpur</td>
<td>23</td>
<td>5</td>
<td>7</td>
<td>09.10.2013</td>
</tr>
<tr>
<td>Pune</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>11.10.2013</td>
</tr>
<tr>
<td>Nashik</td>
<td>8</td>
<td>nil</td>
<td>nil</td>
<td>14.10.2013</td>
</tr>
<tr>
<td>Kolhapur</td>
<td>4</td>
<td>1</td>
<td>nil</td>
<td>11.10.2013</td>
</tr>
</tbody>
</table>

Noise Standards for single crackers: Impulse -125 dB (A), Peak-145 dB (C) Noise Standards for crackers in series: The above noise limit be reduced by 5 log10 (N) dB, where N=No of crackers joined together.

7. Testing of Fire Cracker Noise levels_2013 by MPCB
Graphical Representation of Noise levels in Mumbai and Thane during diwali festival

Figure 1: Noise level in South Mumbai during diwali festival (2011-2013)

Figure 2: Noise level in Mumbai Eastern suburban during diwali festival (2011-2013)

Figure 3: Noise level in Mumbai Western suburban diwali festival (2011-2013)
Observations:

Over 60 different locations all over Mumbai were monitored for two days i.e. Day time and Night time of Diwali in the year 2011-2013.

The above graphical representation illustrates noise level trends in span of three years. The monitoring sites are depicted in Table 1.

In South Mumbai, noise levels were observed higher than the daytime permissible limits, however, some locations showed a surprising decrease in noise levels over the recordings of 2011 to 2013*. Recordings on the 2nd day of Diwali, 2013 indicates a steep rise in noise levels in daytime. Comparison of 3 yrs data proves 2012 as the most clamorous. In South Mumbai, Mazgoan was having high noise levels in the range of 71.9-96.7 dB (A) during daytime and almost the same range i.e. 59.9-97.6 dB (A) was observed at Malabar Hills during night-time.

In Mumbai Eastern Suburban, there was a decrease in the noise levels this year as compared to 2011-2012 and at the same time Mumbai Western Suburban showed noise levels in the range from 60 – 83 dB (A). In Navi Mumbai, noise levels escalated during night as compared to day and highest recordings was observed at Koparkhairne sector 10, Vashi sector 9 and Ghansoli. Tembi Naka and Pokharan in Thane were found to be the most noisy. The noise levels were in the range of 55-83 dB (A) at the monitored location in Thane. By virtue of the growing environmental consciousness and awareness among people, it was observed that noise level during Diwali have decrease on a whole within cities at various locations over the span of 3 years.

* Three Years [2011 to 2013] Comparison of Noise levels During Diwali Festival-2013
Tips to celebrate Eco–friendly Diwali

- Instead of individual celebration, prefer community celebration. This will ensure reduced cost of celebration; paper pollution in a limited space and as compared to individual celebration, community celebration will cause less air and noise pollution.

- Even while celebrating commonly make sure that you limit your celebration for a limited period.

- Young children should be motivated to desist from playing with firecrackers and refrain use of high sound producing equipments and instruments on festivals, which cause noise pollution.

- Workshops and lectures should be initiated in the schools /colleges to highlight the menace of noise pollution and the role of the children/youths in preventing it.

- Instead of selecting conventional chemical crackers, one should opt for eco-friendly diwali crackers. An Eco-friendly cracker comprises of recycled paper and the sound produced by these crackers is under the decibel limit defined by the Pollution Board. These crackers produce different color lights instead of sound on bursting.

- Traditional lightening of earthen lamps or diyas should be preferred instead of electric illumination. This would also cut down the enormous electric consumption and conserve energy. However, earthen lamps need oil but the quantity is less and it gives light for at least 3-4 hours.

- Excessive consumerism increases the undue pressure on the natural resources, so cutting down purchase of unwanted things should be avoided. Use recyclable/reusable decoration.

- Vegetation buffer zones must be created in different parts of the city to reduce the noise impact.

