

**A STUDY ON BULK TERMINAL
OPERATIONS AND FACILITIES
AT PORT KLANG**

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ABSTRACT.

In evaluating the prospect and viability of the Bulk Terminal of Klang Port Management, three important areas were reviewed:

- 1. The existing Bulk Terminal facilities provided by Klang Port Management*
- 2. The handling operations of dry and liquid bulk cargo*
- 3. The efforts of Klang Port Management in upgrading its Bulk Terminal facilities*

One major hypothesis was outlined in search for the answers for the Bulk Terminal's handling operations. Among the answers are the narrow quay at the bulk wharves for lorry movements or marshalling, limited storage space, inefficient conveyor system and cranes breakdown problems.

Finally, it was concluded that Bulk Terminal has the potential to continue to be the terminal for bulk. But the prospect and viability of the Bulk Terminal will depend on the improvements of some weaknesses. Therefore, it was recommended that:

- 1. An expansion of dry bulk's quay and positioning additional berth lights*
- 2. An expansion for storage area is needed to cater the high demand*
- 3. The conveyor system needs some major maintenance*
- 4. The cranes need to be upgraded and installing one high speed crane to serve for the increasing demand*

This is to ensure that the Bulk Terminal facilities provided by Klang Port Management, will be as reliable as the demand. In order to become one of the most active and efficient port in handling bulk commodities in Malaysia

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BULK COMMODITIES IN GENERAL.

Bulk commodities, are those loaded or discharged in loose or fluid form, account for the biggest share of the world seaborne trade. During 1983, 68% of that trade measured by weight consisted of tanker cargoes and the major drybulk commodities¹.

Crude oil and petroleum products are tanker cargoes whereas iron ore, coal, grains and rock phosphate constitute as the "major drybulks" cargoes. They are traded in large quantities and shipped almost exclusively in bulk carriers. Besides it, other cargoes often carried in bulk form such as sugar, salt, cement, maize and wheat are referred to as "minor drybulks". Lately, the term "neo bulk" has come into use for cargoes such as vehicles, steel plates and forest products because they are often shipped in full ship loads².

The major drybulks are not completely homogeneous. Grain for example includes wheat, maize, soyabeans, barley and oats. Grain can be split into two categories:- foodgrains such as wheat and maize for human consumption and feedgrains comprising of those grains used for feeding cattle. Another detailed classification can be made accordingly to the nature of the commodity for example iron ore, is classified according to the iron content and coal according to the calorific value. A common feature of bulk commodities is that the main users can be easily identified as shown below in TABLE 1.1.