



CONFINED SPACE SAFETY CHECKLIST AND ENTRY PERMIT

SHIPBOARD CONFINED SPACE ENTRY PROCEDURES:

The procedures apply to all customs personnel involved in shipboard confined space examination. It is not discretionary and should not be treated as such. It is mandatory that the procedures be adhered to at all times. Strict compliance is essential to maintain a high level of safety.

DEFINITION OF A CONFINED SPACE:

Means an enclosed or partially enclosed space that

- a) is not designed or intended for continuous human occupancy except for the purpose of performing work,
- b) has restricted means of access and egress, and
- c) may become hazardous to a person entering it due to
 - (i) its design, construction, location or atmosphere
 - (ii) the materials or substances in it, or
 - (iii) any other conditions relating to it;

HAZARDS ASSESSMENT AND PRE-ENTRY VERIFICATION:

Before entering a confined space, the Confined Space Safety Checklist and Entry Permit - form E-618 must be completed and signed by all team members.

EMERGENCY PROCEDURES

Vessel construction, risk factors and entry environments differ in virtually all cases. Despite the hazards assessment and the pre-entry verifications, the assumption must remain that there are hidden hazards. The entrant must continuously proceed cautiously and not proceed any further where he believes he can be injured and/or cannot be rescued. The team's emergency preparedness is to remain high at all times.

DEPARTMENTAL SAFETY – ENTRY INTO CONFINED SPACES

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

Before entry into cargo tanks, pump rooms, fuel tanks, cofferdams, duct keels, ballast tanks, cargo holds, and similar enclosed or confined spaces, an assessment must be made by the attendant in conjunction with the master or responsible officer.

GENERAL PRECAUTIONS

Do not enter any such space unless authorized by the master or the responsible officer and unless the appropriate safety procedures laid down for the ship have been carried out. The checklist on the reverse side of this sheet must be used whenever examination of a confined space is to take place.

The attendant, together with the master or responsible officer **MUST** determine that it is safe to enter a potentially dangerous space by ensuring that:

- (a) the space has been properly ventilated by natural or mechanical means; and
- (b) the atmosphere of the space has been tested with appropriate instruments at different levels for acceptable levels of oxygen and/or other gases.

WARNING

When the atmosphere in the space is unsafe or suspect, it should never be entered to conduct an examination. Escape or breathing apparatus must never be used in such circumstances.

PROTECTIVE EQUIPMENT AND CLOTHING

All persons entering enclosed or confined spaces should wear suitable clothing and make use of protective equipment provided. Access ladders and surfaces within the space may be slippery and suitable footwear should be worn. Safety helmets protect against falling objects and bumps. Safety harness/lifelines must be used on all applicable occasions.

CONFINED SPACE SAFETY CHECKLIST AND ENTRY PERMIT

Before entry into the confined space, the appropriate safety checks listed below must be carried out by the attendant and the entrant, having first made an assessment of the risk with a responsible ship's officer.

The attendant must ensure that this checklist has been fully completed before the examination commences.

Date permit validated
Time permit validated

Ship name	Location	Area searched
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	Print name	Signature (Upon completion of all checks)
Attendant ▶		
Entrant ▶		
Emergency Officer ▶		
Assisting Officer ▶		

Date and time of entry into this space	Anticipated date and time of exit	Length of time for which permit is valid
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Hazard assessment and identification

Slips, trips and falls	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Fall exceeding 2.4 metre	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Potential presence of Vapours or Flammable gas? (See result Section 1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Potential presence of toxic gas? (See result Section 1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Potential presence of unacceptable oxygen levels (See result Section 1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Potential presence of airborne hazardous substances (e.g., Dust)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Presence of liquid in which entrant may drown?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Presence of free-flowing solid in which entrant may be entrapped?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Potential entry of liquid, free-flowing solid or hazardous substance?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Material harmful to skin?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Electrical Hazards?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Mechanical hazards?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Temperature Extremes?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other, Specify _____	<input type="checkbox"/> Yes	<input type="checkbox"/> No

SECTION 1 ATMOSPHERIC TESTING

Tested by (Print name)		Time	Multi-gas monitor used	Date of last calibration
Permissible exposure limits	CO: 0 to 25ppm H2S: 0 to 10ppm O2: 19.5 to 23% LEL: 0 to 10% 1% on Tankers		Test results	CO: _____ H2S: _____ O2: _____ LEL: _____

SECTION 2 TO BE CHECKED BY ATTENDANT

2.1 <input type="checkbox"/> Has the space been properly ventilated, tested, and found safe?	2.6 <input type="checkbox"/> Have arrangements been made to have a responsible person to be in constant attendance at the entrance to the space?
2.2 <input type="checkbox"/> Have arrangements been made to prevent the entry of liquid or hazardous substances into the space?	2.7 <input type="checkbox"/> Has a system of communications between attendant and those entering the space, been arranged and tested?
2.3 <input type="checkbox"/> Have arrangements been made to continue ventilation during occupancy of the space and at breaks?	2.8 <input type="checkbox"/> Are access and illumination adequate?
2.4 <input type="checkbox"/> Have arrangements been made to repeat testing at regular intervals during occupancy?	2.9 <input type="checkbox"/> Are portable lights and other equipment to be used, of the appropriate type?
2.5 <input type="checkbox"/> Are rescue and resuscitation equipment available for immediate use at the entrance to the space?	

SECTION 3 TO BE CHECKED BY THE ATTENDANT AND EMERGENCY OFFICER

3.1 <input type="checkbox"/> Are you familiar with the breathing apparatus to be used?	
3.2 Has the breathing apparatus been checked as follows:	(i) <input type="checkbox"/> Adequacy of air supply - Cylinder #1 _____ psi Cylinder #2 _____ psi L-1000 _____ psi
	(ii) <input type="checkbox"/> Low pressure audible alarm?
3.3 <input type="checkbox"/> Have the emergency signals and other emergency arrangements been agreed to?	(iii) <input type="checkbox"/> Respirator and Resuscitator - air supply and tightness?
Ships alarms	Emergency telephone no.

SECTION 4 TO BE CHECKED BY ENTRANT

4.1 <input type="checkbox"/> Are you aware that you should leave the space immediately in the event of ventilation problems, communication failure, or if your gas alarm is activated?	4.3 <input type="checkbox"/> Do you understand the arrangements made for communications between yourself and the attendant?
4.2 <input type="checkbox"/> Are you satisfied that all relevant checks in sections 1, 2 and 3 have been completed?	4.4 <input type="checkbox"/> Have you been given permission by the attendant to enter the space?
	4.5 <input type="checkbox"/> Adequacy of air supply for the lifeair 10.

NARRATIVE LOG

Time	Remarks	CO O2	H2S LEL