### Tabular Representation of Noise Monitoring at various locations in Mumbai

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<tbody>
<tr>
<td></td>
<td>Mumbai South</td>
<td>Colaba - Nariman Point (Intercontinental Hotel)</td>
<td>62.7</td>
<td>78.4</td>
<td>71.9</td>
<td>70.4</td>
<td>73.1</td>
<td>59.6</td>
<td>79.7</td>
<td>73.0</td>
<td>72.6</td>
<td>76.8</td>
<td>61.9</td>
<td>58.1</td>
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<td></td>
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<td>63.0</td>
<td>75.4</td>
<td>71.9</td>
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<td>76.8</td>
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<td>Girgaon - Metro Cinema</td>
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<td>59.8</td>
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<td>80.8</td>
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<td>68.1</td>
<td>62.9</td>
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<td>Mumbai South</td>
<td>Worli - New Passport Office</td>
<td>82.5</td>
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<td>71.5</td>
<td>55.8</td>
<td>68.0</td>
<td></td>
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Source: Maharashtra Pollution Control Board
Three Years [2011 to 2013] Comparison of Noise levels During Diwali Festival-2013
News on Noise

Air, noise pollution levels less this Diwali, says MPCB

*Times of India, November 7, 2013*

MUMBAI: The city seems to have kept its decibel and air pollutions low this year. Data released by the Maharashtra Pollution Control Board (MPCB) shows that the concentration of the Respirable Suspended Particulate Matter (RSPM) levels on Diwali day was about 175 µg/m³, lower than even the 2010 reading of 182.

Last year, the RSPM level was recorded to be 280 µg/m³. In 2009, Mumbai recorded the highest RSPM level of 414 µg/m³ during Diwali.

Even the concentration of nitrogen oxides (NOx) was considerably low at around 70 µg/m³ compared to 95 µg/m³ last year. This shows that people growing more aware of the harmful effect of crackers on humans as well as on the environment.

“It is encouraging to see that the RSPM levels have dropped. Even the nitrogen oxide levels have come down,” said S C Kollur, scientific officer, MPCB. An environment observer, however, expressed surprise that the levels had gone down. “It is surprising because people have been constantly complaining of high level of pollutants in the air even this Diwali,” said the environment activist.

The MPCB data also shows a less noisy Diwali with average decibel levels for November 3 and 4 ranging between 85dB to 87dB on an average. The highest recorded noise level was 97.6dB in Sewree. Though this is higher compared to the 88.9dB recorded in 2012, it is restricted only to an isolated pocket in the city.

Some noisy locations this year were Worli, Sewree, Mulund, Jogeshwari and Santa Cruz. Officials said that the noisy levels didn’t scale higher than the last two years. However, the prime concern is the fact that the decibel levels even after 10pm are comparable to those recorded during the day. Levels above 80dB were recorded from many locations. The highest level recorded in Sewree was also during the night.

“This is a major concern as it shows that people are not adhering to the 10pm deadline. The levels ought to drop after the deadline,” said Kollur. “While the levels are lower or stable compared to last year, they are still above the environmental rules,” he added.

Anti-noise activist Sumaira Abdulali said that the police will have to enforce the deadline and create awareness much ahead of the festival for people to follow.

Mumbaikars see light, tone down Diwali noise

*Times of India, November 3, 2013*

MUMBAI: A decade ago, you knew Diwali was approaching a month in advance, thanks to thunderous firecrackers. After a decade of awareness drives by anti-noise pollution crusaders, police and civic administration, Mumbai has witnessed progressively quieter Diwali celebrations.

Aawaz Foundation, which battles noise pollution, has recorded noise levels during Diwali for several years now. Its report last year talks of how 2012 was the third year when Diwali was relatively quiet. Noise levels for 2013 will be measured on Sunday evening. Going by the trend, there is hope that this year, too, noise levels will continue to be low.

Sumaira Abdulali, founder of Aawaz, says, “When we first began campaigning, nobody was willing to listen to the idea that Diwali could be celebrated without fireworks.” As for the decline in noise levels, Abdulali points to the sheer number of people across the city who has spoken of how quiet the festival has become.

“There are pockets in the city where noise is high. However, it’s largely distant suburbs and the city’s outskirts that have witnessed high noise levels. The situation is a lot better in the city, thanks to sustained awareness campaigns on the ill-effects of noise pollution.”

