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IN THE SUPREME COURT OF INDIA

Writ Petition (C) No. 72 of 1998 with Civil Appeal No. 3735 of 2005 [Arising out of SLP (C) No. 21851/2003]

Decided On: 18.07.2005

Appellants: **In Re: Noise Pollution - Implementation of the Laws for restricting use of loudspeakers and high volume producing sound systems**

WITH

Appellants: **Forum, Prevention of Env'n. and Sound Pollution**

Vs.

Respondent: **Union of India (UOI) and Anr.**

Hon'ble Judges:

R.C. Lahoti, C.J. and Ashok Bhan, J.

Counsels:

Raju Ramachandran, Additional Solicitor General (NP), Jitendra Sharma (AC), N.N. Goswami, Rajiv Dutta, G.L. Sanghi, P.N. Mishra and R. Mohan, Sr. Advs., Sandeep Narain (AC), Anil Kumar Mittal, Anjali Jha, M.K.S. Menon, M.K. Michael, Indra Sawhney, Meenakshi Arora, P. Parmeswaran, Anil Katiyar, A. Francis Julian, A. Subhashini, D.S. Mahra, Ashok Bhan, Varuna Bhandari Gungnani, Vijay Panjwani, K.R. Sasiprabhu (NP), Jagjit Singh Chhabra (NP), Sanjay V.S. Choudhury, Niraj Kumar, V.K. Sidharthan, P.V. Yogeswaran, S. Ravi Shankar, Yamunah Nachiar and M.A. chinnaswamy, Advs. for the appearing parties

Subject: Constitution

Subject: Environment

Catch Words

Abatement, Accused, Acquisition, Ad Hoc Basis, Administrative Action, Air Pollution, Air Quality Standard, Aircraft Noise, Allowance, Atmospheric Pollution, Composition, Conduct of Business, Constitution of India, Construction Site, Criminal Prosecution, Damage, Decent Environment, Definition, Discrimination, Domestic Noise, Duration, Educational Institution, Emergency, Emission, Emission Standard, Enforcement of Fundamental Right, Enforcement of Law, Environment Agency, Environmental Pollution, Environmental Protection, Existing Law, Federation, Freedom of Speech, Fundamental Duties, Fundamental Right, Guarantee, Interim Order, International

Agreement, Issuance of Direction, Jurisdiction, Legal Action, Legal Aid, Legislation, Liberty, Life and Personal Liberty, Mandamus, Motor Vehicle, National Parks, Neighbourhood Noise, Noise Abatement, Noise Pollution, Non-Scheduled Premise, Personal Liberty, Pollution Control, Public Health, Public Interest, Public Interest Litigation, Public Nuisance, Quality Standard, Reasonable Restriction, Regulation, Representation, Right to Life, Right to Live, Road Traffic, Scheduled Premises, Speaker, Special Area, Statutory Nuisance, Temple, The Executive, Third Schedule, Union Territories, Writ of Mandamus

Mentioned IN

Acts/Rules/Orders:

Constitution of India - Articles 19, 19(1), 19(1A), 19(10), 21, 25, 141 and 142; Noise Pollution Control and Regulation Rules, 1999; Air (Prevention and Control of Pollution) Act, 1981 - Section 2; Environment (Protection) Act, 1986 - Section 2; Noise Abatement Act, 1960 - Section 2; Control on Pollution Act, 1974; Noise and Statutory Nuisance Act, 1993; Noise Control Act, 1975; Noise Control (Miscellaneous Articles) Regulations, 1995; Noise Control (Motor Vehicles and Motor Vehicle Accessories) Regulations, 1995; Noise Control Ordinance; Noise Pollution (Regulation and Control) Rules, 2000 - Rule 3; Indian Penal Code, 1860 - Sections 95, 268, 290 and 291; Criminal Procedure Code (CrPC), 1973 - Section 133; Factories Act, 1948 - Sections 89 and 90; Motor Vehicles Act, 1988; Central Motor Vehicles Rules, 1989 - Rules 119 and 120; Central Motor Vehicles (Amendment) Rules, 1999; Environment (Protection) Rules, 1986 - Rule 89; Air (Prevention and Control of Pollution) (Amendment) Act, 1987; Explosive Rules, 1983 - Rule 87; Explosives Act, 1884; Madras Town Nuisances Act, 1889

Cases Referred:

Free Legal Aid Cell Shri Sujan Chand Aggarwal alias Bhagatji v. Govt. of NCT of Delhi and Ors., [MANU/DE/0654/2001](#); P.A. Jacob v. Superintendent of Police, Kottayam, [MANU/KE/0001/1993](#); Om Birangana Religious Society v. State, [MANU/WB/0105/1996](#); Kirori Mal Bishambar Dayal v. The State, [MANU/PH/0003/1958](#); Bhuban Ram and Ors. v. Bibhuti Bhushan Biswas, [MANU/WB/0337/1918](#); Ivour Heyden v. State of Andhra Pradesh, 1984 Cri LJ 16 (NOC) ; Rabin Mukherjee v. State of West Bengal, [MANU/WB/0058/1985](#); People United for better Living in Calcutta v. State of West Bengal, [MANU/WB/0025/1993](#); Burrabazar Fireworks Dealers Association v. Commissioner of police, Calcutta, [MANU/WB/0078/1997](#); Appa Rao, M.S. v. Govt. of T.N. , (1995) 1 LW 319 (Mad) ; The Supreme Court in Church of God (Full Gospel) in India v. K.K.R. Majestic Colony Welfare Assn., [MANU/SC/0537/2000](#); Charan Lal Sahu v. Union of India, [MANU/SC/0285/1990](#); M.C. Mehta v. Union of India, [MANU/SC/1081/2003](#); Moulana Mufti Syed Md. Noorur Rehman Barkati v. State of West Bengal, [MANU/WB/0211/1998](#)

Citing Reference:

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Om Birangana Religious Society v. State [MANU/WB/0105/1996](#)

Kirori Mal Bishambar Dayal v. The State [MANU/PH/0003/1958](#)

Bhuban Ram and Ors. v. Bibhuti Bhushan Biswas [MANU/WB/0337/1918](#)

Ivour Heyden v. State of Andhra Pradesh

Rabin Mukherjee v. State of West Bengal [MANU/WB/0058/1985](#)

People United for better Living in Calcutta v. State of West Bengal
[MANU/WB/0025/1993](#) Discussed

Burrabazar Fireworks Dealers Association v. Commissioner of police, Calcutta
[MANU/WB/0078/1997](#) Discussed

Appa Rao, M.S. v. Govt. of T.N.

The Supreme Court in Church of God (Full Gospel) in India v. K.K.R. Majestic Colony Welfare Assn. [MANU/SC/0537/2000](#)

Charan Lal Sahu v. Union of India [MANU/SC/0285/1990](#)

M.C. Mehta v. Union of India [MANU/SC/1081/2003](#)

Moulana Mufti Syed Md. Noorur Rehman Barkati v. State of West Bengal
[MANU/WB/0211/1998](#) Discussed

Case Note:

Environment –noise pollution - Articles 19, 19(1), 19(1)A, 19(10), 21, 25, 141 and 142 OF Constitution of India , Noise Pollution Control and Regulation Rules, 1999, Section 2 of Air (Prevention and Control of Pollution) Act, 1981, Section 2 of Environment (Protection) Act, 1986, Section 2 of Noise Abatement Act, 1960, Control on Pollution Act, 1974, Noise and Statutory Nuisance Act, 1993, Noise Control Act, 1975, Noise Control (Miscellaneous Articles) Regulations, 1995, Noise Control (Motor Vehicles and Motor

Vehicle Accessories) Regulations, 1995, Noise Control Ordinance, Rule 3 of Noise Pollution (Regulation and Control) Rules, 2000 – petition seeking stringent implementation of laws pertaining to noise pollution – Apex Court considering gravity of matter issued following direction - firecrackers to be evaluated on basis of chemical composition – Department of Explosive (DOE) directed to conduct study for this purpose and to specify composition of chemicals allowable in firecrackers – firecrackers to be divided into light emitting and sound emitting category – complete ban on bursting sound emitting firecrackers between 10 pm and 6 am – manufacturers of firecrackers directed to mention on box of firecrackers the components used in it – manufacturers to be held liable in case formulae used by them does not match with specification of DOE – manufacturers permitted to export firecrackers with higher noise level subject to strict control – regarding use of loudspeaker Court directed that noise level at boundary of public place, where loudspeaker or public address system or any other noise source is being used shall not exceed 10 dB(A) above ambient noise standards for area or 75 dB(A) whichever is lower – beating of drum or tom-tom or blow of trumpet or beat or sound of any instrument or use of any sound amplifier at night (between 10. 00 p.m. and 6.a.m.) except in public emergencies prohibited - peripheral noise level of privately owned sound system restricted to dB(A) - blowing of vehicular horn in residential area at night hours prohibited – State directed to add chapters in text books regarding ill effects of noise pollution -State directed to specify ambient air quality standards in different areas – State also directed to seize loud speakers and amplifiers making noise beyond permissible limit.

JUDGMENT

R.C. Lahoti, C.J.

1. These two matters before us raise certain issues of far-reaching implications in day-to-day life of the people in India relating to noise pollution vis-a-vis right to life enshrined in Article [21](#) of the Constitution of India as interpreted in its wide sweep by the constitutional courts of the country. Though a limited grievance was raised to begin with but several interveners and interlocutory applications enhanced the scope of hearing and the cases were heard in a very wide perspective centering around Article [21](#) of the Constitution. Several associated and incidental issues have also been gone into.

Facts in W.P.(C) No. 72/98

2. CWP No. 72/98 is filed by Shri Anil K. Mittal, an engineer by profession moving the Court *pro bono publico*. The immediate provocation for filing the petition was that a 13 year old girl was a victim of rape (as reported in newspapers of January 3, 1998). Her cries for help sunk and went unheard due to blaring noise of music over loudspeaker in the neighbourhood. The victim girl, later in the evening, set herself ablaze and died of 100% burn injuries. The petition complains of noise created by the use of the loudspeakers being used in religious performances or singing *bhajans* and the like in busy commercial localities on the days of weekly offs. Best quality hi-fi audio systems are used. Open space, meant for use by the schools in the locality, is let out for use in

marriage functions and parties wherein merry making goes on with hi-fi amplifiers and loudspeakers without any regard to timings. Modern residents of the locality organize terrace parties for socializing and use high capacity stereo systems in abundance. These are a few instances of noise pollution generated much to the chagrin of students taking examinations who find it utterly difficult to concentrate on studies before and during examinations. The noise polluters have no regard for the inconvenience and discomfort of the people in the vicinity. Noise pollution has had its victims in the past and continues to have victims today as well. The petitioner seeks to invoke the writ jurisdiction of this Court so that there may not be victims of noise pollution in future. The principal prayer is that the existing laws for restricting the use of loudspeakers and other high volume noise producing audio-video systems, be directed to be rigorously enforced.

Facts in C.A. No. 3735 of 2005 (Arising out of S.L.P.(C) No. 21851/03)

3. Leave granted.

4. The Government of India framed and published Noise Pollution Control and Regulation Rules, 1999. On 11.10.2002 the Government of India brought in an amendment in the Rules. The amendment empowered the State Government to permit the use of loudspeaker or public address system during night hours (between 10 pm and 12 pm) on or during the cultural or religious occasions for a limited period not exceeding 15 days. Vires of this amendment were put in issue by the appellant submitting that the provision is not accompanied by any guidelines and is capable of being misused to such an extent that the whole purpose behind enacting the Rules itself may be defeated. The High Court of Kerala found the petition devoid of any merit and directed the petition to be dismissed. Feeling aggrieved, this petition has been filed by special leave.

