



A R BRINK & ASSOCIATES

MARINE CONSULTANTS & SURVEYORS

ARB House

143 Maydon Road, Maydon Wharf, Durban 4001

P.O. Box 29238, Maydon Wharf 4057, South Africa

Telephone: +27 31 2061861 Fax: +27 31 2061860

E-mail: survey@arbrink.com web.site <http://www.arbrink.com>

ENTRY INTO ENCLOSED SPACES

MARITIME SAFETY CARD

ENTERING CARGO SPACES, TANKS, PUMP ROOMS, FUEL TANKS, COFFERDAMS, DUCT KEELS, BALLAST TANKS AND SIMILAR ENCLOSED COMPARTMENTS

GENERAL PRECAUTIONS

Do not enter an enclosed space unless authorized by the master or a responsible officer and only after all the appropriate safety checks listed have been carried out.

The atmosphere in any enclosed space may be incapable of supporting human life. It may be lacking in oxygen content or contain flammable or toxic gases. This also applies to tanks that have been inerted.

The master or a responsible officer **MUST** ensure that it is safe to enter an enclosed space by:

1. ensuring that the space has been thoroughly ventilated by natural or mechanical means;
2. testing the atmosphere of the space at different levels for oxygen deficiency and harmful vapor where suitable instruments are available; and
3. requiring breathing apparatus to be worn by all persons entering the space where there is no doubt as to the adequacy of ventilation or testing before entry.

WARNING

Where it is known that the atmosphere in an enclosed space is unsafe, it should only be entered when it is essential or in an emergency. All safety checks should be carried out before entry and breathing apparatus must be worn.

Protective equipment and clothing

It is important that all those entering an enclosed space wear suitable clothing and that they make use of protective equipment which may be provided on board for their safety. Access ladders and surfaces within the space may be slippery and suitable footwear should be worn. Safety helmets protect against falling objects and, in a confined space, against bumps. Loose clothing, which is likely to catch on obstructions, should be avoided. Additional precautions are necessary where there is a risk of contact with harmful chemicals. Safety harnesses, belts and lifelines should be worn and used where there is any danger of falling from a height.

There may be additional safety instructions on board the ship - make sure that they are made known to all concerned.

SAFETY CHECK LIST

Before entering any enclosed space all the appropriate safety checks listed below must be carried out by the master or responsible officer and by the person entering the space.

SECTION 1 - To be checked by the master or responsible officer

- 1.1 Has the space been thoroughly ventilated and, where testing equipment is available, has the space been tested and found safe for entry?
- 1.2 Have arrangements been made for continuous ventilation during occupancy of the space and at intervals during breaks?
- 1.3 Are rescue and resuscitation equipment available for immediate use beside the compartment entrance?
- 1.4 Have arrangements been made for a responsible person to be in constant attendance at the entrance to the space?
- 1.5 Has a system of communication between the person at the entrance and those in the space been agreed?
- 1.6 Are access and illumination adequate?
- 1.7 Are portable lights or other equipment to be used in an approved type?

When the necessary safety precautions in SECTION 1 have been taken, this card should be handed to the person who is to enter the space for completion.

SECTION 2 - To be checked by the person who is to enter the space

- 2.1 Have instructions or permission been given by the master or a responsible officer to enter the enclosed tank or compartment?
- 2.2 Has SECTION 1 been completed as necessary?
- 2.3 Are you aware you should leave the space immediately in the event of failure of the ventilation system?
- 2.4 Do you understand the arrangements made for communication between yourself and the responsible person in attendance at the entrance to the space?

SECTION 3 - Where breathing apparatus is to be used, this section must be checked jointly by the responsible officer and the person who is to enter the space.

- 3.1 Are you familiar with the apparatus to be used?
- 3.2 Has the apparatus been tested as follows?
 - (i) Gauge and capacity of air supply
 - (ii) Low pressure audible alarm
 - (iii) Face mask - air supply and tightness
- 3.3 Has the means of communication been tested and emergency signals agreed

Where instructions have been given that a responsible person is in attendance at the entrance to the compartment, the person entering the space should show their completed card to that person before entering. Entry should then only be permitted provided all the appropriate questions have been correctly checked