This time round, associations of both fireworks traders and manufacturers have said there is a slump in sale of crackers in general. “There has been a 20-25% decline in the sale of noisy crackers,” says Harish Melwani of North India Fireworks Manufacturers’ Association, who supplies phooljhadis and ‘atom bombs’ to
Mumbai. He said there has been a definite preference for phooljhadis over ‘atom bombs’. He said there has been a 15-20% decline in the sale of all crackers across north India. As for his own factory in Jalgaon, he says, by the end of the festive season, he may have around 15-18% unsold stock.

Minesh Mehta, general secretary of Fireworks Dealers’ Association of Mumbai and Thane, too, talks of a slump. A trader himself, Mehta recalls the rush for crackers at his stall that would begin 15-20 days before Diwali. Over the past few years, people queue up only a couple of days before the festival. He estimates a 20-25% drop in sales of noisy crackers around Mohammed Ali Road, where his shop is located.

‘Aamchi Mumbai’ still a noisy city despite this year’s quiet Diwali
November 8, 2013, Source: DNA

Although Mumbaikars celebrated a relatively quiet Diwali this year with fewer firecrackers and fewer days of noisy celebration, Mumbai still remains noisiest city. Whether it was so because of inflation or general awareness of noise-related dangers to health, it has led to not just reduced noise pollution but also lesser air pollution this Diwali.

According to the Maharashtra Pollution Control Board, the average noise levels over Mumbai on the November 3 and 4 hovered between 60 decibels (dB) and 70 dB. Air pollutant levels were at an average of 139 ug/m3 compared to the average of 307 ug/m3 last Diwali. Non-governmental organisation Awaaz Foundation termed this year as the ‘Quietest Diwali in a decade’.

Noise is one of the most neglected forms of pollution even though it affects us in a more direct manner as compared to other forms. According to the World Health Organization, the safe limit for environmental noise is 55 dB and noise levels above 85 dB can cause irreparable harm to the body and mind. Sleep deprivation, annoyance and lack of concentration are results of prolonged exposure to noise which get aggravated in people with nervous conditions and can cause brain damage in babies.

“Loud noise leads to secretion of hormones which result in increased heart rate and high blood pressure. At a pub, you feel charged listening to loud music. This is because of adrenalin being secreted in your brain,” says Dr Mahesh Bedekar, a private practitioner who has filed numerous public interest litigations against noise pollution.

Despite citizens awakening to the issue of festive noise, the general traffic noise still seems to grow worse with increasing number of cars and poor driving ethics among people. Unnecessary honking is an offence under the Motor Vehicles Act and so is using a musical or pressure horn.

“Unnecessary honking is a habit that people develop when they are learning to drive. Driving schools need to teach people the theory of noise rules at the start and RTOs should check the use of illegal horns right at the time of registration”, said Sumaira Abdulali, founder of Awaaz Foundation. “The police have been involved, they’ve had car-free days and they occasionally do catch violators of the honking rules but this consciousness has to come in at an individual level,” she said.

Noise levels and corresponding health effects if levels are above...

- **30dB** In bedroom it causes sleep deprivation
- **35dB** In a classroom causes disturbance to communication and concentration
- **55dB** Outdoors causes annoyance
- **70dB** In industrial, commercial or traffic areas can cause the above besides gradual hearing impairment
- **85dB** In occupational environment can cause the above and gradual hearing impairment
- **100dB** At ceremonies and entertainment can cause all of the above and can cause irreversible hearing impairment
- **120dB** Starts causing pain along with the above

Traffic noise levels at silence zones in city

- **95dB** Near Lilavati hospital (7.30pm)
- **83db** Near Breach Candy hospital (6pm)
- **86dB** Hutatma Chowk (6pm)
- **86dB** Near Bandra station (at junction of Hill road and SV road) (5pm)
- **84dB** Carter road (5.30pm)
- **88dB** Near Sion hospital (3.45pm)
- **87dB** Near Jaslok hospital (7.25pm)
- **92dB** JJ hospital junction (4.50pm)
- **88dB** Byculla zoo (4.20pm)