5. The Civil Appeal and, in particular, the writ petition raise issues of wide ranging dimensions relating to noise pollution and the implications thereof. Taking cognizance of the matters as public interest litigation, the Court vide its order dated 6.4.98, directed the cause title of the petition filed by Shri Anil Kumar Mittal to be amended as "In re. Noise Pollution-Implementation of the Laws for Restricting Voice of Loudspeakers and High Volume Producing Sound Systems". The Court also appointed Shri Jitender Sharma, Senior Advocate and Shri Pankaj Kalra, Advocate to appear as *Amicus Curiae*. Both the learned counsel were present in the Court and accepted the assignment. Unfortunately, Shri Pankaj Kalra, Advocate expired during the pendency of the proceedings. Shri Sandeep Narain, Advocate has appeared in his place and assisted the Court.

6. The Union of India and the Central Pollution Control Board have not opposed the prayer made in the writ petition and the appeal and have rather supported the writ petitioner. Valuable inputs have been provided by the Central Pollution Control Board in the form of pleadings, authentic publications, research documents and other papers. The Union of India, while not opposing the relief sought for by the petitioner, has pointed out several practical difficulties in completely regulating and where necessary, eliminating noise pollution.

7. Though, as we have already noted, the sweep of hearing in these matters has been very wide, the principal thrust of the writ petitioner and the learned *Amicus* has been directed towards noise created by firecrackers, loudspeakers used - by political parties, at religious places and on religious and social occasions or festivals. Hindu Bokta Jana Sabai, Tamil Nadu Fireworks and Amorcees Manufacturers Association, Universal Society Performance, All India Federation of Fireworks Association, Indian Fireworks Manufacturers Association and some individuals have sought for interventions. It is not necessary to notice the contents of the intervention applications in detail. Suffice it to say that the reliefs sought for in the applications are conflicting. Some of the interveners have sought for:-

(i) noise created by horns of engines, pressure horns in automobiles, loudspeakers, denting painting of cars, particularly, in residential areas and from unauthorized premises being prohibited;

(ii) use of loudspeakers in religious places such as temples, mosque, churches, gurudwaras and other places being discontinued or at least regulated;

(iii) firecrackers burst during Diwali festival and on other occasions for fun or merry making being prohibited completely, if the noise created exceeds certain decibels and being so regulated as to prevent bursting during night hours.

Other set of interveners seeks such like reliefs:-

(i) granting exemption in favour of bursting of firecrackers on or during festivals without regard to the limit of time as such bursting of firecrackers is associated with the performance of ceremonies relating to religion or social occasions;

(ii) laying down mechanism for regulating the very manufacturing of firecrackers so that such firecrackers as unreasonably enhance noise pollution may be kept away from entering the markets and playing into the hands of the people.

8. It is obvious that during the course of the hearing the scope got enlarged and the Court has been addressed on very many issues from very many angles.

9. Article [21](#) of the Constitution guarantees life and personal liberty to all persons. It is well settled by repeated pronouncements of this Court as also the High Courts that right to life enshrined in Article [21](#) is not of mere survival or existence. It guarantees a right of person to life with human dignity. Therein are included, all the aspects of life which go to make a person's life meaningful, complete and worth living. The human life has its charm and there is no reason why the life should not be enjoyed along with all permissible pleasures. Anyone who wishes to live in peace, comfort and quiet within his house has a right to prevent the noise as pollutant reaching him. No one can claim a right to create noise even in his own premises which would travel beyond his precincts and cause nuisance to neighbours or others. Any noise which has the effect of materially interfering with the ordinary comforts of life judged by the standard of a reasonable man is nuisance.

How and when a nuisance created by noise becomes actionable has to be answered by reference to its degree and the surrounding circumstances including the place and the time.

10. Those who make noise often take shelter behind Article [19\(1A\)](#) pleading freedom of speech and right to expression. Undoubtedly, the freedom of speech and right to expression are fundamental rights but the rights are not absolute. Nobody can claim a fundamental right to create noise by amplifying the sound of his speech with the help of loudspeakers. While one has a right to speech, others have a right to listen or decline to listen. Nobody can be compelled to listen and nobody can claim that he has a right to make his voice trespass into the ears or mind of others. Nobody can indulge into aural aggression. If anyone increases his volume of speech and that too with the assistance of artificial devices so as to compulsorily expose unwilling persons to hear a noise raised to unpleasant or obnoxious levels then the person speaking is violating the right of others to a peaceful, comfortable and pollution-free life guaranteed by Article [21](#). Article [19](#) cannot be pressed into service for defeating the fundamental right guaranteed by Article [21](#). We need not further dwell on this aspect. Two decisions in this regard delivered by High Courts have been brought to our notice wherein the right to live in an atmosphere free from noise pollution has been upheld as the one guaranteed by Article [21](#) of the Constitution. These decisions are *Free Legal Aid Cell Shri Sujan Chand Aggarwal alias Bhagatji v. Govt. of NCT of Delhi and Ors.*, [MANU/DE/0654/2001](#) : AIR2001Delhi455 (D.B.) and *P.A. Jacob v. Superintendent of Police, Kottayam.* [MANU/KE/0001/1993](#) : AIR1993Ker1. We have carefully gone through the reasoning adopted in the two decisions and the principle of law laid down therein, in particular, the exposition of Article [21](#) of the Constitution. We find ourselves in entire agreement therewith.

11. The present cases provide an opportunity for examining several questions, such as what is noise? What are its adverse effects? Whether noise pollution runs in conflict with the fundamental rights of the people? And what relief can be allowed by way of directions issued in public interest?

I

Noise - what it is?

12. The word noise is derived from the Latin term "nausea". It has been defined as "unwanted sound, a potential hazard to health and communication dumped into the environment with regard to the adverse effect it may have on unwilling ears."

13. Noise is defined as unwanted sound. Sound which pleases the listeners is music and that which causes pain and annoyance is noise. At times, what is music for some can be noise for others.

14. Section [2](#) of the Air (Prevention and Control of Pollution) Act, 1981, includes noise in the definition of 'air pollutant'.

15. Section 2 - "air pollutant" means any solid, liquid or gaseous substance including noise present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

16. According to Encyclopaedia Britannica : "In acoustics 'noise' is defined as 'any undesired sound'."

17. According to Chambers 20th Century Dictionary, 'noise' means- sound especially of loud, harsh or confused kind; a sound of any kind; an over loud or disturbing sound; frequent or public talk.

18. In Chambers 21st Century Dictionary, the definition of noise has undergone a change. Noise pollution stands carved out as a phrase separately from noise. The two are defined as under :

"**Noise** - a sound; a harsh disagreeable sound, or such sound; a din. **pollution** - an excessive or annoying degree of noise in a particular area, e.g. from traffic or aeroplane engines."

19. "Pollution" is a noun derived from the verb "pollute". Section 2 of the Environment (Protection) Act, 1986 defines "environmental pollution" to mean the presence in the environment of any environmental pollutant. Section 2 of the said Act defines "environmental pollutant" to mean any solid, liquid or gaseous substance present in such concentration as may be, or tends to be injurious to environment.

20. Thus, the disturbance produced in our environment by the undesirable sound of various kinds is called " noise pollution".

II

Noise as nuisance and health hazard

21. Noise is more than just a nuisance. It constitutes a real and present danger to people's health. Day and night, at home, at work, and at play, noise can produce serious physical and psychological stress. No one is immune to this stress. Though we seem to adjust to noise by ignoring it, the ear, in fact, never closes and the body still responds-sometimes with extreme tension, as to a strange sound in the night.

22. Noise is a type of atmospheric pollution. It is a shadowy public enemy whose growing menace has increased in the modern age of industrialization and technological advancement. Although a soft rhythmic sound in the form of music and dance stimulates brain activities, removes boredom and fatigue, but its excessiveness may prove detrimental to living things. Researches have proved that a loud noise during peak marketing hours creates tiredness, irritation and impairs brain activities so as to reduce thinking and working abilities. Noise pollution was previously confined to a few special areas like factory or mill, but today it engulfs every nook and corner of the globe, reaching its peak in urban areas. Industries, automobiles, rail engines, aeroplanes, radios,

loudspeakers, tape recorders, lottery ticket sellers, hawkers, pop singers, etc., are the main ear contaminators of the city area and its market place. The regular rattling of engines and intermittent blowing of horns emanating from the caravan of automobiles do not allow us to have any respite from irritant noise even in suburban zones.

23. In the modern days noise has become one of the major pollutants and it has serious effects on human health. Effects of noise depend upon sound's pitch, its frequency and time pattern and length of exposure. Noise has both auditory and non-auditory effects depending upon the intensity and the duration of the noise level. It affects sleep, hearing, communication, mental and physical health. It may even lead to the madness of people.

24. However, noises, which are melodious, whether natural or man-made, cannot always be considered as factors leading to pollution .

25. Noise can disturb our work, rest, sleep, and communication. It can damage our hearing and evoke other psychological, and possibly pathological reactions. However, because of complexity, variability and the interaction of noise with other environmental factors, the adverse health effects of noise do not lend themselves to a straightforward analysis.

Hearing Loss

"Deafness, like poverty, stunts and deadens its victims."- says Helen Keller. Hearing loss can be either temporary or permanent. *Noise-induced temporary threshold shift* (NITTS) is a temporary loss of hearing acuity experienced after a relatively short exposure to excessive noise. Pre-exposure hearing is recovered fairly rapidly after cessation of the noise. *Noise induced permanent threshold shift* (NIPTS) is an irreversible loss of hearing that is caused by prolonged noise exposure. Both kinds of loss together with presbycusis, the permanent hearing impairment that is attributable to the natural aging process, can be experienced simultaneously.

26. NIPTS occurs typically at high frequencies, usually with a maximum loss at around 4,000 Hz. It is now accepted that the risk of hearing loss is negligible at noise exposure levels of less than 75 dB(A) Leq (8-hr). Based on national judgments concerning acceptable risk, many countries have adopted industrial noise exposure limits of 85 dB(A) +5 dB(A) in their regulations and recommended practices. [N.B.- Hz. is abbreviation of Hertz which is the unit of frequency, equal to one cycle per second. Hertz (Hz) is the name, by international agreement, for the number of repetitions of similar pressure variations per second of time; this unit of frequency was previously called "cycles per second" (cps or c/s)].

Interference with Communication

27. The interference of noise with speech communication is a process in which one of two simultaneous sounds renders the other inaudible. An important aspect of

communication interference in occupational situations is that the failure of workers to hear warning signals or shouts may lead to injury. In offices, schools and homes, speech interference is a major source of annoyance.

Disturbance of sleep.

28. Noise intrusion can cause difficulty in falling asleep and can awaken people who are asleep.

Annoyance

29. Noise annoyance may be defined as a feeling of displeasure evoked by noise. The annoyance inducing capacity of a noise depends upon many of its physical characteristics and variations of these with time. However, annoyance reactions are sensitive to many non-acoustic factors of a social, psychological, or economic nature and there are considerable differences in individual reactions to the same noise.

Effect on performance

30. Noise can change the state of alertness of an individual and may increase or decrease efficiency. Performance of tasks involving motor or monotonous activities is not always degraded by noise. At the other extreme, mental activities involving vigilance, information gathering and analytical processes appear to be particularly sensitive to noise.

Physiological Effects

31. It has been determined that noise has an explicit effect on the blood vessels, especially the smaller ones known as pre-capillaries. Overall, noise makes these blood vessels narrower. Noise causes the peripheral blood vessels in the toes, fingers, skin and abdominal organs to constrict, thereby decreasing the amount of blood normally supplied to these areas.

32. Possible clinical manifestations of stress concomitant with noise are : (i) galvanic skin response, (ii) increased activity related to ulcer formation, (iii) changes in intestinal motility, (iv) changes in skeletal muscle tension, (v) subjective response irritability, perception of loudness, (vi) increased sugar, cholesterol & adrenaline, (vii) changes in heart rate, (viii) increased blood pressure, (ix) increased adrenal hormones, (x) vasoconstriction. Not only might there be harmful consequences to health during the state of alertness, but research also suggests effects may occur when the body is unaware or asleep. (Source; NOISE EFFECTS HANDBOOK, A Desk Reference to Health and Welfare Effects of Noise By Office of the Scientific Assistant, Office of Noise Abatement and Control, U.S. Environmental Protection Agency, October 1979, Revised July 1981)

33. The investigations have revealed that the blood vessels which feed the brain, dilate in the presence of noise. This is the reason why headaches result from listening to persistent high noise.

