



# Technical Circular

No.: 121/2017

Date: 25<sup>th</sup> September 2017

**To whomsoever it may concern**

**Subject: Fatal accident involving enclosed space entry.**

- UK Marine Insurance P&I Club have published news, dated 20 September 2017 regarding a fatal accident resulting in death of a crew member involved in an enclosed space entry on a bulk carrier.
- The description of accident together with Analysis and Lesson learnt is copied below.

### ***Incident description***

- As discharge of a cargo of coal progressed, the level in one of the cargo holds had lowered to the point where stevedores needed to enter for cargo trimming operations using bulldozers. The cargo hold ladders were completely enclosed within a trunk, with openings at the main deck and at the lower part of the hold only. In accordance with shipboard SMS procedures, it was necessary for the crew to arrange ventilation and testing of the trunk space atmosphere prior to permitting entry of personnel. The third officer instructed two crew members to open the cargo hold access hatch and install a ventilation fan at the entrance, a task which should not normally have required the crew to enter the hold. When the third officer arrived with the portable gas instrument, he saw the hatch open but the fan was not running. He then noticed that both crew members were lying unconscious on the hold ladder platforms within the trunk. The alarm was raised and rescue of the crew members was performed using self-contained breathing apparatus. Unfortunately, one crew member died and the other, although resuscitated, suffered the debilitating health effects of gas poisoning and oxygen starvation.



### ***Analysis***

- It is not known why the crew found it necessary to enter the hold as the surviving crew member had no recollection of the incident. However, this tragedy highlights the dangers associated with unplanned entry into cargo holds which should always be treated as enclosed spaces, particularly when loaded with cargoes which may deplete oxygen and/or emit flammable gasses and/or toxic gasses. Coal is a cargo which can present all of these hazards. Although the hold access trunk serves the purpose of protecting the ladders from stevedore damage, the very restricted space created with only limited openings increases the hazard to personnel, particularly when considering that the lower opening may be obstructed with cargo.

### ***Lessons Learnt***

- All crew should be properly trained to recognise the hazards presented by the enclosed spaces on board and in safe entry procedures as per SOLAS requirements and IMO recommendations.
- Ship managers, Masters and crew must have a zero tolerance attitude to unplanned entry into enclosed spaces or breach of SMS procedures.
- Cargo holds are some of the most dangerous spaces on board vessels and should always be assumed to be dangerous until proven otherwise.
- Enclosed space openings need to be rigorously controlled. Cargo hold access hatches should be clearly labelled with warning notices prohibiting entry without an enclosed space permit.

Ship owners/ operators and masters are advised to be guided by above.

### **Enclosure:**

1. Nil

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