OIL POLLUTION PREVENTION ON TANKERS SEPARATION OF CARGO OIL PIPING SYSTEMS FROM THE SEA

Notice to Shipbuilders, Ship Repairers, Shipowners, Masters and Officers

This Notice supersedes Notice No. M.679

Recent cases of appreciable oil pollution have occurred when cargo was being transferred from the ship to shore or from ship to ship, when leakage through valves has allowed oil to escape overboard. Instances of such pollution have occurred even though the ships were provided with two valve separation from the sea on the discharge side of the cargo pumps. In none of these cases, however, was any means provided to ascertain whether or not each valve was in a satisfactory condition. It is obvious that, with two valve separation, an undetected fault in one valve would leave the system completely dependent on the other, and that a subsequent fault in this valve would result in leakage through the system. For this reason it is usual in other applications of two valve separation to provide a method whereby the first fault can be detected and eliminated, so that avoidance of leakage does not depend wholly on the integrity of the second valve.

The above mentioned pollution incidents do not detract from the advantages of two valve separation between the oil cargo and the sea being incorporated in the piping systems, especially on the discharge side of the cargo pumps, but they do indicate the desirability of the provision of a means for checking the space between the two valves so that personnel can be immediately aware of the failure of either of them. As a further precautionary measure, all valves not required to be open during any discharge operations should be securely shut.

If preferred, an alternative to the provision of two valves, in parts of the system not in frequent use, would be the incorporation of a properly designed line blanking device which would give positive isolation between the cargo lines and the sea. In this case, monitoring of the section between the blanking device and the shipside valve would not be necessary.

One consequence of the failure of two valve separation is that oil may, and did in the cases referred to above, escape through the ballast lines to the sea even though ballast is not being discharged at the time. Such a discharge may continue unnoticed for some time especially at night and when visibility is poor and particularly when the overboard discharge is situated below the water line.

The arrangements recommended above should help to prevent incidents of this kind, as should the provision of an oil content meter to indicate the presence of oil in ballast lines. This in no way detracts from the advantages of stationing an observer at a position where any oil discharge could be readily detected, whenever operations which may lead to discharge of oil or oily mixtures are taking place.

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