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Noise Exposure Assessment at Wood Workshop Faculty of Bioengineering and Technology University of Malaysia Kelantan, Jeli Campus

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Structured Abstract

Background: Noise is generally can be described as undesired or hazardous substances that come from many sources such as traffic noise, construction, machinery and community noise. Noise exposure can cause a serious health danger in the working environment. In Malaysia, the Factory and Machineries (Noise Exposure) Regulations 1989 have been used as a guideline for about 30 years for all companies. The study was conducted to investigate the noise level in the workplace.

Methods: The location selected for this study was located in the Faculty of Bioengineering and Technology, UMK Jeli Campus. The noise assessment was conducted at wood workshop in the faculty. This place was chosen for this research because there are a lot of machineries that create high level of noise. The location also was selected because to identify the machineries that will impact the result of noise measurement. Among the activities that were carried out during the noise measurement were cutting wood, crushing stone, punching wood and knocking wood.

Results: It was found that the highest noise level is at P1 which is 98.3 dB(A) meanwhile the lowest noise level is at P9 which is 73.5dB(A). This situation is due to the machineries who is inherently quiet which are some machines are designed with noise reduction materials and components.

Conclusion: In conclusion, the noise levels that the workers were exposed to varied significantly, with the lowest being 92.2 dB(A) and the highest being 103.3 dB(A). In fact, all of the worker who was being observed had been exposed to noise levels that exceeded the 85 decibels (dB(A)) suggested threshold. Since none of the workers were exposed to noise levels within the advised safe range, this observation raises the possibility that prolonged exposure to high noise levels could be harmful to their hearing health.

Keywords: workshop, noise level, occupational noise exposure, noise mapping

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