Other than silence zones

- **87dB** Sion circle- 4pm-
- **89dB** Crawford market 5:05pm-
- **87dB** Gateway of India 6:30pm-
- **86dB** Pali naka- 9pm-
মুঘীকরানী বেত্তলি কানাচি কাঞ্জড়ি
লক্ষ্মণ, ৬ নভেম্বর, ২০১৩

- ফটাক্যাংকে মুঘীকরানী পাত: ঠাম্প্যাল সাবলেন্সćeনমধ্যে ৫৫ ডেসিবেল আবাজাচি নোড

ঢাণে/মুঘী: প্রতিযোগিত হওয়ায় ফটাক্যাংকে আতিশয়মুঘীকরানী এবং মুঘীকরানী মোট্টি সময় সতৃপ অস্তে। অস্ত মানাচ চাঞ্চ মুঘীকরানী আতিশয়মুঘীকরানী দুর্নিশ করত অনেকাছ ধ্বনির প্রদূশণ হওয়ার মাত্র যাচি কাঞ্জড়ি পেতল্যায় দিয়ানু আলে আলে। অনেকাছ মোট্টি আবাজ করাত এবং ফটাক্যাংকের ছোটাছটা পণ কম আবাজাচি আদাল আবাজ ন করপ ফটাক্যাংকের স্বাধীন পােলা দিতু আলে। চাঞ্চ ফটানীচি পাই দিকনিুনাঁ ফটাক্যাংকে দূপযোগ তালা তো ফন্ত ল্যাঙ্কি প্রদূশণ দিতু।

১ নোংর্থ্যা সুঘীত দিকনী সারাগুলি মালী। খাটিনা ধ্বনির প্রদূশণ ফটাক্যাংকে ইচ্ছী হেলেন, আরো শক্তিত হোয়া। মাত্র এনুনা আবাজাচি ফটাক্যাংকে খেটীচতুর মুঘীকরানী সাপ দূর্নিশ করতে আদাল কম আবাজাচি আদাল আবাজ ন করপ ফটাক্যাংকের মধ্যে কর অস্ত দিয়ানু আলে। যাচি প্রতিযোগিত দিকনীত দিয়ানু আলে। খাটিনা ধ্বনির প্রদূশণ ফটাক্যাংকে একথ লাইন্স চেন কম আবাজ করত ফটাকে অবজাচি অক্টো। তা পালী হিল, পেড রেড না ঢাকাটী রাশি একাঝারর ফটাকে ফোন প্রে হেলেন, তা পালীপু আদাল অস্তকৃত সারাগুলির জাহাজ ফটাকে ফোন প্রে অস্তধারণ পন্যানী পলিসোনান ফোন করত ল্যাঙ্কি ল্যাঙ্কি করণ ফটাক্যাংকে দূপযোগ শাঙ্খুর বিয়ায় আলে। খাটিনা ধ্বনির পাই দিকনী ফটাক্যাংকে দূপযোগ তালা তো ফন্ত ল্যাঙ্কি প্রদূশণ দিতু।

২ কবাজে সাবলেন্সćeনমধ্যে দিখাল ফটাকে ফোন সকারাল নিয়ম িংদা ধ্বনির প্রদূশণ বহুব্ধান আলে। মালী। ধ্বনির ফটাক্যাংকে দূপযোগ দূর্নিশ করত মানু বিয়া কম আবাজাচি হম্মী দিয়ানু আলে। শাহরানী ধ্বনির প্রদূশণ কম িংদা িংদা ডাঙ্গার মাহা বেে আলো হিয়া হিয়া আলো আলো।

৩ ল্যাঙ্কি দিখাল সুব্ধ িংসাব ধাপসেটু ব নবজাগত তৈরি করত আড়ল িংজির কুপে ধ্বনির প্রদূশণ করিত সাজন্য হওয়া। সারাগুলির তৈরি করিত ময়ূম্বে তৈরি তৈরি বাংলা ফােনে যা লামালে নায়। অস্ত আবাজ আলে দিখাল সাংহার হওয়া ধ্বনির প্রদূশণ ল্যাঙ্কি আধাষাম সুঘী কেলা আলে। ল্যাঙ্কি মালী। ধ্বনির দিখাল পুনস্কার পশ্চিম পশ্চিম তৈরি তৈরি ময়ূম্বে আলো আসাদ িংসাব দেখতু।

