

**Analysis of Potential Hazards in Bulldozer Machine Operation with the
Hazard Identification Risk Assessment and Risk Control (HIRARC) Method
at PT. POMI**

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ABSTRACT

Heavy equipment is often one of the work accidents on projects. The heavy equipment used can have a high risk. Every work accident can cause various kinds of losses. So, to deal with work accidents, construction actors divert the high risk of work accidents through a form of employee health care insurance which is expected to provide more protection to workers regarding occupational safety and health. This research aims to determine the dangers of using bulldozers at PT. POMI. Analysis of data collection used in the observation process, filling out questionnaires and analysis using the HIRARC (Hazard Identification Risk Assessment and Risk Control) method. The research was carried out from April 2024 to June 2024 at PT. POMI, District. Paiton, Kab. Probolinggo. The results of the research showed that 27 cases of potential danger were identified for hazards, 59% or 16 cases of potential danger with a low risk of accident, 37% or 10 cases of potential danger with a moderate risk of accident and 4% or 1 cases of potential danger with a high risk of accident. Potential hazards that have the highest risk are workers having accidents on floors or work areas that are slippery and exposed to dust. Recommendations that can be made regarding K3 problems are by creating a HIRARC worksheet and creating operational process standards for each work process so that it can reduce or minimize accidents that may occur.

Keywords: Heavy Equipment, Bulldozer, K3, HIRARC