## CENTRE OF STUDIES FOR BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA

## THE STUDY OF SOUND POLLUTION IN THE EDUCATIONAL AREA AROUND JALAN RAJA LAUT, KUALA LUMPUR

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| THE STUDY | <b>OF SOUND</b>  | <b>POLLUTION IN</b> | THE ED  | <b>UCATIONAL</b> | AREA |
|-----------|------------------|---------------------|---------|------------------|------|
| AR        | <b>COUND JAL</b> | AN RAJA LAUT        | , KUALA | LUMPUR           |      |

"I hereby declare that this academic project is the result of my own research except for the quotation and summary which have been acknowledged"

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#### **ABSTRACT**

Noise pollution is the disturbance or unwanted noise that may harm the enjoyable and balance of human or animal life. Machines, transportation systems and poor urban planning is the source of most outdoor noise worldwide that may give rise to noise pollution. High sound levels can contribute to effects in humans joy, increased blood pressure, and an increase in stress and an increased incidence of coronary artery disease. In animals, noise can increase the risk of death by altering predator or prey detection, interfere with reproduction and navigation, and contribute to permanent hearing loss.

The problem statement Review annoyance caused by noise heard in schools by Dockrell, 2001, suggests that certain sound like overflying planes, trains or sirens can affect children and teachers disproportionate to their contribution to the overall sound of the school environment. Most of the schools that are in the vicinity of Jalan Raja Laut, there is SK Pendidikan Khas (Cacat Penglihatan) Jalan Batu, SK (L) Jalan Batu and SK (P) Jalan Batu that have been contaminated with a variety of noise such as motor vehicles and public transport. Thus, the study should be conducted to determine the level of noise that interfere with students in the schools involved.

The aims of this study are to investigate the level and the effects of noise pollution in the vicinity of the schools also the sources of noise. The objective of this research are to measure the level of noise at the school area near to the main road, to identify the classification of vehicles contribute noise at the schools and to analyze and compare the sound level of the selected schools.

Noise levels were monitoring at various location at Jalan Raja Laut during November,2014 (Wednesday- Friday). The data obtained was used to compute various noise parameters, namely equivalent continuous level (Leq), loudest period, exposure period and noise level (Ln). The data of noise levels taken at various location of the educational area of Jalan Raja Laut, Kuala Lumpur will be compared and analysed. Traffic volume count and noise indexes data were collected at three selected school around Jalan Raja Laut, there is SK Pendidikan Khas (Cacat Penglihatan) Jalan Batu, SK (Lelaki) Jalan Batu dan SK (Perempuan) Jalan Batu. The noise level that has been collected will be compared with the standards set by the Department of Environment (DOE) to determine the proper noise level at the school areas.

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.1 STUDY BACKGROUND

Each day we encounter the sound that annoys us, that interfere with hearing and communication or to affect the level of health care. Any unwanted sound is called noise. Usually generated sound sometimes for a long time and there are times in a short period depending on the circumstances. However, some low intensity, continuous noise can also correspond to the definition of sound. (Holt, Rinehart and Winston)

Due to the noise it has become a habit to society, especially those living in urban areas. Not many people know what should be an acceptable noise levels, especially in residential areas, schools, workplaces and so on. Actually, people should be aware of noise pollution and ways to deal with the dangers of noise pollution on human hearing.

According to Dato 'Seri Kong Cho Ha, Minister of Transport, the cumulative number of drivers in Malaysia until 2012 was 13.3 million and an increase of 4.23%, compared to 12.7 million in 2011. He added that the number of new drivers in Malaysia in 2012 was 540.391 and an increase of 2.5% compared to 527.198 in 2011, which is registered in Malaysia was 21,401,269, compared to 20,188,072 units in 2010. This figure represents an increase of 1,213,197 or 5.66% of new vehicle registrations. With an increased output of new models of vehicles has contributed to noise pollution.

In the book The Environmental Impact Assessment Guidelines for the Project Highway 1 issued by the Public Works Department (JKR) 1996, states that control the sound by the Department of Environment (DOE) under the Environmental Quality Act 1974, Clause 21 and 23. Vehicle noise is controlled under the Environmental Quality Act (Motor Vehicle Noise) Regulations 1987. The Regulations Act and regulations need to be strengthened to obtain a peaceful and secure from noise pollution.