

## **ABSTRACT**

*Material handling is art and science which includes handling, moving, packaging / packing, storing and controlling of materials in all its forms (Wignjosoebroto, 2009). PTPN VIII Ciater is a company that has a diverse material transfer system. One of them is the removal of wood material on the black tea drying unit. In the drying process there are three displacements on this wood transport, which are the 1st transfer from the wood acceptance warehouse to the launch material, the 2nd displacement from the material launch into the "kulakan" and the 3rd transfer from the kulakan to the heat exchanger for processing. However, from the research that has been done on the aspects of OSH management and ergonomics on the removal of wood drying unit PT. Perkebunan Nusantara VIII has a risk of work accidents on the operator. So an improvement is needed immediately. This problem will be indentified using Job Hazzard Analysis approach, on worker activity. The results of this identification show the handling of materials that can cause work accidents, caused by manual material handling activities.*

*A second review to determine the condition of material handling system is currently done with the calculation of Recommended Weight Limit (RWL) and Lifting Index (LI). The results of the RWL and LI recapitulation show the value is above one ( $> 1$ ) which means that the workplace accidents are possible. This work accident is very disadvantageous for operators who suffer such as injury or illness or for the company that can cause downtime and decrease in work productivity. Responding to these problems, research was done to analyze and improve the material handling system on wood removal of tea drying unit at PT. Perkebunan Nusantara VIII using the approach of General Analysis Procedure. General Analysis Procedure which is a systematic approach and used to solve problems in material handling that can help to reorder the complex material transfer system and lead to the right goal. The output of the research is the selection of material handling equipment, support equipment, and safe load unit used and the improvement of layout to increase the capacity of wood storage in the drying unit of PT. Perkebunan Nusantara VIII.*

**Keywords-***General Analysis Procedure, Kecelakaan Kerja, Job Hazard Analysis, Material Handling, , RWL, Lifting Index.*