RESEARCH ARTICLE

NOISE POLLUTION CONTROL AND IN RE NOISE POLLUTION CASE.

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Abstract

Like water and air pollution, noise pollution plays a vital role for the degradation of the environment. Exposed to high level of noise will have detrimental effect to human health. In Indian society, noise is associated with many facets of life, for example, family ceremonies, religious ceremonies, community celebrations, partying and gathering, et cetera. Indian Constitution not only protects the rights related to freedom of speech and expression, but also protects the right to life which can be enjoyed in its full extent when the environment is pollution free. For the control of water and air pollution the legislations, such as, Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 are available. Similarly, for the control of noise pollution the Noise Pollution (Regulation and Control) Rules, 2000 is also available in India. The present article examines the scope of in re noise pollution case regarding control and regulation of noise pollution in India.

Introduction:

The expression noise is nothing but a sound, which is basically an energy particle. The sound is converted to noise by virtue of its magnitude of appearance and becomes intolerable by the human beings and environment\(^1\). Therefore, the expression sound is some energy particle which remains within the golden line of tolerance. In India, environmental legislations define pollution and pollutant both. Pollution means presence of pollutant. Section 2 of the Air (Prevention and Control of Pollution) Act, 1981 defines the expression "pollutant” as gaseous, solid or liquid substances which is present in the environment in such a quantity that is harmful to human beings, animals, property and the environment\(^2\). Accordingly, the noise, when becomes intolerable and causes serious health issue, then considered to be pollutant as per the atmospheric pollution law.

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\(^1\) 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.” AIR 2005 SC 3136 at Para 18.

\(^2\) Section 2, the Air (Prevention and Control of Pollution) Act, 1981- "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.
Noise As Nuisance And Health Hazard:

Exposure to noise for a continuous period of time will have many serious health issues, which may be temporary or permanent. It is because, the human body is naturally adjusted to certain limits of exposure to noise and when goes beyond such a limit the human body is affected highly because of such exposure to unwanted sound.

Hearing loss is one of the common features of exposure to high levels of noise for a continuous period of time. Hearing loss is one of the disabilities of the human being that under the circumstances, person is unable to listen or hear anything from the environment, because of the malfunctioning of the hearing organ.

Interference with communication is another example of noise pollution which renders the situation that a person is disabled to hear proper communication. For example, in a class when the teacher is delivering a lecture to students and all of a sudden, the loud sound speaker, near the classroom, starts creating huge noise of music, it is the example of interference with communication, because the teacher’s voice will not reach properly to students.

Disturbance of sleep is one of the causes of exposure to high levels of noise for a continuous period of time. This is another health hazard associated with noise pollution. Because of disturbance in sleeping, the person concerned shall quickly susceptible to many diseases and physical ailments will be frequent.

Effect on performance will be frequently appearing on the person, when continuously exposed to noise beyond tolerable limit. This is because, the noise pollution will disturb the hormonal function of the individual, thereby, affect the alertness of the individual which will ultimately lead to the successful attempt to ensure that the concerned person performs badly.

A person will be annoying others, because of the fact that continuous exposure to noise beyond tolerable limit will disturb the mental stability and hormonal secretion, thereby, the character of the person shall be changed and will be unable to understand that what the person standing before him expects a reasonable behavior and finally causes an annoyance to other persons.

Continuous exposure to high levels of noise for a continuous period of time will also affect the psychology of a person. It is possible that when a person is exposed to high levels of noise, there will be enhancement of heartbeat rate including abnormal flow of blood in the human brain and, thereby, lead to psychological effect.

The noise can also be associated with other forms of stresses in the human body. For example, cardiovascular problem, neurological problem, renal failure complaint, headache, eyesight problem, skin problem, insomnia, hormonal imbalance, et cetera.

3Noise-induced temporary threshold shift (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 the 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)]. AIR 2005 SC 3136 at Para 26.

4Possible 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). AIR 2005 SC 3136 at Para 32.

5General morbidity (illness); Neuropsychological disturbances-Headaches, Fatigue, Insomnia, Irritability, Neuroticism; Cardiovascular system disturbances-Hypertension, Hypotension, cardiac disease; Digestive disorders-Ulcers, Colitis; Endocrine and biochemical disorders; AIR 2005 SC 3136 at Para 37.
The noise gives adverse impact to unborn persons also. The pregnant mother exposed to high level of noise for a continuous period of time can deliver defective babies. The unborn baby exposed to high level of noise may suffer with hearing loss, come up with cardiovascular problem, brain development problem and sometimes with neurological problem.\(^6\)

**Sources Of Noise Pollution:**

There are various sources of noise pollution, which can generate high level of noise for a continuous period of time, thereby, not only affect the human health but also various components of environment. There are some sources which cause noise pollution at high level, but such sources cannot be stopped from causing noise pollution, for example, fighter jet, passenger air bus, diesel locomotive, et cetera.

