



Technical Bulletin

NUMBER 28 2008

Enclosed space entry permit to work

Heightened frequency of enclosed space incidents resulting in the death of both crewmembers and visitors

Further to technical bulletin 8/2003, the managers are concerned to note a heightened frequency of incidents resulting in the death of both crewmembers and visitors as a consequence of entry into enclosed spaces, or through the release of noxious gases in enclosed spaces. These include:

Spain, April 2008

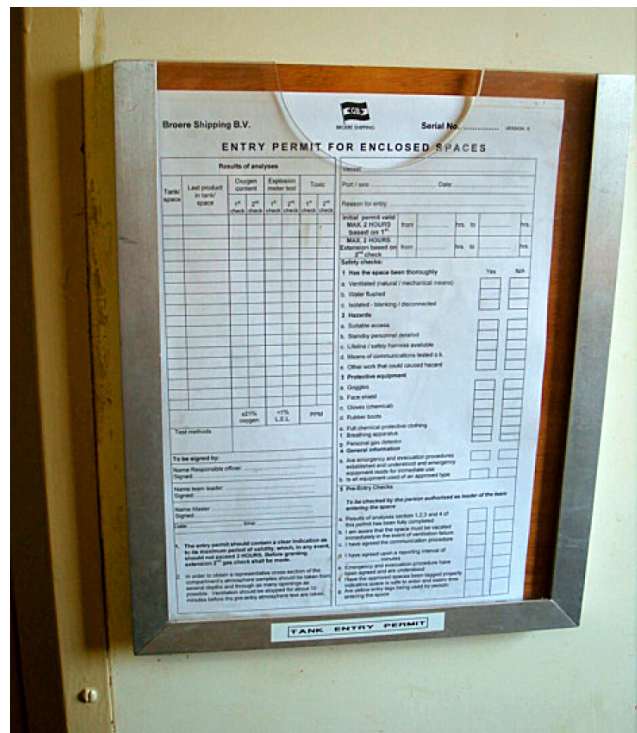
The cargo receiver's surveyor died on board after entering an untested hold via an opened access hatch. The incident occurred despite the surveyor having been strictly advised by the chief officer and another crewmember to remain out of the holds until clearance was obtained.

Indonesia, June 2008

Two shore-based contractors boarded the ship with the intention of removing sludge from a tank. Unknown to the crew, they gained access to the tank. They were not using breathing apparatus, had not taken any measures to determine the composition of the atmosphere within the tank, and they were overcome by fumes and died. It is likely that one of the contractors entered the space in an attempt to rescue his colleague.

USA, June 2008

A bulk carrier was discharging a coal cargo in Mobile, Alabama, when a stevedore entered the hold via an 'Australian ladder'. The bottom of the ladder compartment was blocked by coal and it was later determined that the oxygen level was well below normal. The stevedore died. A crewmember, using only basic equipment, was lucky to escape with his own life after he had courageously, but recklessly, entered the



Example – a blank form is shown

area in the hope of helping the stevedore. It was later determined that the stevedore had fallen and broken his neck as a result of losing consciousness.

Members are encouraged to ensure that there is an onboard system which ensures that all shore-based personnel are aware that they must not enter an enclosed space without prior permission of the master. Rigorous enforcement of the ship's ISPS system should ensure that the business of all visitors to the vessel is known and understood by the ship's senior officers.

Enclosed space entry system

The basic minimum standard for entry is contained in the 2007 edition of the MCA publication *The Code of Safe Working Practices for Merchant Seamen*. A more thorough system is explained below, which is usually seen on tanker vessels but could be adopted on any type of vessel. It encourages safe enclosed space entry for all concerned.

1 Issuing permit

At the space to be entered carry out the required testing and other procedures to complete an 'entry permit for enclosed spaces', which must then be signed by the responsible officer who carried out the checks and the team leader of the work team, who must be present to witness the tests being carried out. The permit, which must be completed in ink and not on the computer, is finally approved by the master who appends his signature to it. Until this is done, no person, visitor or crew member, may enter the enclosed space.

This permit to work is then posted in a perspex holder for all to see until revoked, when it is filed.

No initial permit should be valid longer than four hours. It can be extended a further four hours but the space must be re-tested in order for the extension to be permitted. Permits should not be made for any longer period because, even under proper ventilation, gas concentrations in a space may change rapidly.



Plastic enclosed space entry tags

2 Location entry tags

After the main permit has been displayed, and prior to entry into any space under that permit, a local 'enclosed space entry permit' plastic tag for each location that is covered by the main permit to work should be made. Each of these tags is then tied on to the entrance of the permitted spaces whilst the work is carried out. Permit details are marked on the tag using permanent ink. The tag is filed with the permit, for at least one year, when the permit expires.

Initially the tag is valid for four hours and can be extended by four more hours if required.

3 ID entry tags

Each man on board has a permanent plastic yellow tag and visitor tags are also provided. Anybody entering an enclosed space must first hang their tag on the board at the entrance of the space with the entry permit. Only when all tags are removed, including the entry permit, can the lid/hatch be closed.

This procedure may seem time consuming but it is very risk averse and ensures good safety measures are in place for all enclosed space entries on board ship. It ensures that the level of oxygen, toxic and flammable vapours has been tested before entry. It ensures continuous monitoring thereafter because Permits are only issued for four hour periods. With constant monitoring maintained, safety is enhanced for all personnel.



ID entry tags for personnel