

## ABSTRACT

Sigit Prasetyo, 2017, *Minimize LPG cargo leakage at LPG/C vessel – Attaka when discharge in Langkat, Pangkalan susu terminal – Sumatra Utara at 2016.*  
Supervisor: Capt. Agus Hadi Purwantomo, M.Mar. and Amad Narto, M.Mar.  
E, M.Pd.

In line to the increase of the usage of Liquefied Petroleum Gas (LPG), danger may be happen at the LPG vessel is leakage, which is resulting the formulation of the problem such as: a. why charge leaks during loading and unloading need to be minimized?, b. how to minimize load leakage during loading and unloading, c. what are the cause of leakage when loading and unloading?. Depend on the theories of the leakage cause and the handling appropriate to the procedure and checklist, also completed by theoretical framework. The researcher use descriptive qualitative method to describe and explain the object has been research. During the research, researcher finds some data which can be separated into two; primary data and secondary data.

Based on the data that researcher gets from the research and the handling process of LPG loading and discharge, the cause of the load leakage is: a. the crews negligence when does their job, b. the tools in manifold draining were in bad condition. The handling of load leakage was fit to the procedure and checklist. Loss of profit when the cargo leakage was not significant, but the leakage could make any dangerous like fire, loss of weight, and damage for crew's health. According to that problem, the solution that can do such as giving motivation to crews, reminding the crews, and supervising the crews when they do their duty. Beside that advantage, the solution can also improve the maintenance of the loading and discharge equipment.

The conclusion of the research is the crews' negligence and bad condition of the equipment cause the load leakage. The handling was appropriate to procedure and checklist. The loss of profit was not experienced to the vessel. Based on those problems, the researcher has some suggestions to improve the vigilance of crews and keep the load and discharge equipment in clean so that the loading and discharge process run in line with the procedure and checklist.

**Key Word :** *Leakage, LPG, Tanker*