

Evaluation of Noise Environment in the Production Department of Gomeco Metal Corporation

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Abstract

In this study, ergonomic principles were used to assess the working environment in the production area where excessive noise is experienced by workers. The researchers used Sound level meter in obtaining the readings of the noise produced by various machines in the workplace in order to determine if the noise environment exceeded the permissible noise exposure of no more than 90dB for an 8-hour shift. Following this, the researchers used Speech test to measure the ability to recognize speech and to ascertain hearing loss after noise exposure. Based on the data gathered, it was concluded that the noise produced in the production department was hazardous to health because the noise dose exceeded its allowable noise level, making the environment unsafe for the workers. The computed Time Weighted Average for 8-hour exposure also exceeded the permissible noise level. Data analysis resulted in the conclusion that there was significant difference between sound levels perceived by the workers during different time exposures in the work area and that there would be a need to implement a Safety Program to ensure the safety and health of the individual workers. Likewise, it was also perceived that there was a need for a thorough training for the workers to reduce the risk of hearing disability.