

Noise pollution and control in hk assignment



**ASSIGN
BUSTER**

Pascal (Pa) - Newton per square meter (N/m²). The human audible range ; Human ear can perceive a very wide range of sound pressure. Sound Pressure expressed in IPPP Softest Noise just Heard by a Human Ear (the Threshold of 120 x 10⁻⁶ 120 I Rehearing) I Launching of the Space Shuttle | 2, 000 12 x 10⁹ ; To express sound or noise in terms of Pa is quite inconvenient because we have to deal with numbers from as small as 20 to as big as Response of the human ear to sound ; audible range ; A normal human ear is able to hear sounds with frequencies from 20 Haze to 20, 000 Haze.

The range of 20 Haze to 20, 000 Haze is called the audible frequency range. The sounds we hear comprise of various frequencies. ; The response of the ear to sound is dependent on the frequency of the sound. The human ear has peak response around 2, 500 to 3, 000 Haze and has a relatively low response at low frequencies. Audible range - There is a remarkably wide range of free incise and sound pressure levels over which the human ear can detect.

Noise Problems in HIKE Major causes of noise pollution in later asses ; k A high-rise and high density living environment * The high volume of surface traffic The prevalence of high-rise flatted factories * The close interface between noise sensitive premises and nose sources, such as factory buildings and roads, due to the scarcity of land for development * The almost incessant construction activities dictated by the fast pace of development * An increasingly busy international airport situated in the centre of the populated area * The sub-tropical climate which renders noise insulation and expensive option due to the need to provide air- conditioning. A four-pronged

approach is adopted by the Government to tackle environmental noise in HIKE.

The four prongs are as follows : * planning – proactive participation in the planning and policy making process, * abatement – formulating abatement strategies and implementation of noise abatement measures, * control – control on noise by enforcing of the Noise Control Ordinance, and *

partnership – promoting partnership with various stakeholders. A. Planning

The Government has been taken a more active environmental participation in the land-use and infrastructure planning process since the mid-80s to pre-empt noise problems. The Government has prescribed standards with due regards to noise in planning new development or redevelopment projects.

All new major development projects are required to go through the Environmental Impact Assessment process to ensure that existing and planned noise sensitive receivers such as residential dwelling and schools are protected from excessive noise. Where the predicted noise impacts exceed the applicable noise criteria, direct mitigation measures as shown below shall be considered and evaluated in an appropriate manner: *

- * alternative land use arrangement
- * alternative siting
- * screening by noise tolerant buildings
- * setback of buildings

Mitigation of Noise Impacts *

- * alternative alignment
- * treatment of so race
- * open-textured road surfacing
- * decking over
- * building orientation
- * extended podium
- * special building design
- * architectural features/balcony
- * noise barrier/enclosure

b.

Abatement ; k Abatement is one of the means to resolve existing noise problems. * Examples of these problems are : * busy highways running through residential districts; * schools affected by noise from aircraft or road traffic. The Government has implemented noise abatement programmes such as * the School Insulation Programme, * the Quiet Road Surfacing Programme and * the Retrofit Noise Barrier Programme to reduce impact of traffic noise on existing noise sensitive receivers. C. Control ; k Many forms of environmental noise have already been put under statutory control. A key instrument for control is the Noise Control Ordinance, which commenced in 1989.