

CONFINED SPACE / VESSEL ENTRY PERMIT

IS 17893 : 2023 — Annex C (Clause 3.3)

C-1 Pre Entry Checklist for Confined Spaces

(To be filled up and complied before each entry into confined space. The compliance shall be followed by 'Confined Space Entry Permit')

i) SI No. : _____

ii) Refinery : _____

iii) Associated Permit: Hot Work/Vehicle entry Permit () Cold Work Permit () Confined Space Entry Permit () Radiography Permit () Excavation Permit () Electrical isolation/Energisation Permit () Working at height permit ()

iv) Exact Location of Work (Unit/Area/Equipment No.) : _____

v) Description of Work : _____

vi) Expected Date and Time of Entry : _____

Expected Date of Completion : _____

C-2 Maximum No. of Entrants Allowed

: _____

C-3 Name of Trained Attendant for Entry (Training Validity 1 Year)

Table 8

Sl. No.	Name	Trained on
i)		
ii)		
iii)		
iv)		

C-4 Name of Trained Entrants for Entry (Training Validity 1 Year)

Table 9

Sl No.	Name	Trained on
i)		
ii)		
iii)		
iv)		
v)		
vi)		
vii)		
viii)		
ix)		
x)		
xi)		
xii)		
xiii)		
xiv)		
xv)		
xvi)		

C-5 & C-6

C-5 Communication facility provided and procedure established: Yes (must be "yes" only).

C-6 Rescue procedure established: Yes (must be "yes" only).

C-7 All electrical equipment is of intrinsically safe/flameproof type: Done () To be done () Not Required ()

C-8 Safety signs, boards and barriers are available: Done () To be done () Not Required ()

C-9 Debriefing and key point tipping to authorized entrants: Done () To be done () Not Required ()

Permittee/Entry Engineer

Name : _____

Designation : _____

Signature with date : _____

C-10 Checklist to be Filled up by Permit Issuer (GSI)

Table 10 — Check-list points marked with * shall be complied by the executer.

SI No	Item	Required	Not required	Done
I)	Energy Isolation			
i)	Pumps or lines blinded, disconnected or blocked			
ii)	Positive isolation of electrical source, with LOTO			
iii)	Other sources such as air, water, steam, gas blinded, disconnected or blocked			
II)	Ventilation			
i)*	Mechanical (must be air eductor or FLP type for inflammables)			
ii)	Natural ventilation only			
III)	Portable gas tester checked for healthiness			
IV)	Continuous gas monitoring required			
V)*	PPE			
i)	Full body harness with life line provided.			
ii)	SCBA/air line available at site			
iii)	Retrieval equipment available at site.			
iv)	Dust respirator provided			
v)	Protective clothing, hand gloves, footwear, safety helmet, ear protection			
vi)	Eye/face protection			
VI)*	Hoisting equipment			
VII)*	Resuscitator-inhalator			

C-11 Gas Testing Reading After Opening of Man Way

C-11.1 Flammable (% Low Explosive Limit, LEL) : _____

C-11.2 Oxygen (% by volume) : _____

C-11.3 Any other gas (specify), ppm : _____

C-12 Subsequent Gas Tests After Preparation of Equipment

Table 11 — To be continued till the equipment is safe for entry.

SI No.	Date	Time	Flammable (% LEL) (5% LEL or less)	Oxygen (% by Volume) (Min. 19.5%)	Any Other Gas (ppm)
i)					
ii)					
iii)					
iv)					
v)					

Note: The control measures and precautions appropriate for the safe entry and execution of the work in the confined space have been implemented and the persons required to work in the confined space have been advised of and understand the requirements.

Issuer / Receiver Details

ISSUER (Person in Direct Control) Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____	RECEIVER/ENTRY ENGINEER (Person/Contractor Supervisor working in confined space) Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____
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** Points shall be complied by entry engineer/receiver and checked by issuer.*

Notes: 1. Pre entry confined space checklist shall be used before every Confined space entry permit. 2. No confined space permit shall be issued, till the requirements of checklist are complied.

