

## ABSTRACT

**Budi Utomo**, 2018, NIT: 50134837.N, “*The Optimization of Tank Cleaning Process on Crude palm Oil on MT. Fatmawati*”, a Nautical Program final project, Diploma IV program, Merchant Marine Polytechnic of Semarang, First Advisor: Dr. Capt. H. Sahabuddin Sunusi, M.T., M.Mar., Second Advisor: Febria Surjaman, M.T.

During process of tank cleaning, there are some problems found. Those are because crew do not procedur according to tank cleaning guide book on board, less and not maintained tank cleaning equipment, and limited time of tank cleaning. This may cause failure in tank cleaning process on vessel. This occurred when the writer having sea project on MT. Fatmawati at Bontang Port, East Borneo, on March 25<sup>th</sup> 2016.

Due to the quality of tank cleaning equipment, limited time of tank cleaning, and the ignorance of crew on tank cleaning procedures, there were found the remains of previous cargo that was crude palm oil on the top edge of tank and around tank pump after tank cleaning having done. Because of that, the vessel informed the officee that the vessel was not ready to load the next cargo (in this case, methanol) and they would perform re-cleaning on the tanks that were not ready to be loaded. It caused the ship to get complains from the renters as the owners of cargo.

Based on the observation results and problem discussion on the less-optimal of tank cleaning process and the effect caused, such as; re-cleaning process had to be done since the tank still had CPO remains. This was because the crew and the first officer did not perform tank cleaning based on the proper tank cleaning procedures, the less-maintained condition of tank cleaning equipment and the limited time to perform tank cleaning process. This happened on MT. Fatmawati on March 25<sup>th</sup> 2016 when it sailed from Jasaan Port, The Philippines, to Loktuan Bontang Port, East Borneo. In this case, MT. Fatmawati had to perform re-cleaning tank leading to loss of time, manpower and cost. By knowing these causes and effects caused by the problems, there should be more maintenance and renewal performed to tank cleaning equipment, addition of time to perform the process, and improved perfomance of tank cleaning procedures based on proper guide on vessel so the problems of CPO remains in the tank can be avoided next time.

**Keywords** : *Tank cleaning, re-cleaning, CPO.*