

RINGKASAN

PT Antareja Mahada Makmur (AMM) merupakan salah satu perusahaan kontraktor PT Alamjaya Bara Pratama (ABP) yang bergerak di bidang pertambangan batubara. Sistem penambangan yang diterapkan adalah sistem tambang terbuka dengan metode *strip mine*. Aktivitas penambangan meliputi pembongkaran, pemuatan, dan pengangkutan. Penelitian ini dilakukan di Pit 4 PT Antareja Mahada Makmur *Jobsite* PT Alamjaya Bara Pratama yang berada di Kabupaten Kutai Kartanegara, Provinsi Kalimantan Timur.

Berdasarkan hasil penelitian, pada Bulan Januari 2023 – Maret 2023 masih banyak ditemukan potensi bahaya pada kegiatan *overburden removal* khususnya pada geometri jalan tambang yang tidak sesuai standar yang dapat menyebabkan terjadinya kecelakaan.

Untuk mencegah kemungkinan kecelakaan kerja, manajemen risiko perlu diterapkan dalam kegiatan *overburden removal* dengan tujuan mengurangi atau menghilangkan risiko kecelakaan. Hal ini melibatkan identifikasi potensi bahaya, penilaian risiko, dan pengendalian risiko menggunakan metode *Hazard Identification and Risk Assessment*. Hasil identifikasi bahaya menunjukkan adanya 11 potensi bahaya, termasuk 9 kondisi tidak aman dan 2 tindakan tidak aman. Setelah penilaian risiko, ditemukan 1 risiko kritis, 7 risiko tinggi, 3 risiko sedang, dan 0 risiko rendah. Setelah tindakan pengendalian risiko dilakukan, tingkat risiko menurun menjadi 0 risiko kritis, 0 risiko tinggi, 4 risiko sedang, dan 7 risiko rendah.

Berdasarkan hasil penelitian, diperlukan evaluasi geometri jalan pada kegiatan *overburden removal*. Evaluasi ini mengungkapkan segmen jalan tertentu yang membutuhkan perbaikan pada lebar jalan, *cross slope*, dan tinggi tanggul pengaman (*safety berm*).

SUMMARY

PT Antareja Mahada Makmur (AMM) is one of the PT Alamjaya Bara Pratama (ABP) contractor companies which operates in the coal mining sector. The mining system applied is an open mining system using the strip mine method. Mining activities include unloading, loading and transportation. this research was conducted at Pit 4 of PT Antareja Mahada Makmur (AMM) Jobsite PT Alamjaya Bara Pratama (ABP) which is in Kutai Kartanegara Regency, East Kalimantan Province.

Based on the research results, in January 2023 – March 2023 there were still many potential dangers found in overburden removal activities, especially in mining road geometry that did not comply with standards which could cause accidents

To prevent the possibility of work accidents, risk management needs to be implemented in overburden removal activities with the aim of reducing or eliminating the risk of accidents. This involves identifying potential hazards, risk assessment, and risk control using the hazard identification and risk assessment method. The results of the hazard identification show that there are 11 potential hazards, including 9 unsafe conditions and 2 unsafe actions. After risk assessment, 1 high risk, 7 significant risks, 3 moderate risks, and 0 low risks were found. After risk control measures were taken, the risk level decreased to 0 high risks, 0 significant risks, 4 moderate risks, and 7 low risks.

Based on the research results, it is necessary to evaluate road geometry in overburden removal activities. This evaluation revealed certain road segments that required improvements to road width, cross slope, and safety berm height.