

MSC/Circular.474 - Guidelines for Bow and Stern Loading and Unloading Arrangements on Oil Tankers - (adopted on 9 May 1988)

The Maritime Safety Committee

1. At its fifty-fourth session the Maritime Safety Committee (MSC 54/23, paragraph 7.19) approved "Guidelines for bow and stern loading and unloading arrangements on oil tankers."

2. At the request of the Maritime Safety Committee the Guidelines attached hereto, are brought to the attention of Member Governments and Parties to the 1974 SOLAS Convention.

Annex - Guidelines for Bow and Stern Loading and Unloading Arrangements on Oil Tankers

1 General

1.1. Subject to the approval of the Administration, cargo piping may be fitted to permit bow or stern loading or unloading. Portable piping should not be permitted. Where necessary, portable adaptors, couplings etc. may be used.

1.2. Bow and stern loading and unloading lines should be led outside accommodation spaces, service and machinery spaces within the accommodation or control stations.

1.3. Cargo lines forward or aft of the cargo area, except at the loading station, should have welded connections. If necessary, expansion joints may be permitted. Valve connections may be flanged. Such lines should be clearly identified and segregated either by two valves situated in the cargo area which can be secured in the closed position and provided that the efficiency of the segregation can be checked, or by one valve together with other closing appliances providing an equivalent standard of segregation, such as a spool piece.

1.4. The shore connection should be fitted with a shutoff valve and a blank flange. The blank flange may be omitted when a patent hose coupling is fitted.

1.5. Spray shields should be provided at the shore connection station except where the loading manifold is located outboard. Collecting trays should be provided under inboard manifolds.

1.6. Arrangements should be provided for draining of cargo piping to the satisfaction of the Administration.

1.7. Arrangements should be provided for cargo piping located outside the cargo area to be cleared of oil and inerted. Due consideration should be given to isolation between cargo and the inert gas system.

1.8. When stern loading and unloading arrangements are in use, openings and air inlets to enclosed spaces within a distance of 10 metres from the cargo shore connection should be kept closed.

1.9. Means of communication should be provided on board between the cargo control station and where the cargo shore connection is located.

1.10. The provisions of regulation [II-2/56.6 to 56.8.3](#) inclusive should apply to the exterior boundaries of superstructures and deckhouses enclosing accommodation spaces which face the cargo shore connection, the overhanging decks which support such accommodation, and the outboard sides of the superstructures and

deckhouses for the specific distances from the boundaries which face the cargo shore connection.

1.11. A fixed foam fire-extinguishing system covering the loading and unloading areas should be provided. The system should be to the satisfaction of the Administration.

1.12. Electrical equipment within a distance of 3 metres beyond the cargo shore connection should be of a certified safe type.

1.13. Bow and stern loading and unloading arrangements should not interfere with the safe launching of survival craft, and provisions should be made to the satisfaction of the Administration to protect launching stations from sprays in case of hose and pipe bursting.

2 Special requirements for tankers equipped for single point offshore mooring and bow loading arrangement

2.1. The provisions of [1.1 to 1.13](#) above should apply.

2.2. A fixed water-spraying system covering the area of chain stoppers and hose couplings should be provided.

2.3. Air vent pipes to the forepeak tank should be located as far as practicable from gas dangerous areas.

2.4. Where a forward bridge control position is arranged on the forecastle or fore deck, provisions should be made to the satisfaction of the Administration for emergency escape from the bridge control position in the event of fire.

2.5. An emergency quick-release system should be provided for the cargo hose and mooring systems. The design, location and operation of such a system should be to the satisfaction of the Administration.

2.6. The mooring system should be provided with a tension meter continuously indicating the tension in the mooring system during the bow loading operation. This recommendation may be waived if the tanker has in operation a dynamic positioning system to the satisfaction of the Administration.

2.7. An operation manual describing emergency procedures such as activation of the emergency quick release system and precautions in case of high tension in the mooring system, should be provided on board.