Noise Pollution: An Introduction

Noise is, typically, 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.

Most of the machines that have been developed for industrial purposes, for high-speed transportation, or to make life more enjoyable, by furnishing additional comfort, reducing the drudgery of everyday living, and speeding up our daily routines to provide additional leisure hours, are accompanied by noise. Noise prevention and control is important as noise affects us in hearing, ability to communicate and behaviour. Undoubtedly, lesser noise can make the environment more friendly and life becomes pleasant.

SOURCES / TYPES OF NOISE POLLUTION:

Noise can be broadly classified under 4 categories

1. Transport Noise
2. Occupational / Industrial Noise
3. Neighbourhood Noise
4. Recreational Noise

1. Transport Noise:

Transport noise mainly consists of traffic noise from road, rail, and aircraft. The number of automobiles on roads like motors, scooters, cars, motor cycles, buses, trucks and diesel engine vehicles has increased enormously, leading to noise pollution.

This can be subdivided into

- Road traffic noise
- Air craft noise
- Rail traffic noise
2. Occupational/Industrial Noise:

It is the sound having high intensity, mainly caused by industrial machines. Sources of such noise pollution are various factories’ machines, industries, and mills. Noise from mechanical saws and pneumatic drills is unbearable and a nuisance to the public. It also includes noise from domestic gadgets e.g. washing machines, vacuum cleaner etc.

Industrial workers who are exposed to noise for 8 hours per day and 6 days per week suffer from occupational noise pollution.

3. Neighbourhood noise:

This implies variety of sources of noise which disturb and annoy the general public by interfering with their comfort and welfare. This type of noise includes disturbance from household gadgets and community. Common sources include musical instruments, TV, VCR, radios, transistors, telephones, music in public functions, and loudspeakers etc.

**Effects of Noise Pollution on Humans**

When you think about noise, the first thing that may come to mind is the human ear. Surely the ear is adversely affected from exposure to large sounds. In your inner ear you have a structure called the cochlea. This is a spiral shaped structure that is filled with liquid and tiny hair cells.

Loud noises, from noise pollution, can damage or destroy those tiny hair cells in your ear. By far the most common health effect linked to noise pollution is a condition called noise induced hearing loss, or NIHL. This condition results from prolonged exposure to high levels of noise. Other health effects from noise pollution can include stress-related illnesses, sleep disruption, and even high blood pressure.
The intensity of sound is measured in sound pressure levels (SPL) and common unit of measurement is decibel, dB. The community (ambient) noise levels are measured in the A-weighted SPL, abbreviated dB(A). This scale resembles the audible response of human ear. Sounds of frequencies from 800 to 3000 HZ is covered by the scale A.