Noise pollution assignment

Whether knowingly or unknowingly, every one of us contributes to noise pollution, because most of our day-to- day activities generate some noise. Often neglected, noise pollution adversely affects the human being leading to irritation, loss of concentration, loss of hearing. Identify the sources of noise pollution. Once identified, the reason(s) for increased noise levels to be assessed. Now, efforts shall be made to reduce the undesired noise levels from (unwanted) noise generating sources.

This leads to marginal reduction of noise levels. It is still UN-bearable scientific ethos of noise control shall be employed. The statutory Regulations have prescribed the noise level exposure limits. The public may complain to the statutory Board for violation of noise level limits by any noise generator. Suitable action will be taken to attenuate the noise levels and controlling pollution. It is advisable that suitable noise control measures be taken and reduces the interference of Statutory Board.

It IS high time that everyone should do this bit in curbing the noise pollution, which is otherwise becoming as effective as SLOW POISONING. Noise can be defined as unwanted or undesirable sound. The word “ noise” is derived from Latin word “ nausea” meaning seasickness. Be it human or machine-created noise disrupts the activity and balance of life. Humans, animals, plants and even inert objects like buildings, monuments and bridges have been the victims of noise pollution. Noise pollution is considered as major hazards of modern life especially in urban areas-areas that are most industrialized and urbanize.

Noise by definition is unwanted sound, what is pleasant to some cars it may be extremely unpleasant to other, depending on a number of physiological factors the sweetest music, if it disturbs person ho is trying to concentrate or sleep is a noise to him. Just as the sound of pneumatic reverting hammer is noise to nearly everyone. Sound is a form of energy which is emitted by a vibrating body and on reaching the ear causes the sensation of hearing through nerves. Sounds produced by all vibrating bodies are not audible. The frequency limits of audibility are from 20 HAZE to 20, 000 HAZE.

A noise problem generally consists of three inter-related elements- the source, the receiver and the transmission path. This transmission path is usually the atmosphere through which the sound is propagated, but can include the structural materials of any building containing the receiver. Noise may be continuous or intermittent. Noise may be of high frequency or of low frequency which is undesired for a normal hearing. For example, the typical cry of a child produces sound, which is mostly unfavorable to normal hearing. Since it is unwanted sound, we call it noise.

The discrimination and differentiation between sound and noise also depends upon the habit and interest Of the person/species receiving it, the ambient conditions and impact of the sound generated during that particular duration of time. There could be instances that, excellently rendered musical concert for example, may be felt as noise and exceptional music as well during the course of the concert! Sounds of frequencies less than 20 Haze are called infrasonic and greater than 20, 0000 Haze are called ultrasonic. Since noise is also a sound, the terms noise and sound are synonymously used.

Sound waves are often simplified to a description in terms of, sinusoidal plane waves which are characterized by these generic properties: C] 0 L] C] C L] Frequency, or its inverse, the period Wavelength Wave number Amplitude Sound pressure Sound intensity Speed of sound Direction SOURCES CAUSING NOISE POLLUTION: Road Traffic Noise Aircraft Noise Noise from Railroads Noise from Industry Noise from High Rise Buildings Noise from Construction Works Noise from Loudspeakers EFFECTS OF NOISE: Noise is one of the main pollution of the environment causing various hazardous consequences for human life.

Noise not only impairs sensibility to auditory stimuli by masking effects, it has other consequence too. Studies have proved that a loud noise during peak hours creates tiredness, irritation ND impairs brain activities, so as to reduce thinking and working abilities. Its general effects on human being are that it covers disturbance in sleep which lead to other side effects. Control measures: Immediate measures Proper maintenance of vehicles Thick vegetation and growing trees on road side By lodging a formal complaint Raising obstruction and barriers between noise sources and residences.

Prevention of use of loud speakers at loud levels etc. Noise from ducts or exhaust can be reduced by fitting silencers Long term measures Land use planning Infrastructure development measures Political will REGULATORY GUIDELINES: Statutory Regulatory guidelines were prescribed both for the ambient noise levels and for workspace environment noise levels. The Factories Act, 1948 prescribes the protection of workers against high noise levels (noise level > 90 db (A)). The State Pollution Control Board and

Inspector of Factories have powers to administer the control of noise pollution.

The Factories Act, 1948 The Motor Vehicles Act, 1988 0 Note: 1. Day time is reckoned in between 6 a. M. And 9 p. M. 2. Night time is reckoned in between 9 p. M. And 6 a. M. Application in Environmental Impact Assessment (EIA) studies: The EIA study ill be carried out to evaluate and assess the impacts of any proposed (or existing) activity on the environment. Noise is one of the environmental attributes, on which the likely impacts due to the proposed (or existing) activity need to study.

The likely steps to be carried out while conducting noise level studies for an EIA project are summarized below. The EIA will be carried out for either proposed or existing activities. The sequential steps involved will be same for both the activities. D The likely activities that generate noise from the proposed activity are to be identified The typical sound (noise) levels of the noise generating sources are to be assessed either from literature or from a similar source.

CLC The likely exposure time of a worker at a noise generating source is to be assessed from the plant / utility records. 0 The workspace environment noise levels are to be checked with OSHA standards. If the noise exposure levels are higher, suitable noise control measures like personal protective equipment, installation of barriers, enclosures etc. , need to be suggested. 0 The EIA will usually be carried out in an impact circle of radius 3 Km to 25 Km or even more depending on the objective and the likely activities of the proposed project.

The representative baseline (or back ground) status of the ambient noise levels need to be collected by monitoring at various stations in the study zone. The ambient noise levels are to be analyzed for the prescribed parameters like, Leg, Old etc. , and compared with the ambient noise level standards for the study region. If these values are higher than the prescribed limits, the likely causes for the high values need to be assessed. 0 The likely impact of the noise levels from the proposed activity on the local environment keeping in view the saline status of noise levels need to be predicted.

L] If the predicted impact is adverse, suitable measures for attenuating the noise levels like, green belt development, in-plant control measures etc. , need to be suggested. The objective of the EIA study is to make ensure that, the local environment, say noise, will not get affected by the noise levels emanated from the proposed activity. If the ambient noise levels are high, then control measures are suggested to the project proponent to ensure that, ambient noise levels will not increase due to the proposed activity.