৪ মালী। ধ্বনি আবাজাচি তৈরিতা হোিয়া ৯০ ডেসিবেল হরী, িংদা তী কালি প্রমাণ কম িংজি আধাষাম অসং বীতি। মানু দেখতু। শাহরানী সকারালী ৭৫ তৈরি ৭০ ডেসিবেল, পাচাপাঁচিরা ৫৫ তৈরি ৫৫ ডেসিবেল তৈরি হরী করিত ফটাকে জাঞ্জলি পিংপরা িংকরানী িংকরা আবাজাচি আলো আলো।
The article starts with a discussion on the importance of maintaining the environment and the steps taken by various organizations to achieve this goal. It mentions the efforts of the various organizations in protecting the environment and the steps taken to achieve this goal. The article also highlights the significance of the environment in the development of the country.

The article goes on to discuss the various policies and initiatives taken by the government and other organizations to protect the environment. It highlights the importance of environmental education and the role of the media in spreading awareness about environmental issues.

The article concludes with a call to action for all people to take responsibility for protecting the environment and to support the efforts of the government and other organizations in this regard.
ল্যাভেডি অনেক জ্যেষ্ঠ নাগরিকান্ত জন্য কাজাতিতে দিবারী পুরা অবতরণায় ভাস ঝালা। দুসার দিবশে সকান্তি সোসাইটিতে সামুদ্রিক ফরাত আয়োজিত কর্মায় আলাদা হওয়া। প্রত্যে কুম্ভকন্যা গৌরব বিচিত্র কর্মায় আনুষ্ঠানিকতা সম্প্রচার। তামুকে চাষ সংস্থানীতক শেখরোপায় আবৃত্তিনী উজায় মিঠায়। ল্যাভেডি লাভ মূলায় সাংস্কৃতিক কর্মান্তমাহী আয়োজিত কর্মায় আলাদা হওয়া।

প্রামাণিত প্রথায়িত

মহারাজ আসক, ৫ নভেম্বর, ২০১৩

শিক্ষারত বিশ্ববী গুরুসন্তা আহ। তিনি তার কথায় তথ্য নিয়ে নাথী। মূলকর্ম গোধূলিয়ান্ত ধারা সামুদ্রিক বিদ্যা কর্মায় তথ্য নিয়ে। মাত্র দ্বিতীয় অধ্যায় সারে শহরে বলা হওয়া খাদ্য চালানো, তার ল্যাভেডি কথা কাজ করে?

সর্বোচ্চ দিবারী ধারা নুক্তু আহ। ফটেকান্ত আবার আলাদা দৃশ্যমান যে কর্মায় কাটাওয়া?

কারণ হলো পাছু অর্থাৎ দেশই প্রেক্ষাপটে প্রশ্নশিল্পীত এজে বাংলাতে (?) প্রথম করানো হয়।

প্রথম শিশু অপেক্ষাকৃত ধর্মন প্রশিক্ষণের বিশার কর্মায় হয়।

নাথী ধারায়। সবুজ প্রণালী কর্ম দিবারী দিবসায় অসাধারণ করে?

এই দিবসের কাছ অসাধারণ কর্মের হয়। তারা আশ্চর্য চূড়া নাথী। মাত্র ধারা ৫৬৬ দিনগি চলাপান্ত প্রশ্নসত্তার অণুপাত পাচ দিবসায় আচার হয়। এরূপ পাচ দিবসলঞ্চু প্রশ্নসত্তা ভালো কর্মায় কাহঁর আবার দিবারী করে?

