ABSTRACT

Work accidents are unpredictable events that can cause physical and financial losses. The application of occupational safety and health (K3) is the most important thing in a place of work and is the right of construction workers that must be fulfilled by a company. The construction of the Purwokerto Pandang Tower lacks awareness of workers to implement K3 which is determined by management, resulting in work accidents on worker safety. The research was conducted using the Fault Tree Analysis (FTA) method to find out how much productivity the application of K3 is to the construction of the Purwokerto viewing tower. The FTA method is used to see reliability and show a causal relationship between an event and another event. The results of the study that the frequency of accidents that occurred was influenced at weeks 8, 13, 17, 18, 23, 25, 29. Meanwhile, the severity of work accidents from week to week decreased and was followed by an increase in worker productivity in the construction of the Purwokerto viewing tower. The root causes of work accidents using FTA can be concluded that the 8th, 14th, 19th, 24th, 26th, 30th week showed satisfactory results and a slight decrease because some workers did not use PPE and work accidents occurred. Recommendations are in the form of improving the K3 system by providing a work safety contest for workers for the next project after the construction of the Purwokerto View Tower in order to increase workers' awareness of work safety.

Keywords: Fault Tree Analysis, occupational safety and health (K3), Productivity