ABSTRACT

Mohammad Yasin, 2018, NIT: 50134974.T "Optimization treatment of incinerator to prevention of marine pollution in M.V. Guenther Schulte", minithesis of Technical Program, Diploma IV, Merchant Marine Polytechnic Semarang, Supervising professor I: H. Amad Narto, M.Pd, M.Mar.E and Supervising professor II: Irma Shinta Dewi, M.Pd.

In a voyage it is possible for a ship to sail within more than a week journey from one port to another, during that time many changes occur on board every single day, including amount of garbage and oil. Activity on board made an increasing amount of garbage and waste oil every day, with number of place and tanks are limited, and it is not possible to dispose both garbage and oil at sea, then need a way to reduce amount of garbage and oil, a possible way to reduce that is burned it by incinerator. This is why incinerator is an important, but on M.V. Guenther Schulte incinerator's performance has decreased, so it does not affect to the amount of garbage and waste oil on board.

To find out formulation of the problem which is factors causing of decrease incinerator performance, impact caused and action to be done for incinerator optimizing performance, the research method used is the method of Strength, Weakness, Opportunity, Threat (SWOT), one methods which is using factors to identify the occurrence of damage by determining factor weight, support, and urgency comparison, which is further detailed in the summary value table for reference create an organizational map matrix. This data collection technique is done by through literature study, distributing questionnaires and direct observation of subjects related to incinerator.

The results from the research of decreasing incinerator's performance are due to lack of maintenance and supervision of incinerator's operations, so that damages are not realized and affect to the burning process. To overcome the problems in order for the performance of incinerator to take normally, is a need for more repairs and supervision of all engine crew members, especially the engineers whose responsible of incinerator by raising awareness, so that possible damages can be detected early.