



Office of
Deputy Commissioner
of Maritime Affairs

THE REPUBLIC OF LIBERIA
LIBERIA MARITIME AUTHORITY

Marine Notice

SAF-002
Rev. 06/12

TO: ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT SHIPS, AND AUTHORIZED CLASSIFICATION SOCIETIES

SUBJECT: Prohibition of "Hot Work" in Tankers and Combination Carriers

Reference: (a) [Maritime Law 296\(4\)](#)
(b) [IMO MSC/Circ.1084](#)

Supersedes: Marine Notice SAF-002, dated 11/02

PURPOSE:

Following the guidance provided by reference (b), this notice prohibits entirely the practice of carrying out of any "hot work" in vessels which are carrying or have carried flammable liquid cargoes except under the conditions specified below. This prohibition results from investigations into losses of tankers and combination carriers.

APPLICABILITY:

The prohibition applies to all work within the cargo area as defined in Regulation 3.6 of Chapter II-2 of SOLAS 1974, as amended. This includes that part of the ship that contains cargo tanks, slop tanks and cargo pump-rooms including pump-rooms, cofferdams, ballast and void spaces adjacent to cargo tanks and also deck areas throughout the entire length and breadth of that part of the ship over the afore-mentioned spaces.

REQUIREMENTS:

1.0 Definition

The term "hot work" applies to any work requiring the use of electric arc or gas welding equipment, cutting burner equipment or other forms of naked flame, as well as heating or spark generating tools, regardless of where it is carried out on board a ship.

2.0 General:

2.1 The Safety Management System (SMS) on board should include adequate guidance on control of hot work and should be robust enough to ensure compliance. Absence of guidance should be regarded as prohibition, rather than approval.

2.2 Whenever possible, a space such as a workshop where conditions are deemed safe, should be designated for hot work to be performed and first consideration given to performing any hot work in that space.

3.0 Hot work outside the designated space:

3.1 The master or designated safety officer should be responsible for deciding whether hot work is justified and whether it can be conducted safely.

3.2 A permit-to-work system should be employed.

3.3 Hot work procedures should take account of national laws or regulations or other national safety and health rules.

3.4 A responsible officer, not involved in the hot work, should be designated to ensure that safe procedures are followed.

3.5 A written plan for the operation should be agreed by all who will have responsibilities in connection with the hot work.

3.6 The work area should be carefully prepared and isolated before hot work commences.

3.7 Fire safety precautions should be reviewed, including fire equipment preparations, setting a fire watch in adjacent compartments and areas, and fire-extinguishing measures.

3.8 Isolation of the work area and fire precautions should be continued until the risk of fire no longer exists.

4.0 Permissible Conditions

4.1 Relaxation of this prohibition is permitted in cases where any vessel has been thoroughly gas freed, cargo tank sludge and residues substantially removed, and a gas free certificate has been issued by a qualified chemist which specifies the location and period of validity. The area in which work is taking place shall be constantly monitored for the presence of gas preferably by a qualified chemist but in any case by a responsible senior officer of the ship. All work shall cease immediately if the gas content rises to 1% Lower Explosive Limit/Lower Flammable Limit (LEL/LFL).

4.2 Where a Gas Free Certificate cannot be obtained, the Master, in his sole discretion, may allow as an acceptable alternative work in way of an inert cargo tank, or tanks that had been thoroughly washed and flooded with clean ballast water, after the oily mixtures and washing residues collected during the tank washing have been transferred to tanks outside of the intended work area and its adjacent spaces. Under such circumstances the Master may issue a gas free certificate, if this is consistent with company policy.

5.0 Safety Precautions

5.1 Masters and officers are advised and warned that it should never be assumed that a ship will remain gas free even in cases where a gas free certificate has been previously issued.

- 5.2 Masters and officers are advised that rigorous control should be exercised over repair parties carrying out repair or retrofit work at sea. Such personnel should be placed under the jurisdiction of a nominated senior officer of the ship who will be responsible for supervising the work program and the manner in which it is carried out.
- 5.3 Care should be taken to blank off common vent lines. Cargo lines should be flushed and blanked off, and vents from other tanks terminating in the intended work are to be blanked or led well clear by temporary arrangements.

6.0 Spaces Adjacent to Cargo Areas

Work carried out in spaces adjacent to the cargo area, such as main or auxiliary machinery spaces, boiler rooms or accommodation spaces, may be permitted subject to stringent safety precautions being taken and a positive determination of gas free atmospheres in both the intended work space and in all spaces adjacent to the work space.

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