ABSTRACT

The construction project of Surabaya-Mojokerto tollroad section IV is a large-scale construction project in East Java which is undertaken by PT. Wijaya Karya (Persero) Tbk. One of supporting job in this project is operating excavator PC 200 type that has hazards and risks which must be controlled. The main objective of this research is doing risk management in the operational of the excavator PC 200 type that used in the construction project of Surabaya-Mojokerto tollroad section IV.

This research was an observational research that conducted using cross sectional design and descriptive analysis. Data that used are primary data based on interviews and observations and secondary data which collected from the company. This research performed based on work activities of operating excavator PC 200 type.

The result showed that based on identification of hazards in 6 activities of operating excavator PC 200 type, there are 22 hazards. Risk assessment showed that from 38 pure risks, there are 14 medium risks and 24 high risks. Risk control conducted by engineering controls, administrative controls, and using PPE. Residual risk assessment showed that there are still 6 very high risks and 9 high risks.

The conclusion from this research is the company, operator, and society need to provide the risk control to minimize the risk rate. The company needs to provide controlling function of safety work and secure the excavator work area.

Keywords: excavator PC 200, identification hazards, risk assessment, risk control