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DESIGNING AND IMPLEMENTATION OF LIQUID TRANSFER MAINTENANCE STANDARD OPERATION PROCEDURE IN PT.NIGI

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Abstract

PT. NIGI is a company that speciliazed in producing various gases such as oxygen, carbon dioxide, nitrogen, etc. Liquid transfer department deals with refilling process for the gases tank used for production, which the process must be handled with extreme cautious. However the standard operation procedure had not yet been designed for professional use, so designing a standard operation procedure is a crucial issue to be solved. This standard operation procedure consist of inserting liquid gases from ISO-Tank to a CE-Tank, by considering the purity, pressure, and safety for the personel.

Keywords: *PT.NIGI, Liquid Transfer, Standard operation procedure*

Introduction

PT. NIGI is a company engaged in the production of gas, in the form of oxygen, nitrogen, etc. The company is located in Bintang Industri II Tanjung Uncang, Batu Aji District, Batam City. The company's operational activities are the same as the company's operations in general, namely preparing production materials and then producing them through industrial processes and turning them into gas that is used for hospitals and other industries. During the operations, this company has a process called Liquid Transfer, this process is a process of refilling the liquid tank that will be used for the production process. However, there is no proper SOP to go through this process, so it is dangerous for workers if there is no procedure for this process, because this process involves the gas pressure, to the installation of the hose on the tank.

Method

The data collection for making SOP used was direct observation of activities in the field, interviews with the workers concerned about the Liquid Transfer process, and then collecting several other SOP as a reference for making SOP for the Liquid Transfer process. In the design of the SOP, there are things that need to be considered, namely safety and safety equipment for the work, so that data

collection for design is also gathered by interviewing the K3 safety department at the company.

Discussion



The design of practical work activities has resulted in a Liquid Transfer SOP which has a procedure for carrying out the Liquid transfer process in accordance with the instructions from the supervisor and in accordance with interviews with workers.





The Procedure after being implemented in the company produces a standarize procedures and provides sefety for workers to do work and minimize work accidents that occur in this process. With this SOP, workers will understand more about the valves that exist in the ISO-Tank and CE-Tank, thereby minimizing errors in work, as well as clear safety instruments for workers to do the work that has been clearly stated in the SOP, so that workers know the importance of the safety instrument on work and use it when working the Liquid Transfer process.

Conclusion

From practical work carried out for 3 months, it can be concluded that PT. NIGI has a structured organizational structure and always wants workers to understand the work they are doing and maintain worker safety while doing their work. The resulting SOP is in accordance with the needs of the company and in accordance with SOP standards, the implementation of the procedures is also well carried out by workers from PT. NIGI.

Bibliography

Work Instruction for Operating of the Carbon Dioxide Pump / WI-NIGI-25 Work Instruction for Operating the Cryogenic Cylinder Filling Pump / WI-NIGI-09 Tools and Equipment List Form / FNIG-PRD-002 Tjipto,"STANDAR **OPERASIONAL** PROSEDUR (SOP) DAN Atmoko, AKUNTABILITAS KINERJA INSTANSI PEMERINTAH", JurnalPenelitian, 2010 Budihardjo, Muhammad,"PANDUAN PRAKTIS MENYUSUN SOP (STANDARD OPERATING PROCEDURE)", PenerbitSwadaya, 2014 Darmawi, Herman,"MANAJEMEN RISIKO", PenerbitBumiAksara, 2010 Ramli, Soehatman, "PEDOMAN PRAKTIS MANAJEMEN RISIKO DALAM PRESPEKTIF K3 OHS RISK MANAJEMEN", Penerbit Dian Rakyat, 2010 Ramli, Soehatman, "SISTEM MANAJEMEN KESELAMATAN DAN KESEHATAN KERJA OHSAS 18001", Penerbit Dian Rakyat, 2010