ABSTRACT

Industrialization has brought forth comforts and catastrophes. In the regular scheme of technological developments, the worst malady faced by man is the defilement of the environment. Shipping, being a heavily regulated industry, has contributed less in comparison to other land-based polluters, but the enormity of an oil spill and the post-spill clean-ups are reasons enough for countries to tighten the pollution laws. Today, any action violating these laws is seen as a crime. Ships are being detained, penalized for pollution violations. Environmental concerns and criminalizing incidents have become issues of concern. While considering these viewpoints, a worthwhile approach would be to look at the seafarer training. Assessment of the competency of the shipboard officer is largely carried out by examinations and onboard assessments. This could be extended to other means such as research surveys. The chapter projects inputs from a study undertaken to assess the level of training and awareness in pollution matters amongst shipboard officers.

INTRODUCTION

For the year 2003, International Shipping Federation has listed almost twenty-four major issues facing the shipping industry and criminalizing accidents tops the listing and also features marine oil pollution. Concerned with this trend, BIMCO (Baltic International Maritime Council) conducted a study and analysed a number of cases. The noticeable feature of the report is that all of them were oil pollution related offences. Oil pollution and criminalisation cause great harm and the person concerned is the seafarer. If the reasons for seafarer committing these violations are addressed, the severity of these issues can be mitigated. The fishbone chart of Figure 1 identifies possible factors affecting the performance of the shipboard officer and leading to oil pollution
violations. Each of the factors may be analysed with the associated reasons.

Machines are designed according to regulations but there could be operational difficulties. Assessing the efficacy of machines will require a technical approach. SOPEP (Shipboard Oil Pollution Emergency Plans) materials are requirements under pollution prevention measures, such as self-absorbent pads, dispersants, etc. The knowledge of employment and operation of machines and this equipment is imparted during training.

The methods for oil pollution prevention are approved according to MARPOL (Marpol 73/78) regulations and are included in training. Limitations in some methods (e.g. insufficient shore reception facilities) might exist but would not hamper other prevention measures provided. In the shipboard environment, acts of god (natural causes of storms and other calamities) are beyond normal control. MARPOL permits oil discharges in case of dire emergencies when lives of persons are in danger. This regulatory provision for crisis management is explained during training. Man induced reasons for oil pollution include influence by superiors, training and human factors. Acting on instructions of superiors was an excuse for operational oil discharges but in the legal pur-

view, the responsibilities are equally placed on all concerned parties. For example, when an incident of oil pollution is committed, the person committing the act, the Chief Engineer (if the incident is related to engine department), the Master and the Company are all held responsible. Such legal aspects are made clear while the seafarer is being trained. It is to be noted that training is concerned with all the factors discussed above.

Further, any human error, resulting in a cause for violation say, collision, grounding, and regular shipboard operations, is classified either as a wilful or an ignorant act. Ignorance refers to lack of understanding and skills. Lack of comprehension and deftness is normally attributed to lack of training. Negligence is an aspect of attitude where the reasons could be fatigue, lack of experience or simply behaviour. Apparently, training and human factors remain as primary rationales. Figure 2 illustrates the analysis of the problem identified for the study. The problem statement made was - Are lack of training and human factors (experience, attitude, fatigue) the causes for the oil pollution violations by the seafarer? Though training and human factors were perceived as variables for the problem, the chapter has focused on training to bring out the emphasis.