34. Field studies have also been conducted on various other groups such as people living near airports, and school children exposed to traffic noise, showing that there may be some risk for these people. In addition, laboratory studies on animals and humans have demonstrated a relationship between noise and high blood pressure. Other studies have shown that noise can induce heart attacks.

35. Prolonged chronic noise can also produce stomach ulcers as it may reduce the flow of gastric juice and change its acidity.

With what other stress effects can noise be associated?

36. Stress can be manifested in any number of ways, including headaches, irritability, insomnia, digestive disorders, and psychological disorders. Workers who are exposed to excessive noise frequently complain that noise just makes them tired.

37. Quite a few field studies have been done on workers in Europe, examining the relationship between noise and illness. In these studies, noise has been related to the following:

General morbidity (illness); Neuropsychological disturbances-Headaches, Fatigue, Insomnia, Irritability, Neuroticism; Cardiovascular system disturbances-Hypertension, Hypotension, cardiac disease; Digestive disorders-Ulcers, Colitis; Endocrine and biochemical disorders;

Noise and the unborn.

38. There is ample evidence that environment has a role in shaping the physique, behavior and function of animals, including men, from conception and not merely from birth. The fetus is capable of perceiving sounds and responding to them by motor activity and cardiac rate change Lestre W. Sontang, The Fels Research Institute. (Quoted in Noise: A Health Problem, United States Environmental Protection Agency, Office of Noise Abatement and Control, Washington, D.C., August 1978.).

Special effects on unborn, children and human beings generally

39. The fetus is not fully protected from noise. Noise may threaten fetal development. Noise has been linked to low birth weights. Levels of noise which do not interfere with the perception of speech by adults may interfere significantly with the perception of speech by children as well as with the acquisition of speech, language, and language-related skills. Because they are just learning, children have more difficulty in understanding language in the presence of noise than adults do. Reading ability also may be seriously impaired by noise. Apart from children, the noise pollution causes several

adverse effects on human beings generally. Some of these are: (i) hearing loss, (ii) no auditory physiological response such as stress, arousal response, cardiovascular effects etc.,(iii) communication interference, (iv) performance interference, and (v) sleep disturbance and so on.

III

Sources of Noise Pollution .

40. Noise pollution like other pollutants is also a by-product of industrialization, urbanization and modern civilization.

41. Broadly speaking, the noise pollution has two sources, i.e. industrial and non-industrial. The industrial source includes the noise from various industries and big machines working at a very high speed and high noise intensity. Non-industrial source of noise includes the noise created by transport/vehicular traffic and the neighbourhood noise generated by various noise pollution can also be divided into the categories, namely, natural and manmade.

42. Most leading noise sources will fall into the following categories: road traffic, aircraft, railroads, construction, industry, noise in buildings, and consumer products.

1. Road traffic noise

43. Noise from the motors and exhaust systems of large trucks provides the major portion of highway noise impact, and provides a potential noise hazard to the driver as well. In addition, noise from the interaction of tyres with the roadway is generated by trucks, buses, and private autos.

44. In the city, the main sources of traffic noise are the motors and exhaust systems of autos, smaller trucks, buses, and motorcycles. This type of noise can be augmented by narrow streets and tall buildings, which produce a "canyon" in which traffic noise reverberates.

2. Aircraft noise

45. Nowadays, the problem of low-flying military aircraft has added a new dimension to community annoyance, as the nation seeks to improve its "nap-of-the-earth" warfare capabilities. In addition, the issue of aircraft operations over national parks, wilderness areas, and other areas previously unaffected by aircraft noise has claimed national attention over recent years.

3. Noise from railroads

46. The noise from locomotive engines, horns and whistles, and switching and shunting operations in rail yards can impact neighbouring communities and railroad workers. For

example, rail car retreads can produce a high-frequency, high-level screech that can reach peak levels of 120 dB at a distance of 100 feet which translates to levels as high as 138 or 140 dB at the railroad worker's ear.

4. Construction noise

47. The noise from construction of highways, city streets, and buildings is a major contributor to the urban scene. Construction noise sources include pneumatic hammers, air compressors, bulldozers, loaders, dump trucks (and their back-up signals), and pavement breakers.

5. Noise in industry

48. Although industrial noise is one of the less prevalent community noise problems, neighbours of noisy manufacturing plants can be disturbed by sources such as fans, motors, and compressors mounted on the outside of buildings. Interior noise can also be transmitted to the community through open windows and doors, and even through building walls. These interior noise sources have significant impacts on industrial workers, among whom noise-induced hearing loss is unfortunately common.

6. Noise in buildings

49. Apartment dwellers are often annoyed by noise in their homes, especially when the building is not well designed and constructed. In this case, internal building noise from plumbing, boilers, generators, air conditioners, and fans, can be audible and annoying. Improperly insulated walls and ceilings can reveal the sound of amplified music, voices, footfalls, and noisy activities from neighbouring units. External noise from emergency vehicles, traffic, refuse collection, and other city noises can be a problem for urban residents, especially when windows are open or insufficiently glazed.

7. Noise from consumer products

50. Certain household equipment, such as vacuum cleaners and some kitchen appliances have been and continue to be noisemakers, although their contribution to the daily noise dose is usually not very large.

IV

Noise pollution in the special context of Fireworks.

51. Fireworks are used all over the world to celebrate special occasions. In India, fireworks are burst on festivals like Dussehra, Diwali and on special occasions like social gatherings, marriages, Independence day, Republic day, New year day, etc. In other countries of the world, fireworks are generally burst either on the New Year day or on the

birthday of their respective countries. However, bursting of firecrackers is a health hazard since it is responsible for both air pollution and noise pollution .

52. The use of Fireworks has led to air pollution in the form of noise and smoke. Their excessive use has started to be a public hazard and violation of their fundamental rights as enshrined in the Constitution of India.

53. It has been held in the case of "*Om Birangana Religious Society* v. *State*, [MANU/WB/0105/1996](#)" that the "Freedom of speech and expression guaranteed under Article 19 of the Constitution of India includes, by necessary implication, freedom not to listen and/or to remain silent. A citizen has a right to leisure, right to sleep, right not to hear and right to remain silent. He also has the right to read and speak with others". Because of the tremendous sound and noise, the citizens cannot exercise all these fundamental rights.

54. It has been seen that firecrackers noise is an impulsive noise and is hazardous. Bursting of a firecracker near the ear can lead sometimes to non-recoverable hearing loss.

55. Diwali is the most important festival of India. The bursting of firecrackers during this period is a wide spread practice. The unpredictable, intermittent and impulsive noise produced by bursting of crackers all around, turns the festival of lights into cacophony of noise. People are unable to even sleep due to this excessive noise pollution. Several people are injured due to the noise produced by firecrackers every year.

56. Firecrackers not only increase the ambient noise level but also contribute significantly in increasing the air pollution by means of toxic gases and particles due to their blast wave resulting from a rapid release of energy.

57. In order to assess the situation of noise pollution caused by firecrackers at the time of Diwali the Central Pollution Control Board (CPCB) has been conducting ambient noise level monitoring during Diwali festival regularly at various locations in Delhi since 1993, to find increased ambient noise level caused by intensive burning of crackers. As in the past, the noise and air quality monitoring have been carried out in the years 1999, 2000, 2001, and 2002. The noise monitoring locations have been selected to cover almost all areas of Delhi.

58. An analysis of the Reports prepared in the years 1999, 2000, 2001, and 2002 reveals that the ambient noise level on Diwali day exceeded the limit at almost all the places during these years. The noise level was higher during Diwali-2000 as compared to the values recorded during Diwali festival in the years 1999, 2001, and 2002.

59. The percentage of violation in L.eq. noise level varied from 02 to 49% in the year 2002, 12 to 55% in the year 2001, 11 to 58% in the year 2000 and 22 to 47% in the year 1999 with respect to the day time standards at all the areas. [N.B. - *Equivalent*

Continuous Sound Pressure Level, Leq is the level of that steady sound which over the same interval of time, contains the same total energy (or dose) as the fluctuating sound. Equivalent continuous sound level has gained widespread acceptance as a scale for the measurement of long-term noise exposure.]

60. The ambient noise level conducted during the years 1999 to 2002 on Diwali festival, exceeded the limit at all places in every year and the percentage of violation varies from 2% to 58%.

61. Thus, the study does reveal that the noise levels that have been measured on all these occasions have been more than the prescribed norms. This is a point of worry as it has been discussed that noise pollution does tend to have adverse effects on a person. Thus immediate steps in this direction need to be taken.

62. The problem of noise pollution due to firecrackers is not only limited to India. Similar problems are being experienced in other countries as well. In fact in United Kingdom, in Nottingham the "Be Safe Not Sorry" campaign was launched after the post was inundated with letters from readers to the newspaper saying they were fed up with the noise, nuisance and the distress that fireworks cause.

V

Methodology adopted in other countries for noise pollution control.

63. Different countries of the World have enacted different legislations to control the noise pollution. For Example, in England there is a Noise Abatement Act, 1960. Section 2 of this Act provides that loudspeakers should not be operated between the hours of 9:00 in the evening and 8:00 in the following morning for any purpose and at any other time for purpose of advertisement and entertainment, trade or business. Control on Pollution Act of 1974, contains provisions for controlling noise pollution and it provides noise to be actionable must amount to nuisance in the ordinary legal sense. Section 62 of the English Control of Pollution Act, 1974, operates as perfect control for 'Street Noise'. This provision has been defined as a highway and any other road, footway or square or court which is for the time being open to public. In Japan, there is Anti Pollution Basic Law which helps to control the pollution including noise pollution.

64. A few of the notable legislations may be mentioned illustratively.

Noise Act 1996- U.K.

65. This Act makes provision about noise emitted from dwellings at night; about the forfeiture and confiscation of equipment used to make noise unlawfully; and for connected purposes. The kind of complaint referred to is one made by any individual

present in a dwelling during night hours that excessive noise is being emitted from another dwelling. "Night hours" means the period beginning with 11p.m. and ending with 7 a.m. The Act provides for the service of a notice on the offender by the prescribed officer if he thinks that the noise being emitted is more than the permissible limits.

66. In cases where the noise level does not come down in spite of the notice being served, the officer can seize such equipments which in his opinion are the source of such noise.

Noise and Statutory Nuisance Act 1993

67. An Act to make provision for noise in a street to be a statutory nuisance; to make provision with respect to the operation of loudspeakers in a street; to make provision with respect to audible intruder alarms; to make provision for expenses incurred by local authorities in abating, or preventing the recurrence of, a statutory nuisance to be a charge on the premises to which they relate; and for connected purposes.

The US Noise Pollution and Abatement Act, 1970 is an important legislation for regulating control and abatement of noise. Under this Law the environment protection agency, acting through the office of Noise Abatement and Control, holds public meetings

in selected cities to compile information on noise pollution .

The Public Health And Welfare:- Chapter 65- Noise Control(US)

68. The Congress declares that it is the policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health or welfare. To that end, it is the purpose of this chapter to establish a means for effective coordination of Federal research and activities in noise control, to authorize the establishment of Federal noise emission standards for products distributed in commerce, and to provide information to the public respecting the noise emission and noise reduction characteristics of such products.

The Act further provides for -

1. Identification of major noise sources
2. Noise emission standards for products distributed in commerce
3. Labelling
4. Quiet communities, research, and public information
5. Development of low-noise-emission products
6. Motor carrier noise emission standards

Noise Regulation Law-Japan.

69. The purpose of this Law is to preserve living environment and contribute to protection of the people's health by regulating noise generated by the operation of factories and other types of work sites as well as construction work affecting a considerable area, and by setting maximum permissible levels of motor vehicle noise.

