

**Ministry of Health Politeknik Kesehatan Bandung  
Bachelor of Applied Environmental Sanitation Program  
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**Abstract**

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**VARIATION OF GLASSWOOL THICKNESS WITH PLYWOOD TO  
REDUCTION OF NOISE INTENSITY IN THE BLOWER MACHINE IN  
PT. CAPRIFARMINDO LABORATORIES,  
KAB. BANDUNG BARAT**

viii + 63 pages + 8 tables + 3 attachments

Noise is sound that is not liked so that the listener feels disturbed, uncomfortable and can cause health and hearing problems. Noise NAV in industry for 4 hours is 88 dBA according to Permenkes No. 70 of 2016, if it exceeds TLV, it will cause hearing loss. The blower engine room at WWTP PT. Caprifarmindo Laboratories, Kab. Bandung Barat emits noise exceeding the limit of NAV, namely 93.6-101.6 dBA. The noise level that exceeds the TLV can be controlled by using a noise damper consisting of plywood and glasswool. The aim is to determine the variation in the thickness of the glasswool with plywood to reduce noise intensity on the blower machine at PT. Caprifarmindo Laboratories, Kab. Bandung Barat. The damper material consists of 2 cm plywood with a glasswool ratio of 6 cm, 8 cm and 10 cm. This type of research is an experiment with a pre-test and post-test research design without control. The population is all noise intensity in the WWTP blower engine room at PT. Caprifarmindo Laboratories, Kab. Bandung Barat. The sample is part of the population, with a purposive sampling technique of sampling. The sample size for pre-test 18 points and post-test 18 points, data collection techniques measure noise intensity and temperature and humidity. The results of the study showed that the percentage reduction in noise intensity in the 6 cm plywood and glasswool variation was 3.6-6.1%, 8 cm glasswool variation was 7.9-8.8%, and 10 cm glasswool variation was 9-10%. There is a difference in the reduction in noise intensity from various variations in thickness of plywood and glasswool

REFERENCES : 29 (1992-2017)

KEYWORDS : Glasswool, Noise, Plywood, Silencer,