

ABSTRACT

PT Krakatau Jasa Logistik is a company engaged in logistics, especially supply chain logistics. PT Krakatau Jasa Logistik has a vision to become a leading logistics service company in Indonesia. There are seven divisions at PT Krakatau Jasa Logistik, one of which is the Internal Handling KP (IHKP) division. The main task in the IHKP division is to deliver goods in the form of materials, semi-finished products, finished products, or even waste, from plant A to plant B in the consumer factory area, namely the PT XYZ factory. The process of delivering goods is carried out with several units of vehicles owned by PT Krakatau Jasa Logistik, such as excavators, payloaders, bulldozers, load luggers, trailers, flat trucks, dump trucks, cargo trucks, and pick ups. Based on the Traffic Accident Data from the IHKP Division, there were 18 major accidents that occurred in 2016-2020.

In solving the above problems, the IHKP division carries out risk management only after the risk occurs. The IHKP Division of PT Krakatau Jasa Logistik does not yet have an effective risk prevention plan. Therefore, this study aims to design a risk management system for the company's material handling services to meet the requirements of ISO 9001:2015 based on ISO 31000:2018. The first step in data processing will be to identify the gap between the requirements of ISO 9001:2015 clause 6.1 with the actual conditions of the IHKP division of PT Krakatau Jasa Logistik which considers human resources in the company and standard operating procedures. Next, an integrated system design is carried out which includes determination of inputs and outputs in the process, sequence of processes and the person in charge, process improvement using the business process improvement method, and determination of key performance indicators. The results of the proposed design are then analyzed with advantages and disadvantages and verification using a checklist to determine whether the results of the design can be accepted by the company.

The proposal given in this study is to design a risk management system related to the handling of risks and opportunities at the IHKP division of PT Krakatau Jasa Logistik, in the form of an SOP containing procedures and a proposed business process design that has met the requirements of ISO 9001: 2015 clause 6.1 and an analysis of improvements has been carried out. using business process improvement, the SOP also contains a risk register form that has been designed based on ISO 31000:2018 using a web-based application. The proposed design to the IHKP division of PT Krakatau Jasa Logistik is well received, which has been proven on the verification checklist sheet.

With the design of the proposed risk management system, the company can avoid the losses incurred when affected by the existing risks. This is because the design of the proposed risk management system will assist the company in dealing with the

risks that will occur more effectively, so as to reduce the possibility of the company being affected by these risks.

Keywords — Risk Management System, Standard Operating Procedure, ISO 9001:2015, ISO 31000:2018, Business Process Improvement.