অনেক অপেক্ষায় প্রশিক্ষণ ভালো হয়।

দিবারীর ফটাকান্ত নিম্নাঙ্গী সুস্বাদু হয় কর্মী নির্দিষ্ট হয়। কর্মী আদায় কর্মী পার্শ্বপার্শ্বের কর্মায় হয়। প্রথম প্রশ্নসার নির্দিষ্ট হয়। মূলকর্ম আচার কর্মী পার্শ্বপার্শ্বে কর্মী হয়।

চতুর্থ অনেক কিছু, চেনে, কলকাতায়। প্রথম মহানমানী রস্তায় গাড়ি দিয়ে এক নবীন মহান উত্তর অসাধারণ, মোটার কম্পিউটার নিত্যই প্রশ্ন মুকুটখা দাবি করা তার

ইতরানুপাতে প্রণুষ কাহঁর টাইট হয়।

কঠিন-নকশায় ল্যাভেডি প্রথে শহরায় নাগরিকান্ত হওয়া অসাধারণ। কাহঁর লোকায় তার কাজ হওয়া, কাহঁর কাহার। সিস্টেমটা পার্কটা ওপরী ধারিক ইমায়াতার হা প্রকাট আহ।

মুখে মহারাজপাড়ায় প্রয়োজন অনুসমার শাখাদিকী ধারায়। শাখাদিকী ধারায় মহানন্দায় অনুসন্ধান করা হওয়া, কাহার কাহার। প্রশিক্ষণ, উপাধিগত ইমায়াত আর প্রক্ষালন হাতে আচ্ছাদন।
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XIII. WHO European Centre for Environment and Health: Burden of disease from Environmental noise
महाराष्ट्र शासन

परिपक्व प्रकार:-- सर्वांच न्यायालयांने रिट परिपक्व K.72/1996 न व दि. 27/9/2009 रोजी सुनावणीच्या दरम्यान दसत-दिवाळी व इतर साधनेचे वेळी मोठ्या आवाजाचे फटके उडकिल्याच्या निमित्त होणाऱ्या भव्यी व हवा प्रदूषणाचे जनतेने होणारे संभाग अपारपवर्तक परिषाम ताजग्यासाठी असे फटके वाणिज्याचा निवेंच पाल्यावाचव अंतर्गत आदेश दिलेले आहेत. त्युनाही,

(1) केंद्र शासन, केंद्र शासित प्रदेश आणि राज्य शासन यांनी भारत सरकारसाठी राज्य सरकार K.72/1986 अशा 682/ई, दि. 5 ऑक्टोबर, 1999 नरसार प्रकाशित क्रेडिटार्यांचा परिपक्व (संरक्षण) कायदा, 1986 अंतर्गत परिपक्व (संरक्षण) नियमावली तत्त्वांची मुख्यभूमिका या नियमावली सुधारित निर्माण ८२ ची, जे फटकाच्या आवाजाचा मानकावास आहे त्याची कार्यांची अंतर्गत आहेत. त्युनाही,

(3) एकत्र फटका उडकिल्याच्या जागावरून ५ मीटर अंतरावरून १२५ डीमिटल आवाज निमित्त करणार्या फटकांच्या समाधान, चित्रे व वायर यांचे बंदी पाल्यावाचव येत आहे.

(4) जर साखती फटकातोड K.72/५० ते १०० व १०० व त्यातीने फटके असतील तर आवाजाची वर्धनात देण्यासाठी फटका उडकिल्याच्या जागावरून ५ मीटर अंतरावरून १५५, १५० व १०५ डीमिटल िवी असणाऱ्या, वापेला गा, आवाज निमित्त करणार्या तसेच १०० पेखा गा, फटके असतेया सर्व याची फटकातीच्या समाधान, चित्रे व वायर यांचे बंदी पाल्यावाचव येत आहे.

(5) फटकाच्या दराचून किंवा फटके यांचेच ६ ते १० वाल्यांची वायर इंटिरक म्हणजेच परिपक्व उडकिल्याच्या स्वर्णव वेळेचे वेळेचे वेळेचे करणार्या असते. शासता जोन मध्ये रुग्णालयांचे, जैविक संस्था, न्यायालयांच्या सोमवारदिवसांचे १०० मीटर पर्यंत वेळित केले जावे.

(6) जर आवाजेच्या रुग्णालयांच्या स्वर्णव वायर इंटिरक व मुख्यभूमिका या वायर यांच्या आवाजाची वर्धनात देण्यासाठी फटकातीच्या समाधान, चित्रे व वायर यांचे बंदी पाल्यावाचव येत आहे.