The road traffic noise is a regular affair to be faced by the people anywhere in the world. The buses, trucks, automobiles, and other vehicles continuously generate noise of high volume and the passerby are always exposed to this high level of noise, which are somewhere detrimental to health.

The air craft noise, which is generated from the fighter jet, passenger air bus, cargo air bus, helicopter, private jet services, et cetera, also responsible for causing degradation to the environment. Though there are modern technologies available, under which the noise generation can be reduced to a considerable extent.

The noise from Railroad is also another source for causing noise. The diesel locomotive causes high level of noise. In this regard, electric engine does not generate high level of noise, but running of train on railway track causes huge amount of noise. The residential houses, schools and hospitals constructed near to railway tracks are exposed to this kind of noise every day.

The construction noise is another way of affecting the human health and environment. The running of Earth movers, building equipment, construction equipment, iron rod cutter, uplifting Crain machine, et cetera cause high level of noise which are detrimental to the environment.

Industrial noise is another source of causing high level of noise responsible for degradation of the environment and human health. Primarily, the workmen are highly affected because of the noise generated in the industries and commercial places. At the same time, the industrial noise which are coming out from the premises also affect the passerby from such industrial places.

Noise in the building, for example, performance of celebration, partying, performance of religious festivals, et cetera are also responsible for causing high level of noise of the residents who are residing in the same building.

The noise from consumer products is also another source of causing noise pollution. For example, noise from the vacuum cleaner, mixer grinder, air conditioner, blow fan, diesel generator, et cetera are the sources of causing noise pollution, which will affect the human health and the environment.

The fireworks and the noise pollution is another source of noise pollution in India. This is because, India has many religion, many societies, many communities, many celebrations, many festivals, et cetera. Therefore, fireworks are commonly practiced whether it is Independence Day, Republic Day, New Year’s party, marriage ceremonies, religious ceremonies, birthday party, social gathering, et cetera. It is interesting to note here that in om religious societies’ case it was held by the Calcutta High Court that Article 19 of the Indian Constitution prescribes the right of freedom of speech and expression, which also means right not to listen or right to remain silent. Therefore, right to leisure, right to sleep, right to remain silent, right not to listen et cetera are also integral part of the same article. Accordingly, the fireworks will be violating all the above-mentioned rights, at least for those who want to ensure right not to listen.

\(^7\) Om Birangana Religious Society (1996) ILR 2 Cal 404
Noise Pollution Control In Other Countries:-
In the United Kingdom, there is a legislation called Noise Act, 1996, which prescribes the provision that if a person in the dwelling area causes noise with the equipment between 11 PM to 7 AM, by which other dwelling units are disturbed, then based on the complaint the authority shall take appropriate actions including confiscation of such equipment. The Noise and Statutory Nuisance Act, 1993 deals with the control and prevention of noise in the street and other open fields, where the authority is empowered to fix the charges in financial terms against the polluter to prevent noise pollution.

In the United States the US Noise Pollution and Abatement Act, 1970 empowers the environment protection agency to take all possible measures for the control and prevention of noise pollution. The Act prescribes the sources of noise pollution, determines the level of noise at different places and encourages for the development of low noise equipment and vehicles.

In Japan, the Noise Regulation Law, 1968 is responsible for controlling and abating the noise pollution from industries, commercial places and from operation of factories, which are detrimental to human health and environment.

In Republic of China, the Prevention and Control of Pollution from Environmental Noise, 1996 takes all possible measures to control the occurrence of noise and prescribes the means for better living condition of human being including protection of human health.

