



DEPARTMENT OF ECONOMIC DEVELOPMENT

ENTRY INTO ENCLOSED SPACES AND THE DANGERS POSED BY OXYGEN DEPLETION FROM TIMBER CARGOES

Following a fatal incident onboard an Isle of Man flagged ship we must reiterate the dangers of entry into enclosed spaces without ensuring the atmosphere is safe for entry.

This Shipping Notice is also to highlight the danger posed by timber logs in cargo holds causing a depletion of oxygen in the atmosphere.

Documents referred to in this notice: Code of Safe Working Practices for Merchant Seamen.

Most regulations and notices are available on the Isle of Man Government web site: www.iomshipregistry.com or by contacting marine.survey@gov.im

The incident occurred on a vessel carrying a cargo of coniferous pulp logs. During cargo operations a closed cargo hold was entered by a crew member via an access hatch. When it was realised that the crew member was missing, a search of the ship discovered him in the hold and before a rescue could be arranged the Master entered the hold through the same access hatch and was also overcome by the oxygen depleted atmosphere. The bodies of both crew members were recovered by a rescue party using breathing apparatus.

Preliminary findings have shown;

- 1. While the dangers of oxygen depletion caused by timber logs was known to the crew there was no procedure to cover cargo operations and the dangers posed by this type of cargo.
- 2. Subsequently the cargo hold was not treated or marked as an enclosed space, with no warning not to enter without checking the atmosphere.
- 3. Mechanical ventilation of the holds was provided but not used.
- 4. Initial rescue of the two persons was attempted using only a Charcoal filter mask which almost resulted in another death.

This incident has highlighted deficiencies in the operation and planning of the cargo hold entry procedures on board the vessel, especially when carrying cargoes that cause oxygen depletion, and raises concerns over the control of routine cargo operations.

It is strongly advised that all personnel responsible for, and taking part in, enclosed space entry procedures should take note of the following:

- 1. Filter masks should never be relied upon to support life in atmospheres which are deficient in oxygen or contain toxic and/or flammable gas.
- 2. Companies should review their enclosed space entry procedures and ensure that they are adhered to at all times by all personnel. All crew members must be made aware of the necessity to ventilate spaces and to check the atmosphere in a space prior to any decision to enter being made, by a responsible officer. As an absolute minimum, the requirements of the "Code of Safe Working Practices for Merchant Seamen" Chapter 17 must be followed at all times.
- 3. Enclosed Space Entry Permits must be used and the procedures required by the Permit must be strictly followed at all times before entry is allowed.
- 4. For vessels engaged in this trade we wish to point out that there have been another seven fatalities in the last year on vessels of various flags trading to Baltic countries with crew members entering unventilated spaces carrying timber products. The dangers posed by these products cannot be overemphasised and we require that all Companies involved in the carriage of these cargoes review their current cargo operations procedures to ensure the dangers are known to all onboard and steps are in place to avoid a similar tragedy.

Isle of Man Ship Registry

Please note - The Isle of Man Ship Registry cannot give Legal Advice. Where this document provides guidance on the law it should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel. You should consider seeking independent legal advice if you are unsure of your own legal position.