

West Bengal Pollution Control Board

Report on Noise Pollution survey in Kolkata during Kali puja & Diwali Festivals- 2011

The use of loudspeakers is regulated under rule 5 of The Noise Pollution (Regulation and Control) Rules 2000, issued under the Environment Protection Act, 1986. Prior to these rules, the West Bengal Pollution Control Board issued direction in conformity with the order of Hon'ble Calcutta High Court for mandatory use of Sound Limiter whenever the loudspeakers/public address system is being used in open air. The Hon'ble Supreme Court of India further issued direction dated 18.07.07 in restriction of use of loudspeakers and firecrackers. Further the manufacture, sale, store and use of noisy fireworks that generate noise level more than 90 dB(A) measured at a distance of 5m from the point of bursting is prohibited in by law. Accordingly, chocolate bomb, chain crackers, loose crackers, kali patka, dhani patka, dodoma, seven shot, rocket bomb and similar any other noise making fireworks by any name are prohibited in the state of West Bengal. The Police is empowered to enforce these rules and the orders in controlling of noise pollution against indiscriminate use of loudspeakers and banned crackers. While the legal restrictions are mostly known by and large, special vigilance becomes necessary during major festivals in the State such as the Durga Puja, Kali Puja & Diwali. To have a clear idea about the impact of loudspeaker and firecrackers noise on the ambient level in some preselected residential areas in Kolkata and Howrah in Kali Puja festival, the West Bengal Pollution Control Board (WBPCB) undertook a noise monitoring survey in the year 2011 as in previous years.

Noise Pollution Survey procedure & results:

Firecrackers generate instantaneous impulsive noise, which when measured in free field condition in impulsive mode, gives peak sound pressure level. It is quite obvious that a number of crackers when bursting serially can easily form a band of continuous noise in the presence of reflecting surfaces. The reverberation of sound wave due to repeated reflection in the surfaces prolongs the time interval of prevailing sound intensity. The continuous band of noise, thus formed, definitely affects the ambient level in close proximity.

The monitoring was conducted at the twenty select locations in Kolkata and Howrah cities:- such as Salt Lake, Lake Town, Kankurgachi, Beliaghta, Behala, Minto Park, Burrabazar, Jadavpur, rabindra Sarani, Talapark and Howrah Maidan, Howrah-Kadamtala, Howrah-mandirtala, Baranagar, Nagerbazer, Baguihati-jangra, Kasba-Bosepukur, ballygunge place, Tollygunge-Golf Club Road and New Alipur B Block, on a normal working day, between 6.00 p.m. and 10.00 p.m. The microphone of the Sound Level Meter fitted with windscreen was placed 1.5m above the ground and at least 1m from the façade of the building at each location. Data recorded at each location were used to compute the one-hour equivalent continuous noise level L_{eq} . On the same locations, the above procedure was repeated on the Kali puja day (26.10.11). The results of this survey reflects an increasing noise level in all selected locations ranging between 1 to 43% on Kali puja day compared to normal day (Table-I)

Comparison of Noise Level in a normal day with Kalipuja day in 2011

Table-I

Location	Noise Level in dBL _{Aeq}		
	Normal Day (before kali puja)	Kali Puja Day	% Increase
Salt Lake- Sector-III	62	66	6
Lake Town- B Block	76	81	7
Kankurgachi-Scheme VIIIIM	74	80	8
Beliaghata CIT Building	71	77	8
Behala- Biren Roy Road(East)	63	80	27
Minto Park- Sarat Bose Road	72	76	5
Kalakar Street- Burrabazer	73	88	20
Jadavpur 8B Bus Terminus	74	76	3
Rabindra Sarani- Ganesh Takie	72	89	24
Talapark- Belgachia	57	80	40
Howrah Maidan	68	70	3
Howrah-Kadamtala	68	85	25
Howrah-Mandirtala	71	78	10
Baranagar	58	81	22
Nagerbazer	76	86	13
Baguihati-Jangra	68	85	25
Kasba-Bosepukur	73	74	1
Ballygunge Place	69	84	22
Tollygunge-Golf Club Road	57	75	32
New Alipur B-Block	53	76	43

Besides, Joint raids involving WBPCB and Police officials at fireworks manufacturing units, storing & selling places in and around Kolkata and districts were conducted for seven days prior to the festival. About 7000kg and 2000 pkts of prohibited firecrackers seized in these raids.

Analysis of Complaints:

The State Board had set up a Special Control Room at Head Office, Paribesh Bhawan, Bidhannagar in Kali Puja(26.10.11) and Diwali(27.10.11) festive days on whole night to receive complaints over phone against the violation of noise norms in case of loudspeakers and firecrackers. Similar Control Rooms were set up in Regional Offices-Howrah, Hooghly, Kankinara, Durgapur, Haldia, Malda and Siliguri as well as Asansol Sub-Regional office. The mobile teams from Head Office and other regional offices were patrolling in Kolkata, Howrah and other district towns in the State.

The details of complaints received in the years 2010 and 2011 in the WBPCB Special Control Room at Paribesh Bhawan, Bidhannagar are furnished below:

Table-II

Year	Kali Puja Day	Diwali Day	Total no. of complaints received in two days
2010	75	25	100
2011	102	45	147

Awareness campaign:

- i) WBPCB made an appeal by sending letters through courier to about 1500 no of Housing Societies in and around Kolkata to follow the restriction on noisy firecrackers and celebrate the forthcoming festivals as '**Festival of lights**'.
- ii) Tableaus displaying and disseminating environmental messages have been touring various places in Kolkata, Haldia, Asansol-Durgapur and Siliguri during seven days prior to Kali puja & Diwali festivals for controlling of noise and other kinds of pollution.
- iii) Banners, posters, leaflets etc. carrying various environmental campaign messages were distributed to NGOs as well as educational institutions to generate awareness among students and general public.
- iv) Scroll messages on restriction of prohibited firecrackers advertised in various TV channels.
- v) Short films on awareness about noisy prohibited firecrackers telecast during the prime time in various TV channels.
- vi) Restrictions on prohibited firecrackers advertised in various Newspapers for public awareness.
- vii) Organising rallies with tableau and street plays on awareness generation among general public in Kolkata city jointly with Kolkata Police and an NGO.