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### Noise Pollution and its Impact on the Workers in the Azzawiya Refinery

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#### ABSTRACT

This study was conducted in order to determine the effect of noise on employees of Azzawiya Oil Refining Company, Azzawiya, Libya. A questionnaire was distributed to a total of 100 employee volunteers; which included a set of questions about noise pollutions and its effect on them. Noise pollution may act as a risk factor for numerous health disorders and cardiovascular diseases. The more noteworthy results showed that 20% of those who volunteered to be part of this research worked in management, whereas 17% were employed in plant operations and the remaining 63% worked in the industrial field. The research also showed that noise pollution present in the workplace can have a negative effect on their life, with 56% of participants saying the noise had a negative effect on their life, 28% saying noise occasionally effected their day to day life, and the remaining 16% saying it did not have an effect on their life. Furthermore, 46% of employees questioned say they have suffered medical conditions due to the noise pollution, whereas the remaining 54% say they have not. When asked whether they were told they spoke loudly in daily conversation, 50% responded saying most of time, 24% responding saying always and 26% responded with never. Those questioned were also asked if they have experienced Tinnitus. 70% replied with yes; This was split into 31% of those questioned experienced it in both ears, 22% in the right ear and 17% in the left ear. The remaining 30% said they had not experienced Tinnitus. It was evident from the results collected that high levels of noise can have both immediate and long-term effects on hearing. Excessive levels of noise can cause speech interference, hearing defects; namely Tinnitus, health disorders, hearing loss, loss of concentration and fatigue.

**Keywords.** Noise pollution, Industrial noise, Tinnitus..