ABSTRACT

Risk Analysis is a combination a activity which involved risk assessment, risk management, and risk communication. The purpose of this research is to do Risk Analysis on engine room Ferry Ship Selat Madura II Surabaya.

This research is an observational research which is a cross sectional research based on the time of the research. The object of this research was concerned on engine room of Ferry Ship Selat Madura II Surabaya, with 6 persons as the population of all engine room’s crew. Primary data obtained through observation and interview that were presented in the table form, diagram, and analyzed descriptively.

The result of this research showed that in engine room of Ferry Ship Selat Madura II Surabaya there were 25 kind of hazards which 5 hazards are belong to high risk level or unacceptable category, 20 hazards as medium risk level or tolerated, and the rest 5 hazards as low risk level or acceptable category. The effort of control that applied was technically engineering control, administrative and supply of Personal Protective Equipment (PPE). The most effective control was management installation in safety device on machine, with 90% of the value. Based on assessment residual risk, there were still 6 hazards of high risk level and 19 hazards of medium risk level. During risk analysis process were occured which aims to equalize perception and obtain various kinds of required data.

The conclusion of this research is, from the total of 25 kinds of hazard in the engine room of Ferry Ship Selat Madura II, 20% are belong to high risk level or unacceptable hazard, but the controls that applied have 90% of value which means that they had already implemented very well. Thus 76% hazard which is categorized as high level risk or unacceptable hazard can be downgraded into low risk level or acceptable hazard

Keyword: Risk Analysis, risk assessment, risk management, engine room