Risk Assessment Solutions

"Don't Cure, Prevent"

Circular 02/04/2015

Subject: "Emergency Escape Breathing Device missing" - Important Safety & PSC Issue!

Case: Recently, it has been reported that a cargo vessel faced difficulties in Bangladesh when the Port State Control Officers boarded the vessel for a detailed PSC inspection. Amongst other things, the PSC Officers noticed that in some of the vessel's machinery spaces, there was no available Emergency Escape Breathing Device (EEBD). As a result, the following deficiency was imposed:

Act. Code 17: *"EEBD missing in some space."*

In connection to the above, and in order to assist our clients to avoid similar complications, we would like to refresh the **SOLAS Chapter II-2, Part D, Regulation 13.4.3** requirements pursuant to the above case:

"***4.3.1*** *On all ships, within the machinery spaces, emergency escape breathing devices shall be situated ready for use* ***at easily visible places****, which can be reached quickly and easily at any time in the event of fire. The location of emergency escape breathing devices shall take into account the layout of the machinery space and the number of persons working in the spaces.*
4.3.2 *The number and location of these devices shall be indicated in the fire control Plan required in Regulation 15.2.4.*
4.3.3 *Emergency escape breathing devices shall comply with the Fire Safety Systems Code*".

Referring to the above mentioned regulation and in order to assist further, "Prevention at Sea" recommends that our Clients should also consider the following listed items with regards to the EEBDs and their location onboard the vessel:

<u>General Guidance</u>

In machinery spaces of "Category A", containing internal combustion machinery used for main propulsion, EEBDs should be disposed in accordance with ***MSC/Circ.1081***, as follows:

- ***i)*** One EEBD in the engine control room, if located within the machinery space.
- ***ii)*** One EEBD in workshop areas. In case of the existence of a direct access to an escape way from the workshop, an EEBD is not required.
- ***iii)*** One EEBD on each deck or platform level near the escape ladder constituting the second means of escape from the machinery space (the other means being an enclosed escape trunk or watertight door at the lower level of the space).

For machinery spaces, other than those containing internal combustion machinery used for main propulsion, at least one EEBD should be available on each deck or platform level near the escape ladder constituting the second means of escape from the space (the other means being an enclosed escape trunk or watertight door at the lower level of the space).

❗ Alternatively, different quantities or locations may be determined by the Administration taking into consideration the layout and dimensions or the normal manning of the space.

The EEBD should include a hood or a full face piece, as appropriate, to protect the eyes, nose and mouth during escape procedures. Hoods and face pieces should be constructed with flame resistant materials, and include a clear window allowing a clear view.

The EEBDs, when stored, should be suitably protected from the environment.

Brief instructions or diagrams clearly illustrating their use should be clearly printed on the EEBD. The donning procedures should be quick and easy to allow for situations where there is little time to proceed to safety from a hazardous atmosphere.

❗ In addition, the ***SOLAS Regulation 13.3.4.1*** also requires the provision of spare EEBDs onboard. Owners / Operators should contact the Flag or Classification Society in order to be advised on the exact number of spare parts that have to be available onboard, so as to meet the above requirement.

Maintenance

The EEBD should be maintained and pressure tested in accordance with the manufacturer's instructions and the Administration requirements.

EEBDs placed in the machinery and accommodation spaces should be considered as operational EEBDs, and not as spares ones. Furthermore, it is also recommended that they are clearly marked. Relevant marking should also be provided in the Fire Control Plan. Spare EEBDs would be those kept in storage rooms with the other LSA or FFA spares and shall be ready to replace any operational EEBD which has become unusable.

Training

The ship's weekly safety appliances and equipment inspection/testing routine should be modified so as to incorporate training and inspection of the EEBDs.

Training in the use of the EEBDs should be considered as part of the basic safety training procedure. The training devices should be stowed separately from the spare EEBDs and properly marked as "*Training EEBD Set*".

Personnel should be trained to immediately don an EEBD prior to exiting a space when the atmosphere becomes life threatening. This is necessary due to the possibility of encountering smoke during escape. Such training should be accomplished by scheduling routine escape drills for crew members working in the engineering or machinery spaces.

An EEBD may also be used to escape from a machinery space due to an accidental release of a fixed CO_2 system and can be carried by fire-fighters for the sole purpose of offering the device to personnel in need of emergency assistance.

[Source: IMO MSC/ Circ.849 & IMO MSC/ Circ.1081]

Our company is offering a wide range of 'deficiencies', case studies, clarification on the PSC deficiencies through our PSC Seminar which is delivered on regular intervals in our office or in-house at client's request.

To assist further, we offer our clients the service of assessing onboard or through “Distance Assessment” if a vessel is in conformance with the MLC 2006 or PSC requirements or conducting inspections equivalent to PSC/Flag/Rightship inspections to detect and prevent unpleasant occurrences!

We remain at your disposal for more details,

Prevention at Sea