

ABSTRAK

PT. XYZ merupakan perusahaan yang bergerak dibidang operasional dan pemeliharaan (*Operation & Maintenance*) berperan dalam memproduksi listrik menggunakan material berupa batubara. PT. XYZ pada permasalahan mengenai kecelakaan kerja yang terus meningkat masih belum terdapat solusi tepat. Penelitian ini terfokus pada 6 aktivitas kerja pada bagian civil. Pengumpulan data dilakukan dengan observasi, wawancara, dan penyebaran kuesioner *self assessment* sebagai penentuan adanya *unsafe action* pada aktivitas kerja.

Pengolahan data dilakukan dengan menggunakan model ABC (*Antecedent, Behavior, dan Consequences*) dan metode HIRARC (*Hazard Identification, Risk Assessment, dan Risk Control*). Model ABC berguna untuk menentukan faktor perilaku yang berpengaruh terhadap kecelakaan kerja pada tiap aktivitas kerja. Selanjutnya metode HIRARC (*Hazard Identification, Risk Assesment, and Risk Control*) yang bertujuan untuk mengetahui tingkat level risiko tertinggi, sehingga dapat dilakukan eksekusi pada mitigasi. Hasil penelitian menunjukkan bahwa berdasarkan penilaian risiko yang telah dilakukan mendapatkan hasil kategori *low* sebesar 13%, *medium* sebesar 25%, *high* sebesar 28%, dan *very high* sebesar 34%.

Hasil penelitian menunjukkan bahwa berdasarkan level risiko *high* dan *very high* menunjukkan terdapat 148 potensi bahaya. Rancangan mitigasi risiko pada PT. XYZ bagian civil salah satunya tahap substitusi yaitu penyediaan *dry vacumming*, pemasangan *exhaust fan* pada dinding, pemeriksaan kabel dengan menggunakan alat tespen, dan pengecekan temperatur plat dengan alat thermo gun.

Kata Kunci: Potensi bahaya, model ABC, HIRARC, mitigasi risiko, kecelakaan kerja

ABSTRACT

PT. XYZ is a company engaged in operations and maintenance (Operation & Maintenance) which plays a role in producing electricity using materials in the form of coal. PT. XYZ regarding the problem of work accidents which continues to increase, there is still no appropriate solution. This research focuses on 6 work activities in the civil sector. Data collection was carried out by observation, interviews, and distributing self-assessment questionnaires to determine the existence of unsafe actions in work activities.

Data processing was carried out using the ABC (Antecedent, Behavior and Consequences) model and the HIRARC (Hazard Identification, Risk Assessment and Risk Control) method. The ABC model is useful for determining behavioral factors that influence work accidents in each work activity. Next is the HIRARC (Hazard Identification, Risk Assessment, and Risk Control) method which aims to determine the highest level of risk, so that mitigation can be executed. The research results show that based on the risk assessment that has been carried out, the results in the low category are 13%, medium is 25%, high is 28%, and very high is 34%.

The research results show that based on high and very high risk levels, there are 148 potential dangers. Risk mitigation design at PT. XYZ civil section, one of which is the elimination stage, namely providing dry vacuuming, installing exhaust fans on the walls, checking cables using a test pen, and checking plate temperatures using a thermo gun.

Keywords: Potential hazards, ABC model, HIRARC, risk mitigation, work accidents