

ABSTRACT

PT South Pacific Viscose is a chemical company that produces glass fiber as a main product with capacity of 200,000 tons per year and 132,000 tons per year Na₂SO₄ as a side product. To reduce air pollution, PT South Pacific Viscose has a department that serves to recycle the gases are potentially damaging to the environment or the safety of workers. Plant CAP is one of plants that recycles CS₂ gas into liquid CS₂ to be used in fiber manufacturing process. In each process, many possibilities can be the occurrence of accidents and irregularities, but the accident could have been avoided or prevented in advance with the identification of each work process.

In this study, HAZOP method used to identify deviations that may cause harm to the plant CAP, especially in sub-processes of Lean Gas Scrubbing and Cooling as well as on adsorption. After identifying the level of danger to be ranked using the Risk Assessment.

For the results of hazard identification and hazard ranking produced five possible levels of harm to the sub processes of Lean Gas Scrubbing and Adsorption Cooling as well as having the highest levels of the value of RAC = 2. The most common danger is the occurrence of an explosion and fire at the plant CAP. Recommendations can be given is carefully every process that has the highest danger level and if it is recommended to stop all processes when deviations occur.

Keywords : HAZOP, Risk Assessment, Hazard Identification