In New South Wales of Australia, the environment protection authority under the Noise Control Act, 1975 is empowered to ensure the control of noise pollution and prescribes standards for noise emission from factories and commercial places. To control the noise pollution in the domestic area the Noise Control (Miscellaneous Articles) Regulation, 1995 has been enacted. Similarly, to control the noise from the motor vehicles the Noise Control (Motor Vehicles and Motor Vehicles Accessories) Regulation, 1995 has been brought into operation.8

Statutory Laws In India:-
The Noise Pollution (Regulation and Control) Rules, 2000 has been enacted for the purpose of control and abatement of noise pollution in the industrial area, commercial area, residential area and also maintenance of noise pollution in silence zone, for example, hospitals, educational institution, library. The Rules prescribed for ambient noise quality in four zones, for example, industrial area at the day time the noise level should be 75 dB, at nighttime it should be 70 dB. In commercial area, the noise level should be 65 dB in the daytime and 55 dB during the nighttime. In the residential area, the ambient noise level at the day time should be 55 dB and at nighttime it should be 45 dB. Similarly, in the silence zone at the day time the ambient noise quality should be 50 dB and at nighttime it should be 40 dB. The daytime means 6 AM to 10 PM and nighttime means 10 PM to 6 AM. In exceptional situation, the authority can extend the time for maximum two hours from 10 PM to 12 AM for the purpose of celebration of religious and other ceremonies. In the silence zone, the maintenance of ambient noise quality shall be applicable for hundred metres from the outside the periphery of educational institution, hospital, library.

The Indian penal code defines public nuisance in section 268 and prescribes punishment under section 290 and 291. Similarly, section 133 of Code of Criminal Procedure defines the power of the executive magistrate to control the public nuisance.

Under the Factories Act, 1948 as per the requirement of section 89, the medical practitioner will have to inform the Chief Inspector of the factory about the appearance of any disease including hearing loss of the workmen because of exposure to high level of noise.

The Motor Vehicles Act, 1988 and rules made thereunder prescribe noise pollution control. The rule 119 prescribes the standard for horn of the vehicle so that noise created by such horn should be under control. Similarly, Rule 120 prescribes the standard of silencer to be used by vehicle so that the noise of the engine remains under control.

By the amendment of 1987 in the Air (Prevention and Control of Pollution) Act, 1981, the noise pollution was inserted and now the noise pollution is the integral part of this Act. In the other words, noise pollution means it is a

8 See, AIR 2005 SC 3136 at Paras 91 & 92.
part of atmospheric pollution and accordingly, the relevant provisions of this Act will be applicable to control the noise pollution apart from application of Noise Pollution (Regulation and Control) Rules, 2000.

Similarly, by the amendment in the year 1987, the Environment (Protection) Act, 1986 has been amended to insert the expression “Noise Pollution” and therefore, to control and prevent the noise pollution the relevant provisions of this Act can be applicable.

Finally, in India the sale, manufacturing, storage, transportation of firecrackers is regulated under the provisions of the Explosives Act, 1884 and the Explosives Rules, 1983.

**Noise Pollution Control By Judicial Opinion:**

In Kirori Mal Bishambar Dayal\(^9\) case it was held by the Punjab and High Court that a person cannot create a noise which reaches to another dwelling house along with vibration, because that affects the peaceful environment and causes disturbance to others. The High Court relied on a previous case of Bhuban Ram\(^10\), where a paddy husking machine was causing nuisance to others.

In Rabin Mukherjee v. State of West Bengal\(^11\) case the Calcutta High Court examined the scope of noise pollution caused by air horns in the vehicle and prevented the use of air horns in various parts of the cities and towns.

In People United for better Living in Calcutta v. State of West Bengal\(^12\) case the Calcutta High Court clarified the position of conflict between development and environmental preservation and stated that development should be in harmony with environmental protection, otherwise, the development will lead to total devastation of the environment. Therefore, any sort of pollution by way of development cannot go beyond the tolerance limit of the Earth which will lead to devastation.

In Burrabazar Fireworks Dealers Association v. Commissioner of Police, Calcutta\(^13\) case the Calcutta High Court held that bursting of firecrackers make happy one or two, but cannot force others to be the captive listeners of such a huge noise which will have detrimental effect to their health. Article 19 of Indian Constitution though speaks of freedom of speech and expression, but that doesn’t mean to maintain such freedom of speech and expression will pollute the environment to such an extent which will cause serious health issues of the individuals including devastation to the environment. The court also held that the reading of Article 19 along with Article 21 of Indian Constitution clearly gives the picture that the fundamental rights are balanced rights and also are not absolute one. Therefore, freedom of speech and expression should be seen under right to life, which means right to full enjoyment of life should not be impaired because of weight is given to freedom of speech and expression.

