

## ABSTRACT

The bunkering operation at Pertamina's Jetty Propylene Refinery Unit - VI Balongan involves the transfer of fuel oil to ships, presenting potential risks of oil spills that could have severe environmental and economic consequences. This study aims to conduct a risk assessment of bunker occupation to prevent oil spills at the refinery unit's jetty. The International Safety Guide for Oil Tankers and Terminals (ISGOTT) sixth edition serves as the framework for this assessment.

The risk assessment methodology employed in this study includes hazard identification, consequence analysis, and risk evaluation. Potential hazards associated with bunker occupation activities are identified, such as equipment failure, human error, and adverse weather conditions. Consequence analysis considers the potential impact of oil spills on the environment, including marine life, coastal ecosystems, and nearby communities. Risk evaluation involves assessing the likelihood and severity of potential oil spills based on historical data, industry standards, and expert opinions. Mitigation measures, such as safety protocols, emergency response plans, and maintenance procedures, are identified and incorporated into the risk assessment. The goal is to minimize the likelihood and severity of oil spills during bunker occupation operations.

**Keywords :** Risk Assessment, ISGOTT, Oil Spill