

## ABSTRACT

*PT Perkebunan Nusantara 1 Regional 2 operates in the plantation sector, where there are a number of potential hazards in the production process. so far, the company has only addressed these risks by providing personal protective equipment (PPE) for workers. However, the lack of awareness of the importance of Occupational Health and Safety (OHS) causes the use of PPE to be less complied with, ultimately increasing the number of work accidents in the company. Work accidents do not only occur during the production process, but are also influenced by factory conditions such as workplace inadequacies, slippery work areas, and the use of dangerous machinery.*

*Based on these problems, this research aims to design OHS risk control procedures to minimize the risk of work accidents in the production process and help companies meet the requirements of ISO 45001: 2018. This research begins with hazard identification, risk assessment, and risk control related to production activities with the Hazard Identification, Risk Assessment, and Determining Control (HIRADC) approach. The risk control results obtained will be integrated into the OHS risk control business process using the Business Process Management (BPM) method. The results of this risk control design research meet the requirements of ISO 9001: 2015 Clause 4.4.1. With this method, the designed OHS risk control includes OHS Risk Control Standard Operating Procedures (SOP) and supporting documents such as HIRADC filling form, JSA form, and treatment application inspection form.*

*With the existence of the OHS Risk Control SOP, it is hoped that the company can be more effective in minimizing the risk of work accidents and making continuous improvements to reduce these accidents.*

**Keywords:** *Work Accident, HIRADC, ISO 45001:2018, ISO 9001:2015, BPM*