

REVISED TRAINING RECOMMENDATIONS FOR ENTERING ENCLOSED SPACES

ENCLOSED SPACE ENTRY CONTINUES TO PRESENT A RISK OF FATAL INJURY TO SHIP'S CREW AND EXTERNAL VISITORS.

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Acknowledging this, the International Maritime Organization (IMO) has been working to improve their Resolution A.1050(27) *Revised Recommendations for Entering Enclosed Spaces Aboard Ships* with an amendment adopted at the recent 110th Maritime Safety Committee meeting.

The update is extensive with notable changes in the recommendations for training of personnel with responsibilities during enclosed space entry, where additional criteria have been listed under the minimum training requirements.

As before, the resolution states that "only trained and authorized personnel should be assigned the duties of entering, functioning as attendants or acting as members of rescue teams."

AREAS OF AMENDED TRAINING FOCUS ARE:

HAZARD IDENTIFICATION

The ship-specific 'Enclosed Space Register' is a useful place to search for information on any space to be entered. The amendment has expanded and clarified the

contents of the register, specifying the need to identify the expected hazards, amongst other valuable information for each enclosed space on board. It is important to become familiar with the contents of this register.

The amendment reaffirms that oxygen depletion can be expected to occur continuously and rapidly within unventilated enclosed spaces. Any interruption in ventilation to a space, for example a supply fan stopping, will quickly result in oxygen depletion. All personnel involved in an enclosed space entry should be aware of this possibility and be ready to leave the space should this occur. The attendant positioned at the entrance to the space should relay this information immediately should they become aware of ventilation interruption.

Oxygen depletion is not the only atmospheric hazard that can be found in an enclosed space. Much also depends upon the current or former contents of the space. The new recommendations include providing the necessary reference materials to allow personnel to identify the hazards of the cargoes and other substances carried on board.

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example source materials such as Safety Data Sheets, shipper's declaration, or various mandatory codes such as the International Maritime Dangerous Goods (IMDG) Code or International Bulk Chemicals (IBC) Code to allow hazard identification, such as toxicity. Some cargoes are listed that have caused "many fatal accidents". This includes coal, wood products, mineral concentrates, seed cake, and scrap metal. In addition, grain cargoes and timber are highlighted as causing both oxygen depletion and carbon dioxide emission, whilst very often also being fumigated by toxic gas.

WARNING SIGNS

A new paragraph has also been added noting that when any person within an enclosed space appears unwell, it should be assumed that the reason is oxygen depletion or a toxic atmosphere. Heavy or laboured breathing, complaints of dizziness, nausea, or appearing confused are classic examples of the negative effects that can be encountered in a dangerous atmosphere. In such circumstances all personnel should leave the space until the cause can be determined.

Visible unconsciousness, inability to exit the space, or a loss of communication with an entry team requires prompt action from the attendant. The alarm should be raised, and only the rescue team wearing Self Contained Breathing Apparatus and following the agreed rescue plan should enter to conduct a rescue.

It cannot be repeated enough that the urge to enter an enclosed space and help must be resisted, no matter how close the casualty is to safety.

EQUIPMENT USE

The amendments now highlight that the use of communications equipment, atmosphere measuring instruments, and rescue equipment should be part of the training requirements. This adds to the existing requirements relating to personal protective equipment (PPE), and first aid equipment and techniques.

This now matches the requirement within SOLAS regulation III/19.3.6 for enclosed space entry and rescue drills, where each drill shall include checking and use of:

1. PPE required for entry
2. communication equipment and procedures
3. instruments for measuring the atmosphere in enclosed spaces
4. rescue equipment and procedures; and
5. instructions in first aid and resuscitation techniques.

These drills take place at least every two months and are an excellent opportunity to obtain practical experience and knowledge in the correct use and function of equipment and procedures.

Enclosed space entry should only be conducted by personnel adequately trained for the task. Whilst each company will have their own training standards, often exceeding the minimum requirements, we recommend that crew members with a role in enclosed space entry should proactively seek out training opportunities and request assistance where knowledge gaps are found.

For further information, please do not hesitate to email lossprevention@tindallriley.com