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EFFECT OF MARITIME TRAINING AND HUMAN FACTORS ON OIL POLLUTION VIOLATIONS

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EFFECT OF MARITIME TRAINING AND HUMAN FACTORS ON OIL POLLUTION VIOLATIONS

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December 2008

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Ship operations have been a source of marine pollution. Of various pollutions, oil pollution has caused serious long and short term harm.

Maritime training addresses the concerns by disseminating knowledge of

relevant machinery operations and regulations. The control measures

include heavy penalties and in the recent past have resulted in

criminalisation of the seafarers. In spite of this, incidents of oil pollution and

falsifying records to prove compliance have been occurring.

Amongst many factors, training and the human factors such as experience

and attitude could be rationales for the pollution violations. The objectives

of the study were primarily to look at maritime training particularly for oil

pollution prevention. The Malaysian seafarer populace was the main focus

of the study but samples were also drawn from Indian seafaring community

for better representation of the global seafaring respondents.

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The effect of present training and other human factors (experience, fatigue and attitude) on oil pollution violations was dimensioned by the statistical methods such as ANOVA, Chi-square and correlation analysis and other inputs from questionnaire surveys. Additionally, the STCW prescribed training standards was compared with Syllabi of a maritime institute and the present training was found to be adequate.

The progression of the methods was built on the premise of reason-cause-effect. Training and experience were the reasons, attitude and fatigue the causes and the effect were the oil pollution violations.

Increased training and experience was found to have a positive effect on attitude-behaviour. Awareness was found to be sound. Fatigue was seen as a major causal factor affecting shipboard practices and so the oil pollution violations. The objective inferences apart, recommendations have been made for improving the quality of training such as simulator training, exposure to pollution case studies and upgradation of trainers' knowledge. Suggestions for further study on other factors such as machinery limitations have been made.