ABSTRACT

PT XYZ is a metal casting industry, where in the production process there are several potential hazards. Efforts made by the company to overcome the potential danger is to provide PPE facilities to workers. However, workers lack of self-awareness of OHS makes workers not adhere to the use of PPE. Because of this, the company makes a reward and punishment policy, but still the workers do not comply with it. Therefore, there are still numbers of work accidents in that company.

Based on the above problems, the methods used in the design proposal stage are FMEA and FTA. FMEA and FTA is a failure analysis method, FMEA can be used also to assess the failure that occurs. The stages of the two methods are integrated to then create a process of hazard identification, risk assessment, and control. With this, we can prevent work accidents that occur.

The draft proposal made based on the description above is SOP hazard identification, risk assessment, and control. The purpose of SOP hazard identification, risk assessment, and control is to identify any hazards that occur in the production process and assess the level of risk, so that the company can provide appropriate controls for existing hazards. The SOP is made to fulfill the requirements contained in Clause 6.1 of ISO 45001: 2018 and PP No. 50 of 2012 about OHSMS.

With the SOP of hazard identification, risk assessment, and control, it is expected to help the company in improving the company's OHSMS and the company can achieve zero accident.

Keywords – [OHSMS, *Zero accident*, ISO 45001:2018, FMEA, FTA]