

DRAFT STUDY ON SURVEY AND HANDLING OF MIXED CRUDE OIL- BIODIESEL CARGO AT INDONESIAN PORTS

Achmad Vidi Asy Sukru
Email : vidiasy@gmail.com

ABSTRACT

This study aims to examine and analyze the survey process and the handling of mixed crude oil and biodiesel cargoes at major ports in Indonesia. With the increasing use of biodiesel as an environmentally friendly alternative fuel, the shipment of mixed crude oil and biodiesel cargoes is becoming more common. However, this combination poses significant technical challenges, particularly related to mixture stability, material compatibility, contamination risks and its impact on port facilities and handling procedures. The research methods include the collection and analysis of samples directly from mixed cargo shipments at several strategic ports in Indonesia, as well as field surveys to study operational conditions and available facilities. In addition, interviews with port stakeholders, such as terminal operators, security personnel, and environmental managers, were conducted to understand handling practices, challenges faced, and potential risks that may arise. Laboratory analysis is also carried out to identify the physical and chemical properties of the mixture that affect transportation and storage processes. The research results show that handling mixed cargo of crude oil and biodiesel requires special attention to maintain material stability, such as proper temperature control and stirring during transportation. Some port facilities still need improvements to reduce the risk of leaks and pollution. This study provides technical recommendations for handling procedures, including staff training, facility adjustments, and implementation of appropriate safety standards. Implementing these recommendations is expected to improve operational efficiency, ensure safety, and support renewable energy management policies in Indonesia.

Keywords: Draft Survey, Biodiesel Cargo, Tanker Cargo Handling.