70. The Prefectural Governor shall designate concentrated residential areas, school and hospital zones, and other such areas in which it is deemed necessary to protect the living environment of the residents from noise, as areas subject to the regulation of noise produced by specified factories and specified construction work.

71. The Prefectural Governor, while designating the areas pursuant to Paragraph 1 of the preceding Article, shall establish regulatory standards for specified hours and zones of said areas within the scope of the standards set forth by the Director General of the Environment Agency according to the necessary degree of noise control in regard to specified factories for specified hours and zones.

72. Persons installing specific facilities are liable to report the same to the Prefectural Governor within 30 days.

73. The Governor has the powers to order change in the outlay of the factory when they do not conform to the noise regulations.

74. Any party who plans to undertake construction projects which involve specified construction work in designated areas, shall file a report with the Prefectural Governor no later than seven (7) days prior to the beginning of the said construction.

75. The Prefectural Governor shall be responsible for the monitoring of noise levels in designated areas.

76. For the regulation on noise caused by announcement through the use of loudspeakers and noise emitted during the night time operation of bars and restaurants, local Government shall take measures necessary to protect the living environment, including restrictions on operating hours, in accordance with the local physical and social conditions.

77. The regulations also prescribe the permissible noise levels for the various areas, as well as the time periods between which noise- emitting machines can be used.

Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise (adopted on October 29, 1996)

78. This Law is enacted for the purpose of preventing and controlling environmental noise pollution, protecting and improving the living environment, ensuring human health and promoting economic and social development.

79. For purposes of this Law, "environmental noise" means the sound that is emitted in the course of industrial production, construction, transportation and social activities and that impairs the living environment of the neighbourhood.

80. The competent administrative department for environmental protection under the State Council shall, in accordance with the national standards for acoustic environmental quality and the State's economic and technological conditions, fix national limits for environmental noise emission.

81. Every project under construction, renovation or expansion must conform to the regulations of the State governing environmental protection.

82. The industrial noise emitted to the living environment of the neighbourhood within an urban area shall be kept within the limits set by the State on emission of environmental noise within the boundary of an industrial enterprise.

83. The construction noise emitted to the living environment of the neighbourhood within an urban area shall be kept within the limits set by the State on the emission of environmental noise within the boundary of a construction site.

84. It is forbidden to manufacture, sell or import automobiles that emit noise beyond the limits set on noise level.

85. All units and individuals are forbidden to use high-pitch loudspeakers in urban areas where noise-sensitive structures are concentrated.

86. Any unit or individual suffering from the hazards of environmental noise pollution shall have the right to demand the polluter to eliminate the hazards; if a loss has been caused, it shall be compensated according to law.

"Noise emission" means emission of noise from the source to the living environment of the neighbourhood.

"Noise-sensitive structures" means structures that require a quiet environment such as hospitals, schools, government offices, research institutions and residential buildings.

"Areas where noise-sensitive structures are concentrated" means such areas as medical treatment areas, cultural, education and research districts and areas where government offices or residential buildings constitute the main buildings.

"At night" means the period from 10:00 p.m. to 6:00 a.m.

Australia

87. In New South Wales (NSW) no single Government authority has the responsibility or capacity to be able to minimise all forms of noise pollution. The State is excluded from

control of noise in a number of areas by commonwealth legislation. These include aircraft noise, where noise limits could affect trade, and the setting standards for noise emissions from new vehicles. In areas where the State does have powers to control noise, the Environment Protection Authority (EPA) has an overall responsibility for environmental noise (as distinct from occupational noise), under the *Noise Control Act 1975*. The Act deals with the prevention, minimization and abatement of noise and vibration and empowers the EPA, the Waterways Authority, local Government and the police for these purposes.

88. The EPA controls noise from scheduled premises, those required by the Noise Control Act to have a licence and noise associated with rail traffic and the construction or upgrading of freeways and toll roads. The Police and local council are generally responsible for neighbourhood noise issues and have authority to issue noise abatement directions to control noise from premises and for noise from burglar alarms. Local council have an essential role in minimising the effects of excessive noise, particularly in their local residential areas, from smaller factories, non-scheduled premises and public places. The Waterways Authority has specific responsibilities in relation to noise from vessels in navigable waters.

89. Under the provisions of the *Noise Control Act 1975* in NSW the railway system is classified as scheduled premises and as such the EPA has a regulatory role, and seeks to achieve noise targets for rail operations throughout the State to minimise the impact on local residents.

90. The EPA issues licences for the management of scheduled premises. When issuing a licence the EPA sets initial noise limits that are achievable with the operation of plant and equipment currently installed, operated and maintained effectively. To achieve further improvements in noise exposure to residents, negotiations with the licensed premises are carried out and can be incorporated in the licence as Pollution Reduction Programs (PRPs). The EPA is currently working with industry to reduce noise levels from major sources.

91. The Noise Control (Miscellaneous Articles) Regulation 1995 was introduced to cover community noise issues not covered by previous legislation. It includes limitations on burglar alarms for both residential and commercial premises. Changes have been made to the night-time control of common domestic noise sources such as power tools, air conditioners, amplified music and lawn mowers. Under the new regulation, only one warning to the offender is required and the warning is valid for 28 days. If an offence is committed within this period a fine can be issued without further warnings. The previous regulation warning was only active for 12 hours which meant it was not very effective with repetitious offences typical in suburban areas.

92. The Noise Control (Motor Vehicles and Motor Vehicle Accessories) Regulation 1995 controls the noise of individual motor vehicles. It includes a provision to control noise from a range of accessories including horns, alarms, refrigeration units and sound

systems. It also places responsibility to ensure compliance of repairs/modifications of vehicles on the vehicle repairers.

93. In addition to the measures introduced to reduce the source and transmission of noise, measures can be undertaken to noise proof buildings thereby reducing the occupant exposure to noise.

Montgomery County Noise Control Ordinance

94. The Montgomery County Noise Control Ordinance allows for normal activities during regular hours; however, it does attempt to eliminate interference from noise when most of us want to rest and relax. It also seeks to control disturbing and unhealthy levels of noise in general. Key provisions of the Noise Control Ordinance:

- (i) Provide day/night sound level limits.
- (ii) Establish "quiet hours."
- (iii) Define sounds that constitute noise disturbances.
- (iv) Establish a "nuisance provision" that prohibits certain noises at any time.

95. A 'noise disturbance' as defined by the Ordinance, is any sound that is unpleasant, annoying, or loud; abnormal for the time or location; and prejudicial to health, comfort, property, or the conduct of business. Under the Ordinance, it is unlawful to create a noise disturbance anywhere during "quiet hours," including multi-family buildings and townhouses. The "nuisance provision" prohibits some noise disturbances anywhere at any time.

96. The Montgomery County Noise Control Ordinance promotes peace and quiet for everyone by covering a wide variety of residential and business situations. The Ordinance does not cover noise from aircraft and railroads or motor vehicles on public roadways, as Federal and State Governments supersede local regulation. Also exempt are emergency operations by public utilities.

97. Among other provisions, the Montgomery County Noise Control Ordinance makes it illegal to:

- (i) Operate, or allow to be operated, a radio, television, or other electronic sound-producing device on public or private property if the sound exceeds 55 decibels at the receiving property line.
- (ii) Create a noise disturbance during "quiet hours" in a residential zone or multi-family structure.
- (iii) Operate any equipment that exceeds the receiving property line sound level limits.

(iv) Allow an animal or fowl to create a noise disturbance at any time.

(vi) Load or unload material during "quiet hours."

(vi) Create a noise disturbance across property lines during "quiet hours" by operating power equipment mounted on a motor vehicle; for example, refrigerated trucks or commercial vacuum cleaners.

(vii) Permit construction noise to exceed 75 decibels, with allowances for higher decibel levels under an approved "Noise Suppression Plan."

VI

Statutory Laws in India

98. Not that the Legislature and the Executive in India are completely unmindful of the menace of noise pollution. Laws have been enacted and the Rules have been framed by the Executive for carrying on the purposes of the legislation. The real issue is with the implementation of the laws. What is needed is the will to implement the laws. It would be useful to have a brief resume of some of the laws which are already available on the Statute Book. Treatment of the problem of noise pollution can be dealt under the Law of Crimes and Civil Law. Civil law can be divided under two heads (i) The Law of Torts and (ii) The General Civil Law. The cases regarding noise have not come before the law courts in large quantity. The reason behind this is that many people in India did not consider noise as a sort of pollution and they are not very much conscious about the evil consequences of noise pollution. The level of noise pollution is relative and depends upon a person and a particular place. The law will not take care of a super sensitive person but the standard is of an average and rational human being in the society.

The Noise Pollution (Regulation and Control) Rules, 2000

99. In order to curb the growing problem of noise pollution, the Government of India has enacted the Noise Pollution (Regulation and Control) Rules, 2000. Prior to the enactment of these Rules noise pollution was not being dealt specifically by a particular Act.

"Whereas the increasing ambient noise levels in public places from various sources, inter-alia, industrial activity, construction activity, generator sets, loudspeakers, public address systems, music systems, vehicular horns and other mechanical devices, have deleterious effects on human health and the psychological well being of the people; it is considered necessary to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standard in respect of noise;"

100. The main provisions of the Noise Pollution Rules are as under:

1. The State Government may categorize the areas into industrial, commercial, residential or silence areas/zones for the purpose of implementation of noise standards for different areas.

2. The ambient air quality standards in respect of noise for different areas/zones has been specified for in the Schedule annexed to the Rules.

3. The State Government shall take measures for abatement of noise including noise emanating from vehicular movements and ensure that the existing noise levels do not exceed the ambient air quality standards specified under these Rules. 4. An area comprising not less than 100 meters around hospitals, educational institutions and courts may be declared as silence area/zone for the purpose of these Rules.

5. A loudspeaker or a public address system shall not be used except after obtaining written permission from the authority and the same shall not be used at night i.e. between 10.00p.m. and 6.00 a.m.

6. A person found violating the provisions as to the maximum noise permissible in any particular area shall be liable to be punished for it as per the provisions of these Rules and any other law in force.

Indian Penal Code

101. Noise pollution can be dealt under Sections [268](#), [290](#) and [291](#) of the Indian Penal Code, as a public nuisance. Under Section [268](#) of this Code, it is mentioned that 'A person is guilty of a public nuisance who does any act or is guilty of an illegal omission which causes any common injury, danger or annoyance to the public or the people in general who dwell or occupy property in the vicinity, or which must necessarily cause injury, obstruction, danger or annoyance to persons who may have occasion to use any public right.

102. A common nuisance is not excused on the ground that it causes some convenience or advantage.'

103. Sections [290](#) and [291](#) of the Indian Penal Code deal with the punishment for public nuisance.

Criminal Procedure Code

104. Under Section [133](#) of the Code of Criminal Procedure, 1973 the magistrate has the power to make conditional order requiring the person causing nuisance to remove such nuisance.

The Factories Act, 1948.

105. The Factories Act does not contain any specific provision for noise control. However, under the Third Schedule [Sections [89](#) and [90](#) of the Act], 'noise induced hearing loss', is mentioned as a modifiable disease. Under Section [89](#) of the Act, any medical practitioner who detects any modifiable disease, including noise- induced

hearing loss, in a worker, has to report the case to the Chief Inspector of Factories, along with all other relevant information. Failure to do so is a punishable offence.

106. Similarly, under the Model Rules, limits for noise exposure for work zone area has been prescribed.

Motor Vehicles Act, 1988, and Rules framed thereunder

107. Rules 119 and 120 of the Central Motor Vehicles Rules, 1989, deal with reduction of noise.

Rule 119. Horns

(1) On and after expiry of one year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, every motor vehicle including construction equipment vehicle and agricultural tractor manufactured shall be fitted with an electric horn or other devices conforming to the requirements of IS: 1884-1992, specified by the Bureau of Indian Standards for use by the driver of the vehicle and capable of giving audible and sufficient warning of the approach or position of the vehicle:

Provided that on and from 1st January, 2003, the horn installation shall be as per AIS-014 specifications, as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified.

