ANALYSIS AND IMPROVEMENT OF OCCUPATIONAL SAFETY AND HEALTH IN PT. ALISONS USING HAZOP APPROACH

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ABSTRACT

Occupational safety and health (OSH) is very focused on preventon of work accident by identifying, analysing, and controlling risk and hazard. The general problem of OSH in Indonesia is that OSH is still often overlooked. This is demonstrated by the high number of workplace accidents that occur. In the construction company, factor of OSH is an important aspect in the implementation of activities associated with construction work due to several factors, among other is construction’s work that is difficult and dangerous, use of dangerous instrument, and the level of air pollution and noise. In this study, PT. Alisons is a company engaged in the field of construction that was founded in 2010, and have handled 34 projects with 8 projects of it is a middle risk category. This study aimed to analyse and provide recommendations for improvement of OSH implementation on PT. Alisons by using HAZOP approach. From these result, it was found that PT. Alisons still not implemented procedures and work instructions that can be understood by the workers, giving rise to as many as 49 types of potential hazard from the 8 stages of construction work. Based on the result of data processing and the identification of risk or hazard determination of the level of risk using the HAZOP, found a wide source of hazard risk with extreme levels, 6 different source of risk hazard with high risk levels, 33 kinds of sources of hazard with the level of moderate risk, and 9 kinds of sources of hazard with low risk. At the extreme and high risk categories obtained two main source of hazard to the worker’s behaviour and the process undertaken and the selection process of mixing materials. Recommendations for improvement related to worker behaviour is the source of hazard signs safety training delivery, understanding of the SOP and PPE, build facilities and supporting infrastructure, and improved control of OSH. While improvement recommendations related materials are complementary SOP, supplier selection, increase inspection, and make a checklist.