The same condition can also be imposed on the use of loudspeakers, where tremendous sound is generated and people in the vicinity are exposed to such enormous noise, which not only hazardous to human health but also detrimental to the environment.\(^14\)

In P.A. Jacob v. the Superintendent of Police\(^15\) case the Kerala High Court held that the freedom of speech and expression as guaranteed under Article 19 of the Indian Constitution also gives liberty not to listen or not to be

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\(^9\) Kirori Mal Bishambar Dayal AIR 1958 P&H 11
\(^10\) Bhuban Ram and Ors. v. Bibhuti Bhushan Biswas MANU / WB / 0337 / 1918; 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. See, AIR 2005 SC 3136 at Para 113.
\(^11\) AIR 1985 Cal 222
\(^12\) AIR 1993 Cal 215
\(^13\) AIR 1998 Cal 121
\(^14\) 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 tranquillity 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. See, AIR 2005 SC 3136 at Para 117.
forced to listen. In this regard, the noise coming out from the bursting of firecrackers or from loudspeakers and reaching to those persons who are not willing to listen such a noise, will violate the provisions of Article 19 of the Indian Constitution. Therefore, the level of noise which creates an annoyance to someone is a violation of the freedom of speech and expression as well.

In Free Legal Aid Cell Shri Sugan Chand Aggarwal alias Bhagatji v. Govt. of NCT of Delhi and Ors\(^{16}\) case it was held by the Delhi High Court that the noise is a kind of pollution, because it contaminates the environment, causes public nuisance and affect the human health, thereby, create annoyance with Article 21 of the Indian Constitution.

In Moulana Mufti Syed Md. Noorur Rehman Barkati v. State of West Bengal\(^{17}\) case it was held by the Calcutta High Court that the level of noise fixed in the European country and America cannot be the same for the state of West Bengal, because the societal condition, population density, technological advancement, general awareness of the people regarding noise pollution are not same with the state of West Bengal. In India, because of technological advancement creating huge noise is a matter of luxury for few at the cost of the peaceful life of others. Similarly, the fashion of having multiple air horns in the vehicle is a luxury than necessity. Control of noise pollution is essential when the level of noise going to affect the health of the individuals and the environment.

In The Supreme Court in Church of God (Full Gospel) in India v. K.K.R. Majestic Colony Welfare Assn\(^{18}\) case the honourable Supreme Court held that the court can issue directions for the control and abatement of noise pollution, even if such a noise is coming out because of performing the religious ceremony or connected with any religion. Historically speaking, no religion ever used for its propagation or for ceremonial practices, amplifier and Mike, because this facility is the consequence of the modern science and technology, without which the religious practices were practiced in ancient time. By controlling the noise of religious practice, does not mean that there is stoppage of religious practice. It is only to ensure that the noise so generated should not cause health hazard to human beings and the environment.

**Final Findings On Noise Pollution Control:**

The honourable Supreme Court in In Re Noise Pollution case issued various directions for the purpose of control and abatement of noise pollution.

On firecrackers, the court stated that the categorisation of firecrackers shall be done based on chemical composition. The busting of firecrackers shall not be allowed between 10 PM to 6 AM. The noise level of firecrackers should not exceed more than 125 dB to 145 dB.

On loudspeaker, the apex court stated that the public-address system or the loudspeaker used in any public ceremonies should not exceed more than 10 dB of the prescribed ambient noise level or 75 dB whichever is lower. However, generally, there will be no permission to use the loudspeaker between 10 PM to 6 AM.

On air horn of the vehicle, the honourable Supreme Court stated that no air horns should be used in the silence/residential zone and between 10 PM to 6 AM.

On awareness program, the apex court stated that control and abatement of noise pollution can be introduced to the textbook offered in the schools and other educational institution, so that people at large can be made aware of the health hazard associated with the exposer of noise pollution.

Finally, the honourable Supreme Court directed the government and the authorities that they should confiscate the public-address system, loudspeakers and other noise creating equipment, if they create noise beyond the permissible limits.

\(^{15}\) AIR 1993 Ker 1  
\(^{16}\) AIR 2001 Delhi 455  
\(^{17}\) AIR 1999 Cal 5  
\(^{18}\) 2000 Cri LJ 4022
Conclusion:-
Vehicular noise, aircraft noise, railroad noise including noise generated during the public ceremonies and religious festivals are harmful to human health and the environment, when the noise crosses the prescribed limit of ambient noise quality. Control of noise pollution has been done successfully in the UK, America, Australia, Republic of China. In this regard, India has enacted Noise Pollution (Regulation and Control) Rules, 2000 for the purpose of control and abatement of noise pollution. Apart from this Rule, the Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986, both are equipped with control of noise pollution. The Supreme Court in India has strike a balance between various fundamental rights of Indian Constitution. Court has stated that right to freedom of speech and expression cannot override right to life and vice versa. Proper implementation of noise pollution laws is of utmost importance because of the fact that expose to noise for a long time shall have detrimental effect to human health and the environment.