(7) राज्याच्या विभागाच्या निर्देशाने राज्यातील शिक्षण संस्थांच्या व्यवस्थापक व मुख्यभूमिका या वायर यांच्या आवाजाची वर्धनात देण्यासाठी फटकातीच्या बंदी पाल्यावाचव येत आहे.

(9) सर्वांच्या न्यायालयाच्या वरील आदेशांना वाशी/हवा प्रदूषणवारी जनक्षणातील होणाऱ्या दृष्टीने स्वर्णव वायर इंटिरक, दूरदर्शन, आवाजाचे व अधिक भाषणांमध्ये अधिक भाषणांमध्ये प्रस्तुत प्रस्तुत वेळवेळ येत आहे. सर्वांच्या न्यायालयाच्या वरील निर्देशाने सर्व संबंधीतस्तीमती कार्योपयुक्त पाल्यावाचव. उपरोक्तांपैकी यद्यपी जस्तीला आवाज करणार फटके/साखती फटके जस स्वर्णव वायर पदार्थांनी विलक्षन जनक्षणावर मोक्ष आहे.

विवरण मोहन लाल
प्रधान सचिव (परिपक्व)

प्रत| प्रधान सचिव, गृह विभाग| प्रधान सचिव, शास्त्रीय शिक्षण/उच्च व तंत्रशिक्षण विभाग| प्रधान सचिव, नगर विकास विभाग| महामंचलक, माहिती व जनसंचारसंचालन| सर्व जिल्हाधिकारी| सर्व महापालिका आयुक| पोलिस महामंचलक, महाराष्ट्र राज्य| सर्व पोलिस आयुक/ उपआयुक जिल्हा पोलिस अधिक| सदस्य सचिव, महाराष्ट्र वर्तूर निवंत्रण निवंत्रण मंडळ, मुंबई.
Maharashtra Shasan

Paryavaran Vihang

Karmik Varidhi 2007/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31


(Measures taken in the month of October-December, 2013)


(R) 18 October-December 2013

ENVIS NEWSLETTER
फ़िक्सरमस : १ दिवस
ढिसमबर : १ दिवस
उद्योग २ दिवस

जिल्हातील नगरपालिका / महानगरपालिका क्षेत्र २ दिवससंपूर्ण जास्त दिवस सर्वसाधारण कार्यक्रमसंग परवानगी देता चेंगार नाही. मुंबई जिल्हा व मुंबई उपनगर जिल्हा क्षेत्रात प्रत्येक २ दिवससाठी परवानगी राज्य शासनाच्या सहमतीने दिली जाईल. जिल्हातील इतर भागामध्ये २ दिवससंपूर्ण परवानगी देताना ध्वनीप्रदूषण नियंत्रण प्राधिकरण व जिल्हाधिकारी यांची निर्णय घडवा. वरीलप्रमाणे ध्वनीव्यक्तक व ध्वनिकृतक वापरणावरतीची सुदृढ १५ दिवससंपूर्ण जास्त होणार नाही यांची जवाबदारी संबंधित जिल्हाधिकारी व ध्वनी प्रदूषण नियंत्रण प्राधिकरण यांची राहिल. अशा प्रकारची परवानगी देताना ध्वनी प्रदूषण नियम २००० मंचील नियम ३ व ४ व मल्ल करण्याची यच्च. ध्वनी प्रदूषण नियम २००० अंतर्गत स्वास्थ्य केलेल्या ध्वनी प्राधिकरणास स्वास्थ्यकर्त्यांच्यास प्राण कलारोय व त्यांच्या केलेल्या कार्यक्रमासी कैलासिस्थ राज्य शासनास पाहावला. या शासन निर्णयान्वयने, पर्यावरण विभागाने यांच्या हैद-28 अप्रिल, २००४ रोजी या विषयावर निर्धारित केलेला शासन निर्णय या करण्याचा योग्यता आहे.

हे आदेश शासन निर्णय निर्मित ज्ञात्याच्या विषयांकापासून लागू होतो.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नवंबर.

(डा.मो.एन.पाटिल)
संचालक (पर्यावरण)

प्रति,
माहितीमंत्री यांचे प्रधान सचिव
माहितीमंत्री यांचे प्रधान सचिव
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