



## Assessment on different levels of noise pollution in Aizawl City, Mizoram, India

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### ABSTRACT

Assessment of noise pollution was carried out in Aizawl city of Mizoram during August 2009 to July 2011. Different levels of noise were recorded from industrial zones, commercial zones, residential zones and silence zones by using Sound Level Meter 2031/A. Of all the four zones, residential zones and silence zones were found to exceed the standard prescribed by the Noise Pollution (Regulation and Control) Rules, 2000. Among the commercial zones New Market and Zangena Petrol Pump exceed the standard level. And all the study sites under industrial zones were within the standard level. Detailed information is presented in the paper.

**Key words:** Noise pollution; control measures; silence zones; Aizawl.

### INTRODUCTION

The unwanted sound with high level intensity is called noise, and the state of discomfort and restlessness caused to human being is noise pollution.<sup>1</sup> Noise pollution becomes more severe and widespread due to population growth, urbanization, industrialization, etc. Noise problems and complaints increased dramatically by the end of 19<sup>th</sup> century and beginning of the 20<sup>th</sup> century as US and European societies became more urbanized and mechanized. With time, the problem of noise was taken up in the social and

political context so that legislative measures were introduced to reduced noise pollution.<sup>2,3</sup> Different sources of noise are automobiles, vehicle horns, loudspeakers, explosions, crackers, aircrafts, factories, workshops, musical instruments, animals, etc. The intensity or loudness of sound is measured by a unit of decibel (dBA scale). The effects of high intensity noise on human beings are represented by threshold of hearing -0 dBA, annoyance -80 dBA, damage of hearing -90 dBA, permanent loss of hearing -100 dBA, threshold of pain -120 dBA, pain in ear -140 dBA, damage in ear drum -160 dBA and lung damage at 190 dBA.<sup>4</sup> Today, one of the most important calamities in urban life is unwanted, meaningless and unmusical sound,

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