ABSTRACT

Influence of Noise towards the Occurrence of Hearing Loss and Blood Pressure in the area of Petroleum-Generated Power Station in Tello Sector, the City of Makassar

Power station, particularly petroleum-generated power station does not only provide the positive impacts towards those surrounding inhabitants but also provides the probability of giving negative impacts such as air contamination and noise. This state will exactly affect the health status of the inhabitants surrounding the power station. The purpose of this research is to analyze the influence of noise towards the occurrence of hearing loss and blood pressure in the surrounding inhabitants of the Petroleum-Generated Power Station in Tello Sector, the city of Makassar. This research is an analytic observational with cross sectional study design. The samples used in the research were the residents that were directly exposure to the noise, as many as 93 residents and taken by stratified random sampling. The result of the research showed that the noise intensity on 100 meter exceeded the Environmental Quality Standard, as many as 76,37 dB A > 55 dB A. Variable of age was influential toward hearing loss with p value = 0,000 dan RP = 7,165 which meant that the group of inhabitants with age between 31-40 years old had a risk 7,165 higher suffering hearing loss compared with those who were in range 20-30 years old range. Blood pressure with p value p = 0,000 dan RP = 8,953 which also meant that the group of inhabitants with age between 31-40 years old had a risk 8,953 times higher in suffering hypertension compared with those who were in 20-30 years old range. Thus concluded that the noise intensity on 100 meters exceeds the safe level and variable which has the most significant influence towards hearing loss and blood pressure is variable of age due to the fact that having the biggest rate percentage. Recomendation : since its machines has been equipped with a modern sound dampening and machine insulation is currently unable to be done any longer, thus it is suggested to the Power Station to do such trees planting just in the area surrounding of the power plant, thus hoped can make such a barrier or can reduce the sound pollution.

Keywords: Noise, hearing loss, blood pressure, Petroleum-Generated Power Station in Tello sector, the city of Makassar.