(2) No motor vehicle shall be fitted with any multi-toned horn giving a succession of different notes or with any other sound-producing device giving an unduly harsh, shrill, loud or alarming noise.

Rule 120. Silencers

(1) Every motor vehicle including agricultural tractor shall be fitted with a device (hereinafter referred to as a silencer) which by means of an expansion chamber or otherwise reduces as far as practicable, the noise that would otherwise be made by the escape of exhaust gases from the engine.

(2) *Noise standards*- Every motor vehicle shall be constructed and maintained so as to conform to noise standards specified in Part E of the Schedule VI to the Environment (Protection) Rules, 1986, when tested as per IS: 3028-1998, as amended from time to time.

Law of Torts

108. Quietness and freedom from noise are indispensable to the full and free enjoyment of a dwelling-house. No proprietor has an absolute right to create noises upon his own land, because any right which the law gives is qualified by the condition that it must not be exercised to the nuisance of his neighbours or of the public. Noise will create an

actionable nuisance only if it materially interferes with the ordinary comfort of life, judged by ordinary, plain and simple notions, and having regard to the locality; the question being one of degree in each case.

The Air (Prevention and Control of Pollution) Act, 1981

109. Noise was included in the definition of air pollutant in Air (Prevention and Control of Pollution) Act in 1987. Thus, the provisions of the Air Act, became applicable in respect of noise pollution, also.

The Environment (Protection) Act, 1986.

110. Although there is no specific provision to deal with noise pollution, the Act confers powers on Government of India to take measures to deal with various types of pollution including noise pollution .

Fireworks

111. The Explosives Act, 1884 regulates manufacture, possession, use, sale, transport, import & export of explosives. Firecrackers are governed by this Statute. Rule 87 of the Explosives Rule, 1983 prohibits manufacture of any explosive at any place, except in factory or premises licensed under the Rules.

112. In India, there is no separate Act that regulates the manufacture, possession, use, sale, manufacture and transactions in firecrackers. All this is regulated by The Explosives Act, 1884. The Noise that is produced by these fireworks is regulated by the Environmental Protection Act, 1986 and The Noise Pollution (Regulation and Control) Rules, 2000.

VII

JUDICIAL OPINION IN INDIA

113. In *Kirori Mal Bishambar Dayal v. The State* [MANU/PH/0003/1958](#), accused/petitioner was convicted and sentenced under Section [290](#) of Indian Penal Code, 1860 and was fined Rs. 50 for causing noise and emitting smoke and vibrations by operating of heavy machinery in the residential area. The order of the trial court was upheld by the District Magistrate in appeal. The High Court of Punjab & Haryana also upheld the decision of the courts below and dismissed the revision petition. In the case of *Bhuban Ram and Ors. v. Bibhuti Bhushan Biswas* [MANU/WB/0337/1918](#), it was held that working of a paddy husking machine at night causes nuisance by noise and the occupier was held liable to be punished under Section [290](#) IPC. In *Ivour Heyden v. State of Andhra Pradesh* 1984 Cr LJ 16 (NOC) , the High Court of Andhra Pradesh excused the act of playing radio loudly on the ground that it was a trivial act. Careful reading of Section [95](#) of IPC shows that only that harm is excused which is not expected to be complained by the person of ordinary temper and sense.

114. In *Rabin Mukherjee v. State of West Bengal* MANU/WB/0058/1985 : AIR1985Cal222 the use of air horns was prohibited by the court to prevent noise pollution. The Court observed:

"...it is found that the atmosphere and the environment is very much polluted from indiscriminating noise emitted from different quarters and on research it was found that persons who are staying near the Airport, are becoming victim of various ailments. Such persons even become victim of mental disease. On such research it was also found that workers in various factories even become deaf and hard of hearing. It was further found on such research that as a result of this excessive noise pollution, people suffer from loss of appetite, depression, mental restlessness and insomnia. People also suffer from complain of excessive blood pressure and heart trouble. It is not necessary to go into the question about direct effect of such noise pollution because of indiscriminate and illegal use of such electric and air horn as it is an admitted position that the same is injurious to health and amongst different causes of environmental pollution, sound pollution is one which is of grave concern."

115. In the case of *People United for better Living in Calcutta v. State of West Bengal* MANU/WB/0025/1993 : AIR1993Cal215 the Calcutta High Court observed:

"In a developing country there shall have to be developments, but that development shall have to be in closest possible harmony with the environment, as otherwise there would be development but no environment, which would result in total devastation, though, however, may not be felt in present but at some future point of time, but then it would be too late in the day, however, to control and improve the environment. In fact, there should be a proper balance between the protection of environment and the development process. The society shall have to prosper, but not at the cost of the environment and in similar vein, the environment shall have to be protected but not at the cost of the development of the society and as such a balance has to be found out and administrative actions ought to proceed accordingly."

116. In *Burrabazar Fireworks Dealers Association v. Commissioner of Police, Calcutta*, MANU/WB/0078/1997 : AIR1998Cal121 it has been held

"Article [19](#) of the Constitution of India does not guarantee the fundamental right to carry on trade or business which creates pollution or which takes away that communities safety, health and peace....A citizen or people cannot be made a captive listener to hear the tremendous sounds caused by bursting out from a noisy fireworks. It may give pleasure to one or two persons who burst it but others have to be a captive listener whose fundamental rights guaranteed under Article [19](#) and other provisions of the Constitution are taken away, suspended and made meaningless....Under Article [19](#), read withy Article [21](#) of the Constitution of India, the citizens have a right of decent environment and they have a right to live peacefully, right to sleep at night and to have a right to leisure which are all necessary under Article [21](#) of the Constitution."(Headnote)

117. In *Appa Rao, M.S. v. Govt. of T.N.*, (1995) 1 LW 319 (Mad), the Madras High Court taking note of the serious health hazard and disturbance to public order and

tranquility caused by the uncontrolled noise pollution prevailing in the State, issued a writ of mandamus directing State Government to impose strict conditions for issue of license for the use of amplifiers and loudspeakers and for directing Director-General, Police (Law and Order) to impose total ban on use of horn type loudspeakers and amplifiers and air horns of automobiles.

118. In *P.A. Jacob v. the Superintendent of Police*, MANU/KE/0001/1993 : AIR1993Ker1 , it was said - "The right to speech implies, the right to silence. It implies freedom, not to listen, and not to be forced to listen. The right comprehends freedom to be free from what one desires to be free from. Free speech is not to be treated as a promise to everyone with opinions and beliefs, to gather at any place and at any time and express their views in any manner. The right is subordinate to peace and order. A person can decline to read a publication, or switch off a radio or a television set. But, he cannot prevent the sound from a loudspeaker reaching him. He could be forced to hear what he wishes not to hear. That will be an invasion of his right to be let alone, to hear what he wants to hear, or not to hear, what he does not wish to hear. One may put his mind or hearing to his own uses, but not that of another. No one has a right to trespass on the mind or ear of another and commit auricular or visual aggression. A loudspeaker is mechanical device, and it has no mind or thought process in it. Recognition of the right of speech or expression is recognition accorded to a human faculty. A right belongs to human personality, and not to a mechanical device. One may put his faculties to reasonable uses. But, he cannot put his machines to any use he likes. He cannot use his machines to injure others. Intervention with a machine, is not intervention with, or invasion of a human faculty or right. No mechanical device can be upgraded to a human faculty. A computer or a robot cannot be conceded the right under Article 19 (though they may be useful to man to express his faculties). No more, a loudspeaker. The use of a loudspeaker may be incidental to the exercise of the right. But, its use is not a matter of right, or part of the right".

119. In *Free Legal Aid Cell Shri Sujan Chand Aggarwal alias Bhagatji v. Govt. of NCT of Delhi and Ors.*, MANU/DE/0654/2001 : AIR2001Delhi455 , it was said that "Pollution being wrongful contamination of the environment which causes material injury to the right of an individual, noise can well be regarded as a pollutant because it contaminates environment, causes nuisance and affects the health of a person and would therefore, offend Article 21, if it exceeds a reasonable limit."

120. *The Supreme Court in Church of God (Full Gospel) in India v. K.K.R. Majestic Colony Welfare Assn.*, MANU/SC/0537/2000 : 2000CriLJ4022 held that the Court may issue directions in respect of controlling noise pollution even if such noise was a direct result of and was connected with religious activities. It was further held:-

"Undisputedly, no religion prescribes that prayers should be performed by disturbing the peace of others nor does it preach that they should be through voice amplifiers or beating

of drums. In our view, in a civilized society in the name of religion, activities which disturb old or infirm persons, students or children having their sleep in the early hours or during daytime or other persons carrying on other activities cannot be permitted. It should not be forgotten that young babies in the neighbourhood are also entitled to enjoy their natural right of sleeping in a peaceful atmosphere. A student preparing for his examination is entitled to concentrate on his studies without there being any unnecessary disturbance by the neighbours. Similarly, the old and the infirm are entitled to enjoy reasonable quietness during their leisure hours without there being any nuisance of noise pollution. Aged, sick, people afflicted with psychic disturbances as well as children up to 6 years of age are considered to be very sensible (*sic* sensitive) to noise. Their rights are also required to be honoured.

"Under the Environment (Protection) Act, 1986, rules for noise-pollution level are framed which prescribe permissible limits of noise in residential, commercial, industrial areas or silence zone. The question is - whether the appellant can be permitted to violate the said provisions and add to the noise pollution. In our view, to claim such a right itself would be unjustifiable. In these days, the problem of noise pollution has become more serious with the increasing trend towards industrialisation, urbanization and modernisation and is having many evil effects including danger to health. It may cause interruption of sleep, affect communication, loss of efficiency, hearing loss or deafness, high blood pressure, depression, irritability, fatigue, gastrointestinal problems, allergy, distraction, mental stress and annoyance etc. This also affects animals alike. The extent of damage depends upon the duration and the intensity of noise. Sometimes it leads to serious law and order problem. Further, in an organized society, rights are related with duties towards others including neighbours.....

.....because of urbanization or industrialization the noise pollution may in some area of a city/town might be exceeding permissible limits prescribed under the Rules, but that would not be a ground for permitting others to increase the same by beating of drums or by use of voice amplifiers, loudspeakers or by such other musical instruments and, therefore, rules prescribing reasonable restrictions including the Rules for the use of loudspeakers and voice amplifiers framed under the Madras Town Nuisances Act, 1889 and also the Noise Pollution (Regulation and Control) Rules, 2000 are required to be enforced."

121. In *Charan Lal Sahu v. Union of India* MANU/SC/0285/1990 : AIR1990SC1480 the Supreme Court reiterated the need to create separate tribunals and asserted the need to appoint a body of experts to advice the Government on environmental issues.

122. In *M.C. Mehta v. Union of India* MANU/SC/1081/2003 : (2004)1SCC571 this Court has emphasized the need for creating environmental awareness amongst students through education.

123. We have referred to a few and not all available judgments. Suffice it to observe that Indian Judicial opinion has been uniform in recognizing right to live in freedom from

noise pollution as a fundamental right protected by Article [21](#) of the Constitution and noise pollution beyond permissible limits as an in-road on that right. We agree with and record our approval of the view taken and the opinion expressed by the several High Courts in the decisions referred to hereinabove.

VIII

Interim orders

124. During the course of the hearing of this case the Court had passed several interim orders keeping in mind the importance of the issue.

125. The interim order dated 27/09/2001 deserves to be mentioned in particular, which directed as under:

"(1) The Union Government, the Union Territories as well as all the State Governments shall take steps to strictly comply with Notification No. G.S.R. 682(E) dated October 05, 1999 whereby the Environment (Protection) Rules, 1986 framed under the Environment (Protection) Act, 1986 were amended. They shall in particular comply with amended Rule 89 of the said Rules, which reads as follows:

"89. Noise standards for fire- crackers

A.(i) The manufacture, sale or use of firecrackers generating noise level exceeding 125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited.

