Analisis Kecelakaan Kerja Pada Kegiatan Pengeboran dan Kerja Ulang Sumur di Rig PT BCY Menggunakan Konsep Human Factor Analysis

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Abstrak

PT BCY, sebagai perusahaan yang bergerak di bidang pengeboran dan kerja ulang sumur minyak, memiliki risiko tinggi terhadap kecelakaan kerja. Data dari departemen Healthy Safety and Environment (HSE) PT BCY menunjukkan bahwa selama periode 2019–2024, terjadi beberapa insiden kecelakaan kerja yang menyebabkan cedera serius hingga fatal. Kinerja Keselamatan PT BCY Sepanjang 2019-2024 tercatat terdapat 26 kasus, perusahaan telah menerapkan standar keselamatan kerja. Menganalisis faktor-faktor yang memengaruhi kecelakaan kerja di PT BCY antara tahun 2019 – 2024 dengan metode HFACS.Penelitian ini menggunakan metode penelitian deskriptif analitik dengan metode gabungan. Data sekunder yang digunakan berupa rekaman kejadian kecelakaan dan laporan investigasi atas 26 kejadian kecelakaan dan hampir celaka di PT BCY. Data sekunder tersebut kemudian diklasifikasikan sesuai dengan empat (4) tahapan kegagalan di metode HFACS, yaitu unsafe acts, precondition of unsafe acts, unsafe supervision, dan organizational influence. Data primer melalui kuesioner kemudian dinalisis menggunakan uji bivariat untuk memvalidasi persepsi responden terhadap temuan dari data sekunder. Berdasarkan analisis HFACS, faktor Preconditions for Unsafe Act merupakan yang paling banyak teridentifikasi (77 identifikasi), diikuti Unsafe Acts (60 identifikasi), Organizational Influences (38 identifikasi), dan Unsafe Leadership (36 identifikasi). Disimpulkan Faktor yang berhubungan dengan kecelakaan kerja adalah Organizational Influences: Resources Management, Organization Culture, Organizational Process, pada Faktor Unsafe Leadership: Inadequate Leadership, Planned Inappropriate Operations, Failed to correct problem, pada faktor Preconditions for Unsafe Act: Lingkungan Fisik, Lingkungan Teknik, Kondisi Mental, Kondisi Fisiologis, Keterbatasan Fisik, Kesiapan Pekerja, untuk Faktor Unsafe Acts: Skill based error, Decision Error, dan Routine Violations. Sedangkan Faktor yang tidak berhubungan signifikan adalah Leadership Violations, Kegagalan Mengelola Pekerjaan, dan Exceptional Violations. <hr /> PT BCY, as a company operating in oil well drilling and workover, carries a high risk of work related accidents. Data from PT BCY's Health, Safety, and Environment (HSE) department indicates that during the 2019–2024 period, there were several work related accident incidents leading to serious and even fatal injuries. PT BCY's safety performance throughout 2019-2024 recorded 26 cases despite the company having implemented work safety standards. The objective of this research was to analyze the factors influencing work related accidents at PT BCY between 2019 and 2024 using the Human Factor Analysis and Classification System (HFACS) method. This study employed a descriptive analytic research design with a mixed-methods approach. Secondary data consisted of accident records and investigation reports for 26 accident and near-miss incidents at PT BCY. This secondary data was then classified according to the four (4) stages of failure in the HFACS method: unsafe acts, preconditions for unsafe acts, unsafe supervision, and organizational influences. Primary data was collected through questionnaires and then analyzed using bivariate tests to validate respondents' perceptions against the findings from the secondary data. Based on

the HFACS analysis, "Preconditions for Unsafe Act" was the most frequently identified factor (77 identifications), followed by "Unsafe Acts" (60 identifications), "Organizational Influences" (38 identifications), and "Unsafe Leadership" (36 identifications). It was concluded that the factors significantly related to work accidents were: For "Organizational Influences": Resource Management, Organization Culture, and Organizational Process. For "Unsafe Leadership": Inadequate Leadership, Planned Inappropriate Operations, and Failed to Correct Problem. For "Preconditions for Unsafe Act": Physical Environment, Technical Environment, Mental Condition, Physiological Condition, and Personnel Readiness. For "Unsafe Acts": Skill-based Error, Decision Error, and Routine Violations. Conversely, factors that did not show a significant relationship were Leadership Violations, Physical Limitations, Failure to Manage Work, and Exceptional Violations Keywords: HFACS, work accidents, occupational Health and Safety