

TINJAUAN KADAR DEBU LINGKUNGAN KERJA PADA INDUSTRI PEMBUATAN KAYU LAPIS CV. TUMITAH KAPANEWON PAJANGAN, KABUPATEN BANTUL

Fatkhul Ngalim¹, Naris Dyah Prasetyawati², Sigid Sudaryanto³, Yamtana⁴
Jurusan Kesehatan Lingkungan Poltekkes Kemenkes Yogyakarta,
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman
Email : fatkhulngalim4@gmail.com

ABSTRAK

Latar Belakang. Industri kayu lapis merupakan salah satu sektor industri yang berpotensi menghasilkan debu dalam jumlah tinggi. Debu kayu ini dapat memicu gangguan saluran pernapasan pada pekerja, seperti asma dan iritasi paru. Berdasarkan studi pendahuluan di industri CV. Tumitah, ditemukan bahwa kadar debu masih cukup tinggi dan mengganggu kenyamanan serta kesehatan pekerja. Sesuai dengan Permenaker No. 5 Tahun 2018, kadar debu tidak boleh melebihi 5 mg/m³. Oleh karena itu, penelitian ini dilakukan untuk mengetahui kadar debu di area tahap produksi.

Tujuan. Penelitian ini bertujuan untuk mengetahui kadar debu lingkungan kerja pada industri pembuatan kayu lapis CV. Tumitah

Metode. Jenis penelitian ini merupakan penelitian deskriptif yang menggambarkan kadar debu lingkungan dan penggunaan Alat Pelindung Diri pada pekerja di industri pembuatan kayu lapis CV. Tumitah.

Hasil. Hasil pengukuran menunjukkan bahwa kadar debu di area pemotongan memiliki nilai yang lebih tinggi dibandingkan dengan area finishing. Rata-rata kadar debu di titik 1 dan 2 masing-masing sebesar 1,90 mg/m³ dan 2,36 mg/m³, dengan nilai tertinggi 2,48 mg/m³. Jika dikonversikan terhadap waktu pajanan 8 jam kerja, kadar tersebut berpotensi melebihi ambang batas yang ditetapkan Permenaker No. 5 Tahun 2018 yaitu < 5 mg/m³. Sebaliknya, kadar debu di area finishing masih dalam batas aman, dengan rata-rata 0,35 mg/m³ di titik 3 dan 0,32 mg/m³ di titik 4. Hasil observasi penggunaan APD menunjukkan bahwa sebagian besar pekerja belum memenuhi standar keselamatan kerja, di mana hanya 25% pekerja yang menggunakan APD secara lengkap.

Kesimpulan. Meskipun secara umum kadar debu lingkungan kerja di CV. Tumitah memenuhi standar baku mutu (<5 mg/m³), beberapa titik di area pemotongan berpotensi melebihi ambang batas jika dikonversikan ke dalam satu shift kerja. Selain itu, hasil pengamatan terhadap penggunaan Alat Pelindung Diri menunjukkan bahwa hanya 25% pekerja yang telah memenuhi syarat kelengkapan APD, sementara 75% lainnya belum menggunakan APD secara lengkap.

Kata Kunci : kayu lapis, kadar debu, alat pelindung diri, lingkungan kerja

OVERVIEW OF WORKING ENVIRONMENT DUST CONTENTS IN THE PLYWOOD MANUFACTURING INDUSTRY CV. TUMITAH PAJANGAN DISTRIC, BANTUL REGENCY

Fatkhul Ngalim¹, Naris Dyah Prasetyawati², Sigid Sudaryanto³, Yamtana⁴
Jurusan Kesehatan Lingkungan Poltekkes Kemenkes Yogyakarta,
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman
Email : fatkhulngalim4@gmail.com

ABSTRACT

Background. The plywood industry is one of the industrial sectors that has the potential to produce high amounts of dust. This wood dust can trigger respiratory tract disorders in workers, such as asthma and lung irritation. Based on preliminary studies at CV. Tumitah, it was found that dust levels were still quite high and disturbed workers' comfort and health. In accordance with Permenaker No. 5 of 2018, dust levels should not exceed 5 mg/m^3 . Therefore, this study was conducted to determine dust levels in the production stage area.

Purpose. This study aims to determine the dust content of the work environment in the plywood manufacturing industry CV. Tumitah.

Methods. This type of research is a descriptive study that describes environmental dust levels and the use of Personal Protective Equipment in workers in the plywood manufacturing industry CV. Tumitah.

Results. The measurement results show that dust levels in the cutting area have higher values compared to the finishing area. The average dust levels at points 1 and 2 were 1.90 mg/m^3 and 2.36 mg/m^3 respectively, with the highest value being 2.48 mg/m^3 . If converted to an exposure time of 8 working hours, these levels have the potential to exceed the threshold set by Permenaker No. 5/2018, which is $<5 \text{ mg/m}^3$. In contrast, dust levels in the finishing area are still within safe limits, with an average of 0.35 mg/m^3 at point 3 and 0.32 mg/m^3 at point 4. Observations of PPE use show that most workers have not met work safety standards, with only 25% of workers using PPE in full.

Conclusion : Although in general the dust levels in the work environment at CV. Tumitah meets the quality standard ($<5 \text{ mg/m}^3$), several points in the cutting area have the potential to exceed the threshold if converted into one work shift. In addition, observations of the use of Personal Protective Equipment (PPE) showed that only 25% of workers had met the requirements for PPE completeness, while the other 75% had not used PPE completely.

Keywords: plywood, dust content, personal protective equipment, work environment