(ii) For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by $5 \log_{10}(N)$ dB, where N = number of crackers joined together."

(2) The use of fireworks or fire-crackers shall not be permitted except between 6.00 a.m. and 10.00p.m. No firework or firecracker shall be allowed between 10.00 p.m. and 6.00 a.m.

(3) Firecrackers shall not be used at any time in silence zones, as defined in S.O. 1046(E) issued on 22.11.2000 by the Ministry of Environment and Forests. In the said Notification Silence Zone has been defined as: " Silence Zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority."

(4) The State Education Resource Centers in all the States and the Union Territories as well as the management/principals of schools in all the States and Union Territories shall take appropriate steps to educate students about the ill effects of air and noise pollution and appraise them of directions (1) to (3) above."

126. These interim directions were also directed to be given wide publicity both by electronic and print media. It was said that Doordarshan and other television channels shall give publicity to these directions, at least once every day during prime time, during the fortnight before Dussehra and Diwali. The Ministry of Information and Broadcasting was asked to bring these directions to the notice of the general public through appropriate advertisements, issued in the newspapers. The All India Radio was asked to broadcast these directions on prime time on FM and other frequencies for information of the general public.

127. Due to the imposition of the restrictions on the bursting of firecrackers, several Interim Applications came to be filed before the Court. The Court vide its interim order dated 10.9.2003 stated:-

"Through the I.A.s filed in this Court the following two suggestions deserve notice.

Firstly, it is submitted that certain local festivals and celebrations are accompanied customarily by bursting of firecrackers which is at times at such hours as is not permissible under the order of this Court dated 27.9.2001. Secondly, it is pointed out that the industry of fireworks may face serious difficulty, even partial closure, on account of the directions made by this Court.

We have grave doubts if the abovesaid considerations can come in the way of the enforcement of fundamental rights guaranteed by the Constitution for the citizens and people of India to live in peace and comfort, in an atmosphere free from pollution of any kind, such as one caused by noise and foul/poisonous gases. However still, without expressing any final opinion on the pleas advanced, we allow the parties adversely affected the liberty to make representation to their respective State Governments and the State Governments may, in their turn, if satisfied of the genuineness of the representation made, invite the attention of the Govt. of India, to the suggestions made."

128. We are happy to note that the initial reluctance to abide by the interim directions made by this Court as displayed by the subsequent interlocutory applications soon gave way to compliance. By and large, the interim directions made by the Court were observed in compliance. Police and civil administration remained alert during Diwali Festival to see that the directions made by the Court were complied with. Residents Welfare Associations and school children gave a very encouraging response who voluntarily desisted from bursting firecrackers in prohibited hours of night and also from bursting

such firecrackers as produce high level noise .

IX

Difficulty in implementation of noise pollution control methodology in India.

129. India has passed through the stage of being characterised as a developing country and is ready to enter and stand in the line of developed countries. Yet, the issue of noise pollution in India has not been taken so far with that seriousness as it ought to have been.

Firstly, as we have stated earlier, there is a lack of will on the part of the Executive to implement the laws. This has contributed to lack of infrastructure essential for attaining the enforcement of laws. Secondly, there is lack of requisite awareness on the part of the citizens. The deleterious effects of noise pollution are not well known to the people and are not immediately perceptible. People generally accept noise pollution as a part of life, a necessary consequence of progress and prosperity.

130. The problems that are being faced in controlling noise pollution are:-

1. The Statutes and the Rules framed thereunder are not comprehensive enough so as to deal with all the problems and issues related to noise pollution. This impression of ours stands reaffirmed on a comparative reading of legislation in India with those in other countries of the world to which we have referred to briefly earlier in this judgment.

2. The authorities responsible for implementing the laws are not yet fully identified. Those which have been designated, do not seem to be specialised in the task of regulating

noise pollution . There is dearth of necessary personnel technically qualified to act effectively. What is needed is a combination of technically qualified and administratively competent personnel with the requisite desire and dedication for implementation of the laws.

3. There is lack of proper gadgets and equipments and other infrastructure such as labs for measuring the noise levels. Due to the shortage of the instruments needed for the purpose of measuring sound, the policemen who are on the job usually end up measuring sound with their ears itself and not with the use of technical instruments.

X

Firecrackers.

131. In the context of firecrackers in particular, several questions do arise for which answers shall have to be found. What should be the maximum permissible sound level for firecrackers? What should be the method of checking whether a particular firecracker shall emit sound which shall be within permissible limits? Which authority shall be conferred with the responsibility for ensuring the effective implementation of these noise levels? What should be the time limit during which the bursting of firecrackers should be allowed? Should there be any relaxation in the hours fixed for bursting firecrackers during festivals? Should the Environment (Protection) Rules, 1986, be amended in such a way that the firecrackers manufactured for export in other countries are exempted from the Indian noise standards?

What is the Maximum sound level that should be permissible for firecrackers?

132. At present the maximum permissible sound level for firecrackers as per the noise standard is provided by Item 89, Sch. I, Table 1.5 of the Environment (Protection) Rules, 1986:

"89. Noise Standard for Fire- crackers

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

(ii) For individual firecrackers constituting the series (joined fire- crackers), the above mentioned limit be reduced by $5 \log_{10} (N)$ dB, where N= Number of crackers joined together."

133. The learned *amicus curiae* had on 17th September 2001, filed certain suggestions for issuance of directions for the consideration of this Court. In it he had suggested that the maximum noise level of firecrackers could be fixed at 65 dB(A). It is submitted that the limit of emission of noise prescribed in the Rules is too liberal and errs on higher side.

134. It is suggested that the manufacturers of Firecrackers or those dealing with them should ensure that only such crackers are produced and marketed which do not emit noise of more than 65 dB(A).

135. The Government of India had not accepted the above suggestion of the learned Amicus. The government replied to it in the following words.

"Sound level of 65 dB(A) for firecrackers is too low a level to be prescribed. The noise levels prescribed in GSR 682 (E) dated 5TH October, 1999, have been evolved by a technical committee and need to be complied with."

136. The Fire workers industry also submitted an application to the Union Minister of Environment and Forest at a meeting convened in New Delhi on 15/04/2004, pleading justification for the increase proposed in the prescribed firecrackers noise standards from 125 dB(AI) to 135 db(AI) and from 145 dB(c)pk to 155(C)pk.

137. In an Article on 'Firecracker Noise, a Hazard- A review of its Standards', by, Dr. S.P. Singhal, published in MAPAN- Journal of Metrology Society of India, Vol. 17, No. 3, 2002; pp. 101-117, Dr. Singhal has stated:

"UK and many other European Economic Commission (EEC) countries have adopted an exposure limit of 140dB(lin) peak sound pressure level for impulsive or cracker noise for a maximum exposure of 100 impulses per day.

European Standardization Committee CEN/TC/212 WG3 is also working to set-up standards on fireworks. Some of the countries have desired the limit to be set at 112dB(AI) and, several others have wanted it to be set at 125dB(AI) or even at 126-127 dB(AI) at the testing distance, with the peak sound pressure level to be 20dB higher than these limits. It has fixed a noise level of 120dB(AI) measured at the testing distance on an ad hoc basis for category 2 fireworks.

Canada has adopted the damage risk criterion of 140dBA peak sound pressure level at a distance of 5m from the point of explosion of the cracker. It is applicable in all categories of fireworks unless otherwise specified."

Keeping all these submissions in mind, it does seem that the present noise standards as prescribed in India by the Government of India are correct and do not need to be altered at the moment. However, if the Government is of the opinion that this sound level needs to be increased or reduced at a later date it is free to do so.

Should a firecracker be tested on the basis of sound level or on the basis of chemical compositions so as to check, does the firecracker correspond with the prescribed rules?

For an effective implementation of noise pollution prevention programme, it is essential that such a method be devised whose enforcement shall not be problematic. A rule should be so designed, that it is possible for all concerned to be able to implement it, and thus it is not violated by anyone due to some kind of supervening impossibility. Almost all the parties concerned have expressed a discontent about the present system of enforcement of noise level pertaining to firecrackers. Lack of infrastructure on account of noise measuring devices, high cost of such devices, low noise levels prescribed, expensive rates for getting samples tested, long time taken by the testing laboratories are a few of the difficulties that have been cited in the enforcement of the noise standards.

138. The Department of Explosives has filed two affidavits before the Court, the first on 1.4.2003 and the second on 16.2.2004, besides a joint affidavit which was filed by the Ministry of Environment and Forest on behalf of the Union of India on 29.8.2003.

139. In the aforesaid Affidavits, the stand taken by the Department of Explosives before the Court is:

(i) that "the firecrackers noise standard prescribed under the Environment (Protection) Rules, 1986 requires costly instruments, wide infrastructure and special expertise in the fields of acoustic science." (para-8 of Affidavit dated 1.4.2003)

(ii) that "the Department is not prepared in terms of manpower equipments and infrastructure for implementation of the standard which is based on measurement of noise level" (para-9 of Affidavit dated 1.4.2003)

(iii) that "the Department of Explosives is of the opinion that the noise level of firecrackers can be efficiently controlled by specifying the size, shape, composition and quantity of chemicals in the fireworks, which are the prime factors that determine the noise level which entails a lot of R & D work. The maximum permissible size of firecrackers and the maximum possible weight of the chemicals for each variety would be mentioned in the list of authorized explosives appended to the Explosives Rules consequent upon amendment of the Explosives Rules."(para-15 of Affidavit dated 1.4.2003.)

(iv) that "the department is already publishing one authorized List of Explosives, which is updated periodically as and when new items of explosives are approved by the Department. The specification for the approved varieties are prescribed in the said Authorised List, in terms of permissible size, permissible composition of chemicals, mass of charge and other such physical and chemical properties. The items which are not listed in the authorized list cannot be manufactured, stored, transported or sold as per various provisions of the Explosives Rules. Anybody proposing to manufacture a new variety of fireworks shall apply to the Chief Controller of Explosives, Nagpur along with detailed drawings, samples and prescribed fee for testing and approval. Noise regulations for firecrackers can be implemented effectively through the Authorised List in four phases:

(i) The permissible sound level of 125 dB(AI) notified under the Rules is taken as the guideline for purpose of implementation by the Department of Explosives. (ii) To achieve this, the Department can experiment with various sizes, chemicals and compositions in order to devise the optimal set of factors for each variety, to result in the desired noise level.

(iii) This set of factors or parameters for each variety of firecrackers will then be notified under the Authorized List of Explosives under the Explosives Rules, 1983.

(iv) Any violation from the authorized List exceeding the permitted size, permitted chemical content and chemical composition will attract legal action."(para-16 of affidavit dated 1.4.2003).

140. In the Affidavit filed on 16.2.2004, the Chief Controller of Explosives stated:-

(1) That since the role of the Department of Explosives is mainly administration and enforcement of the Explosives Rules 1983 and the status of the Department is statutory in nature hence the Department of Explosives had already taken up the matter and advised the fireworks manufacturers of developing and producing environment friendly fireworks besides advocating to promote, sale and use of only fireworks/crackers meeting the noise standards prescribed under Environment (Protection) Rules, 1986 and amendments thereof.

(2) That it is impractical for Government of India to fix norms regarding chemical composition and the size of the firecrackers. It is the duty and responsibility of the manufacturer to control size and composition of firecrackers to comply with the noise limits prescribed under the Environment (Protection) Rules, 1986.

(3) That it is impractical owing to the shortage of infrastructure available with the Department of Explosives. The licensing for the manufacture of firecrackers shall be as per the Explosives Act, 1884. The Power of the District Magistrate for issuing licenses is to be retained as per the Rules.

(4) That the matter is now open and the manufacturers are at liberty to manufacture, develop, promote and sell only those fireworks, which comply with the noise limits prescribed under the Environment (Protection) Rules 1986 and Explosive Rules, 1983.

(5) That the Department of Explosives had already made mandatory for the manufacturers of fireworks to mention the noise levels in decibel units on firecrackers. The manufacturers are also required to declare on the packing of the boxes that the noise levels conform to the standards prescribed under the Environment (Protection) Rules, 1986. The Department had already included the prescribed noise limits for firecrackers as additional conditions of licenses issued under the Explosives Rules 1983. The authorities empowered to enforce the Explosives Rules 1983 have been clearly defined under the said Rules.

Desirability of fixing chemical composition for the firecrackers

141. The learned Amicus Curiae has suggested that the Government of India should fix the permissible chemical compositions for the firecrackers. He submitted - "To control the noise levels from firecrackers, it was felt that apart from firecrackers carrying on its label, the extent of its noise level emission, it may be appropriate if the Government was to fix norms regarding chemical composition and the size of firecrackers so as to conform to the notified noise emission norms."

142. In UK as well, the method of determining the noise level of a firecracker, is by fixing its chemical contents. The British Standard Institute has developed the British Standard Fireworks, Part 2. Specification for Fireworks (BS 7114: Part 2) of 1988, which prescribes the maximum permissible quantity of chemicals in a particular firework. The Standards prescribe the various specifications with which the firework has to comply for it to be manufactured or used in UK.

143. During the course of hearing, submissions in extenso were made on the comparative merits and demerits of the two systems namely (i) measuring the noise level of firecrackers in decibels and thereby securing the implementation of rules in this regard, and (ii) securing the implementation of the rules by restricting and prescribing the size of chemical content, chemical composition etc. of firecrackers. A tabulated statement of such comparison has been placed on the record by the Tamil Nadu Fireworks and Amorcees Manufacturers Association.

144. Briefly stated, it is pointed out that if the firecrackers are allowed to be manufactured in the manner in which they are being done now and the noise level is left to be measured at the time of bursting of firecrackers, several difficulties in implementation would arise, frustrating the regulation. Very expensive instruments and gadgets are necessary to measure the sound level of firecrackers. A sound level meter with required capabilities may cost around Rs.3 lacs or upwards. Factors like wind velocity, temperature and humidity have a bearing on the measurement of noise level. The gadgets for monitoring these factors shall also be required to be installed at the testing field. Technically trained persons would be required to be posted at every point of

measuring. Testing the sound level of firecrackers at the point of bursting would mean that the firecrackers have already reached the market. The persons to be hauled up would be unwary retailers or users and it would be difficult to fix the responsibility on the manufacturers or distributors. Difficulties of proof in the court of law would also arise. The noise level in a firecracker is not stable. The same firecracker may have a different noise level at the time of manufacturing and at the time of use on account of climatic changes which would naturally occur by the lapse of time and change of place. If the noise level was to be tested at the factory, the firecracker would have already been manufactured. There would also be other difficulties inasmuch as the clearance for marketability would depend on the firecrackers satisfying the test carried out and at that point of time the firecrackers have already been manufactured and shall have to be only destroyed if unsuccessful in the test. That apart, the manufacturers are spread throughout the country. Some of them are small scale industries. Either many a testing stations shall have to be established or else the manufacturers would be required to go to centralized testing stations carrying untested firecrackers. Both seem to be difficult situations.

145. On the other hand, prescribing of weight and composition of chemicals to be used in manufacturing firecrackers would mean experiment or analytical tests being carried out at any one station followed by publication of results and laid down standards. Experimental checks would be enough to satisfy the authorities, if the manufacturers were following the laid down standards as to size of firecrackers, weight and percentile composition of chemicals used. This system would enable identification of illegal firecrackers with comparatively more ease. Size and mass of charge are two basic factors that determine the noise level of a firecracker. By restricting these two prime factors, noise standard is achieved more effectively. Though other factors like climatic conditions may affect the noise level to some extent, but this system seems to us to be more dependable and logical, at least on the materials made available before us.

146. On a comparison of the two systems, i.e. the present system of evaluating firecrackers on the basis of noise levels, and the other where the firecrackers shall be evaluated on the basis of their chemical composition, we feel that a change in the method of evaluating the firecrackers shall surely be more beneficial. It shall reduce the expenditure that shall otherwise have to be incurred on expensive instruments that are necessary for the purpose of measuring sound. The firecrackers shall easily be identifiable on the basis of their mass of charge, and the weight of the chemicals contained in the firecrackers can also be easily measured. There shall not be too much need of the personnel technically qualified for measuring sound, as what would then be needed, would be to simply weigh the chemical constituents. It shall to a great extent also be successful in putting an end to illegal fireworks, which come in bigger sizes, as they now shall be more easily identifiable. In short, the implementation of the rules relating to firecrackers shall be easier and carried out by the enforcing authority more easily.

147. Keeping all these considerations and the various submissions made before this Court in mind, we are of the opinion that a method as proposed by the learned *Amicus Curiae*, of fixing the maximum chemical composition for each and every firecracker, keeping in mind the limit of 125dB(AI) as the maximum permissible limit, should be adopted. Every

manufacturer should on the box of each firecracker mention details of its chemical contents as well. In case of a failure on the part of the manufacturer to mention these details or in cases where the contents of the box do not match to the chemical formulae as stated on their box, the manufacturer shall be liable for criminal prosecution.

148. The Department of Explosives should in public interest undertake necessary research activity for the purpose and come out with the chemical formulae for each firecracker. The Department shall at the time of giving the license for manufacturing a particular firecracker shall specify the ratio as well as the maximum permissible weight of every chemical used for the purpose.

Response during hearing

149. The civic awareness towards prevention of noise pollution in India is not as high as is expected. It is regrettable to see that people indulge into making noise beyond tolerable limits and create health hazard unmindful of consequences which are likely to befall not only on others but also on themselves who create noise. The enactment of laws has failed to create the requisite awareness. The best time to create awareness is in the childhood. At middle- school level education and in the age of adolescence the children should be taught in the schools, and in the homes as well by the parents-- What are the consequences of noise pollution and how much health hazard is created by bursting firecrackers?

150. An awareness towards protecting the environment from all sorts of pollutants and destructive activities needs to be created in the minds at a younger age. Suitable courses of study need to be devised by preparing text-books to be handed down to the youth in its shaping age and whilst they are still in schools.

151. We are happy to note the way the people of the country and especially the younger generation has responded to the interim order made from time to time by this Court. News reports came to our notice wherein certain schools were stated to have organized special lectures for the children pointing out the adverse effects of noise pollution created by firecrackers just before the schools closed for Diwali festival. The children decided not to burst firecrackers during Diwali Festival. Some volunteered and took a vow to burst such firecrackers as do not create intolerable noise and confining their such fun and frolic only to the hours of the day and not to do so during the hours of night. Such a response from young boys and girls who are our future and the educational institutions on whom lie the responsibility of shaping the future of this country is most welcome.

152. Certain incidental and associated issues require to be dealt with and that we do hereafter.

Fixing of time limit for bursting firecrackers -- Is relaxation desirable for festivals?

153. The learned *Amicus Curiae* in his suggestions filed on 17th September 2001 had suggested that the "Bursting of crackers should be prohibited during night time, between

10.00 p.m. and 06.00 a.m.". The Court had agreed and directed, vide Order dated 27.9.2001 -- "The use of fireworks or firecrackers shall not be permitted except between 6.00 a.m. and 10.p.m. No fireworks or firecrackers shall be used between 10.00 p.m. and 6.00 a.m. The Government of India, has also expressed its opinion that there should be no relaxation in the time limit for bursting firecrackers. Relaxation of restrictions on bursting of crackers from 10.00 p.m. to 6.00 a.m. shall not be given as it is night time. During the night time, people sleep and the high level of noise has deleterious effects on the health and well being of the people."

154. Several interlocutory applications have been filed in this Court, wherein it was pleaded that restriction on bursting of firecrackers in the night should be removed during the Diwali Festival. Similar relaxation was demanded for other festivals. These applications highlighted practices prevalent in some of the western countries wherein such relaxation is allowed. We do not think that we will be justified in granting any such relaxation. Indian society is pluralistic. People of this great country belong to different castes and communities, have belief in different religions and customs and celebrate different festivals. We are tolerant for each other. There is unity in diversity. If relaxation is allowed to one there will be no justification for not permitting relaxation to others and if we do so the relaxation will become the rule. It will be difficult to enforce the restriction.

155. The Calcutta High Court in the case of *Moulana Mufti Syed Md. Noorur Rehman Barkati v. State of West Bengal* [MANU/WB/0211/1998](#) : AIR1999Cal15 has expressed the following view:

"The condition of the European countries, England and America cannot be equated with the condition prevailing in the State of West Bengal, particularly in the City of Calcutta....West Bengal has got its own peculiar problem and this Court cannot decide a matter looking at Europe or America where the amenities and the facilities are better. Density of population is very thin. Roads are maintained in a perfect order. Traffic noise is insignificant. The use of horns by vehicles is a thing which is prohibited there unless in case of emergency. People are disciplined. Traffic moves in a disciplined manner. No horns are there. The Ambient Noise Level in those countries are not at par with those noise level in the City of Calcutta and/or in different parts of State of West Bengal.

Accordingly, whatever may be decided by the European countries or America, cannot have any direct bearing on the fixation of the sound level in the State of West Bengal. In other civilized countries, cars move without making any noise or sound. Condition of the roads is such that it cannot create any noise beyond tolerance. People in those countries are not in the habit of creating unnecessary sounds but in our country because of the gift of the technology sound has become a source of pleasure for few people including some young people. Use of unnecessary horn in vehicles has become a part and parcel of Indian culture".

156. The picture of the entire country compared with the State of West Bengal does not bear any material difference. Thus a rule, practice or provision as to relaxation in Europe

or America may not be of much help for us. They do not have many festivals or celebrations round the year. Their festivals and events are only at national level and one for all, unlike ours. Further, in the European countries or even in America an insignificant percentage of the population indulges in bursting crackers. Very few families, mainly Indian, in these countries celebrate the festival of Diwali and burst crackers. Thus the noise pollution produced by this small use of firecrackers is not a cause of worry in these countries.

157. The situation in India is almost the opposite. The streets are congested and the density of population per square kilometer is one of the highest in the world. Firecrackers are burst in almost all the houses, thus leading to pollution in the form of noise and smoke- both on a large scale, making it a cause of worry.

158. It is a judicially noticeable fact that in advanced countries there is a move for collective celebration of festivals. For example, in United States, on May Day, a show of fireworks is arranged outside the city. People assemble in large numbers to witness such show which is officially arranged by the State. Such example can be emulated in our country. People belonging to that section of the society which wishes to celebrate a festival or an occasion may be encouraged to organize such event collectively and may have a show of fireworks away from the residential locality. Such a move would save the people from the hazardous effects of noise pollution caused by fireworks and at the same time bring the people together and contribute in developing closeness, unity and brotherhood.

159. In our opinion, the total restriction on bursting firecrackers between 10 pm and 6 am must continue without any relaxation in favour of anyone.

Whether such restriction is violative of Article 25 of the Constitution ?

160. The affidavit filed by Mr. Mariappan, the Secretary of the Tamil Nadu Fireworks and Amorcees Manufacturers Association, alleges the restriction on bursting firecrackers to amount to infringement of religious rights under Article 25. He says -

"Therefore, the interference with the date and time of celebrating the festivals, amounts to infringement of religious rights under Article 25 and the limitation under Article 21 does not cause any health hazard."

161. The Court by restricting the time of bursting the firecrackers has not in any way violated the religious rights of any person as enshrined under Article 25 of the Constitution. The festival of Diwali is mainly associated with pooja performed on the auspicious day and not with firecrackers. In no religious text book it is written that Diwali has to be celebrated by bursting crackers. Diwali is considered as a festival of lights, not of noises. Shelter in the name of religion cannot be sought for, for bursting firecrackers and that too at odd hours.

162. Another argument that has been put forward to remove the restriction during festivals is that they are celebrated by most of the people and that an inconvenience to a few should not become the reason for restraining a greater lot.

163. In P.A. Jacob v. Superintendent of Police, Kottayam, MANU/KE/0001/1993 : AIR1993Ker1 , it has been said "However wide a right is, it cannot be as wide, as to destroy similar or other rights in others. Jefferson said: No one has a natural right to commit aggression on the equal rights of another. J.S. Mill said: If all mankind minus one were of one opinion, and if only one person was of contrary opinion, mankind would be no more justified in silencing that one person, than he, if he had the power, would be justified in silencing mankind."

164. If at all the people feel it necessary to burst firecrackers they can choose and go for such firecrackers which on being burst emit colours or lights mainly and produce very little or no sound. Their use can be permitted. The Department of Explosives can, while working out formulae for firecrackers, also along side classify the crackers into two categories that could be: (a) sound emitting crackers, and (b) colours/light emitting crackers. A few examples of such colour emitting crackers are, snake tablets, sparklers, pencils, hunters, chakri, colour rockets, flowerpots, parachutes, etc. Category (b) firecrackers may not have restriction as to timings. Though, it would need expert examination and opinion if colour emitting crackers also emit fumes and gases which though not source of noise pollution yet would cause air pollution, equally bad. Till such time the Department of Explosives makes any such classification there shall be a total ban on bursting of firecrackers between 10 p.m. and 6 a.m.

Can an exception be carved out for firecrackers meant for export exclusively.

165. Should the Environment (Protection) Rules, 1986, be amended in such a way that the firecrackers manufactured for export and use in other countries are exempted from the Indian noise standards?

166. Mr. Mariappan, the Secretary of The Tamil Nadu Fireworks and Amorges Manufactures' Association, had in his affidavit dated 8th February 2002, requested the Court to remove the restriction on manufacturing fireworks meant for exporting only and which are in excess of the sound levels prescribed for fireworks within the country. It is submitted, "the Indian Standards on noise of firecrackers do not have any relevance to firecrackers intended for export. But the order of the Hon'ble Supreme Court prohibits manufacture of firecrackers generating noise level exceeding 125 dB(AI) or 145 dB(C)pk at 4 meters distance from the point of bursting. There is a total restriction on the manufacture of fireworks and crackers without any discrimination being made between firecrackers that are manufactured for use in India and those for use in foreign countries. The trade having been globalised, Indian firecrackers have to necessarily comply with foreign standards if they are to enter into the international markets. The Department of Explosives is already having various provisions laid down under the Explosives Act, 1884 and the Explosives Rules, 1983, which govern the export of fireworks. Prior approval from the Department of Explosives is imperative for every export of fireworks.

Therefore, the comprehensive position now imposed on firecrackers should be modified exempting firecrackers that are manufactured for use in foreign countries, from the purview of the Environment (Protection) Act 1986 and the Rules framed thereunder."

167. The Court on the above-mentioned submission sought for the view of the Department of Explosives. The Department has expressed the view that firecrackers that are to be sold in foreign countries may be excluded from the purview of the noise standards provided they conform to the rules for manufacturing the goods for export. They also submitted - "The firecrackers manufactured and sold for export purpose may be excluded from the purview of the firecrackers' noise standards provided they follow the rules for manufacturing of goods for export. This will enable the manufacturers to compete in the world market with the other suppliers of firecrackers. The firecrackers manufactured for export shall have a different colour code and a clear print indicating that they are not to be sold in India."

168. We are inclined to agree with the view of the Department of Explosives. Firecrackers for the purpose of export may be manufactured and bear higher noise levels subject to the following conditions: (i) The manufacturer should be permitted to do so only when he has an export order with him and not otherwise; (ii) The noise levels for these firecrackers should conform to the noise standards prescribed in the country to which they are intended to be exported as per the export order; (iii) These firecrackers should have a different colour packing, from those intended to be sold in India; (iv) The firecrackers should have a clear print on them stating that they are not to be sold in India. In case these firecrackers are found being sold in Indian territory, then the manufacturer and the dealer selling these goods should be held liable.

How to check/control noise pollution

169. The need for checking noise pollution as highlighted by the petitioners and several interveners deserves appreciation.

170. Need for specific legislation to control and prevent noise pollution still needs some emphasis. Undoubtedly, some laws have been enacted. Yet, compared with the legislation in developed countries India is still lagging behind in enacting adequate and scientific legislations. We need to have one simple but specific and detailed legislation dealing with several aspects referable to noise pollution and providing measures of control therefore.

171. There is an equal need of developing mechanism and infrastructure for enforcement of the prevalent laws. Those who are entrusted with the task of enforcing laws directed towards controlling noise pollution, must be so trained as to acquire expertise in the matter of fighting against noise pollution by taking preventive and deterrent measures both. They need to be equipped with the requisite equipments such as audio meters as would help them in detecting the level of noise pollution more so when it crosses the permissible limits and the source thereof.

172. Above all, there is need for creating general awareness towards the hazardous effects of noise pollution. Particularly, in our country the people generally lack consciousness of the ill effects which noise pollution creates and how the society including they themselves stand to benefit by preventing generation and emission of noise pollution. The target area should be educational institutions and more particularly schools. The young children of impressionable age should be motivated to desist from playing with firecrackers, use of high sound producing equipments and instruments on festivals, religious and social functions, family get-together and celebrations etc. which cause noise pollution. Suitable chapters can be added into text-books which teach civic sense to the children and teach them how to be good and responsible citizen which would include learning by heart of various fundamental duties and that would obviously include

learning not to create noise pollution and to prevent if generated by others. Holding of special talks and lectures can be organized in the schools to highlight the menace of noise pollution and the role of the children in preventing it. For these purposes the State must play its role by the support and cooperation of non-government organizations (NGOs) can also be enlisted.

173. Similar awareness needs to be created in police and civil administration by means of carrying out a special drive to make them understand the various measures to curb the problems and the laws on the subject. Residents Welfare Associations (RAWs), Service Clubs (such as Rotary International and Lions International) and Societies engaged in preventing noise pollution as part of their projects need to be encouraged and actively involved by the local administration. Festival and ceremonies wherein the fireworks and crackers are customarily burst can be accompanied by earmarking a place and time wherein and when all the people can come together and witness or view a show of fireworks dispensing with the need of crackers being burst in the residential areas and that too which is done without any regard to timings. The manufacturers can be encouraged to make such fireworks as would display more the colours rather than make noise.

174. Not only the use of loudspeakers and playing of hi-fi amplifier systems has to be regulated even the playing of high sound instruments like drums, tom-toms, trumpets, bugles and the like which create noise beyond tolerable limits need to be regulated. The law enforcing agencies must be equipped with necessary instruments and facilities out of which sound level meters conforming to Bureau of Indian Standards (BIS) code are a bare necessity.

175. Preventive measures need to be directed more effectively at the source. To illustrate, the horns which if fitted with the automobiles would create hawking sound beyond permissible limits, should not be allowed to be manufactured or sold in the market as once they are available they are likely to be used.

176. Loudspeakers and amplifiers or other equipments or gadgets which produce offending noise once detected as violating the law, should be liable to be seized and confiscated by making provision in the law in that behalf.

177. Prohibiting the sale of such firecrackers which create noise pollution by producing noise beyond permissible limits is practically unmanageable. A better option certainly is to prescribe the chemical contents and composition for each type of firecrackers to effectively curb noise pollution. The Chief Controller of Explosives has also been agreeable to take steps in this regard but has pointed out difficulties attributable to shortage of personnel and non- availability of lab facilities and requisite equipments for this purpose.

178. We hasten to add that during the course of the proceedings the parties have been generally agreeable to solicit directions on the lines as indicated hereinabove. There should be no difficulty in issuing directions and ensuring compliance to the extent as indicated hereinabove. Wherever there are difficulties they have to be sorted out in the larger public interest.

DIRECTIONS

179. It is hereby directed as under:-

I. Firecrackers

1. On a comparison of the two systems, i.e. the present system of evaluating firecrackers on the basis of noise levels, and the other where the firecrackers shall be evaluated on the basis of chemical composition, we feel that the latter method is more practical and workable in Indian circumstances. It shall be followed unless and until replaced by a better system.
2. The Department of Explosives (DOE) shall undertake necessary research activity for the purpose and come out with the chemical formulae for each type or category or class of firecrackers. The DOE shall specify the proportion/composition as well as the maximum permissible weight of every chemical used in manufacturing firecrackers.
3. The Department of Explosives may divide the firecrackers into two categories- (i) Sound emitting firecrackers, and (ii) Colour/light emitting firecrackers.
4. There shall be a complete ban on bursting sound emitting firecrackers between 10 pm and 6 am. It is not necessary to impose restrictions as to time on bursting of colour/light emitting firecrackers.
5. Every manufacturer shall on the box of each firecracker mention details of its chemical contents and that it satisfies the requirement as laid down by DOE. In case of a failure on the part of the manufacturer to mention the details or in cases where the contents of the box do not match the chemical formulae as stated on the box, the manufacturer may be held liable.
6. Firecrackers for the purpose of export may be manufactured bearing higher noise levels subject to the following conditions: (i) The manufacturer should be permitted to do

so only when he has an export order with him and not otherwise;(ii) The noise levels for these firecrackers should conform to the noise standards prescribed in the country to which they are intended to be exported as per the export order; (iii) These firecrackers should have a different colour packing, from those intended to be sold in India; (iv) They must carry a declaration printed thereon something like 'not for sale in India' or 'only for export to country AB' and so on.

II. Loudspeakers

1. The noise level at the boundary of the public place, where loudspeaker or public address system or any other noise source is being used shall not exceed 10 dB(A) above the ambient noise standards for the area or 75 dB(A) whichever is lower.
2. No one shall beat a drum or tom-tom or blow a trumpet or beat or sound any instrument or use any sound amplifier at night (between 10. 00 p.m. and 6.a.m.) except in public emergencies.
3. The peripheral noise level of privately owned sound system shall not exceed by more than 5 dB(A) than the ambient air quality standard specified for the area in which it is used, at the boundary of the private place.

III. Vehicular Noise

No horn should be allowed to be used at night (between 10 p.m. and 6 a.m.) in residential areas except in exceptional circumstances.

IV. Awareness

1. There is a need for creating general awareness towards the hazardous effects of noise pollution. Suitable chapters may be added in the text-books which teach civic sense to the children and youth at the initial/early level of education. Special talks and lectures be organised in the schools to highlight the menace of noise pollution and the role of the children and younger generation in preventing it. Police and civic administration should be trained to understand the various methods to curb the problem and also the laws on the subject.
2. The State must play an active role in this process. Residents Welfare Associations, Service Clubs and Societies engaged in preventing noise pollution as a part of their projects need to be encouraged and actively involved by the local administration.
3. Special public awareness campaigns in anticipation of festivals, events and ceremonial occasions whereat firecrackers are likely to be used, need to be carried out.

The abovesaid guidelines are issued in exercise of power conferred on this Court under Articles [141](#) and [142](#) of the Constitution of India. These would remain in force until modified by this Court or superseded by an appropriate legislation.

V Generally

1. The States shall make provision for seizure and confiscation of loudspeakers, amplifiers and such other equipments as are found to be creating noise beyond the permissible limits.

2. Rule 3 of the Noise Pollution (Regulation and Control) Rules, 2000 makes provision for specifying ambient air quality standards in respect of noise for different areas/zones, categorization of the areas for the purpose of implementation of noise standards, authorizing the authorities for enforcement and achievement of laid down standards. The Central Government/State Governments shall take steps for laying down such standards and notifying the authorities where it has not already been done.

180. Though, the matters are closed in consonance with the directions as above issued in public interest, there will be liberty of seeking further directions as and when required and, in particular, in the event of any difficulty arising in implementing the directions.

181. The CWP, CA and all pending IAs be treated as disposed of.

182. Before parting, we would like to place on record our deep appreciation of valuable assistance rendered by Shri Jitendra Sharma, Senior Advocate assisted by Shri Sandeep Narain, Advocate (and earlier by late Shri Pankaj Kalra, Advocate) who highlighted several relevant aspects of the issues before us and also helped in formulating the guidelines issued as above.