C-13 Items to be Checked Before Issuing the Clearance

Table 12 — To be checked with valid permit for confined space.

SI No.	Item	Done	Not Required
i)	Equipment/Work area inspected		
ii)	Surrounding area checked, cleaned and covered		
iii)	Space is free from all unwanted materials such as scraps/debris, surplus items, left over tools and tackles and combustible materials		
iv)	Space is free from all combustible material		
v)	Space is free from all persons presence after checking and manhole cover has been engaged		
vi)	Illumination and ventilation		
vii)	The safety sign for "safe entry" has been removed from man way		
viii)	Danger sign to caution all against entry has been displayed at man way		
ix)	Additional precaution if any		

Gas Safety Inspector (GSI): _____

Permittee/Receiver Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____	Gas Safety Inspector Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____
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C-14 Do's and Don'ts for Working in Confined Space (To be Attached with All Confined Space Entry Permits)

Permit No.- _____

C-14.1 Do's

- C-14.1.1 Check for valid work permit "Entry into Confined Space" before entry into confined space.
- C-14.1.2 Ensure that the confined space is positively isolated from your source of energy and has been made free from harmful gases.
- C-14.1.3 Proper ventilation and illumination of space must be ensured.
- C-14.1.4 Wherever forced ventilation is used, the gas test should be carried out after minimum 10 min of stopping the eductor/fan/blower.

- C-14.1.5 Thorough gas test must be carried out before issuing permit to ensure that there is no pocket of gas available inside and the place is safe for performing the particular task inside confined space. For entry of person the concentration of toxic gases should not exceed Threshold Limit Value (TLV) and oxygen must be minimum 19.5 percent by volume.
- C-14.1.6 Use suitable respiratory protection for entry in the confined space, having oxygen deficiency or having toxic gases more than TLV.
- C-14.1.7 Attendant should be available all the times at man way entry of confined space, till the work is in progress inside. The permit should be available with him and he shall maintain attendance in prescribed form.
- C-14.1.8 Attendant must be in constant touch with persons working inside and know the actions to be taken for rescue/emergency handling, if so required.
- C-14.1.9 The low voltage light limited to 24 V should be allowed inside confined space. All electric connection shall be provided with ELCB.
- C-14.1.10 Wherever possible, lifelines with safety harness should be used for entry into confined space.
- C-14.1.11 Special precautions are required for entry into inert gas atmosphere. It requires the controlled condition inside confined space as well as mandatory use of compressed breathing air supply to person going inside with alternate air supply arrangement.
- C-14.1.12 Keep at least 2 access/exit for each confined space, wherever possible. The access should be unobstructed and approachable.
- C-14.1.13 Use required PPE and personal gas monitors while entering inside. Use of Safety helmet and safety shoe is mandatory for all work areas. Use air mask for areas, where there is likelihood of accumulation of gas during the work such as in sewers.
- C-14.1.14 The person in confined space should pass the warning signal to stand by person in case of any suffocation/difficulty for help.
- C-14.1.15 Carry out regular gas test of confined spaces, where there is possibility of gas generation due to nature of work, being performed inside such as removal of sludge, hot works, etc.

C-14.2 Don'ts

- C-14.2.1 Do not use light of more than 24 V inside confined space.
- C-14.2.2 Do not give any other responsibility to stand by person, which may cause his absence at man way.
- C-14.2.3 Do not obstruct the man ways from any side of confined space.

(Signature of Receiver) Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____	(Signature of Issuer) Signature : _____ Date : _____ Name : _____ Designation : _____ Tel No. : _____
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C-15 Attendance Sheet for Persons Inside Confined Space

(To be maintained by attendant at man way of confined space)

Date : _____

Equipment No. : _____

Confined space permit no. : _____

Valid upto : _____

Table 13

Sl No.	Name of Person Entering	Date of Entry	Time of Entry, h	Time of Exit, h (Mention Date, if Changed)	Sign of Attendant
i)					
ii)					
iii)					
iv)					
v)					

Notes: 1. This attendance sheet shall be filled and maintained at man way of confined space by stand by person for all entries in confined space. 2. This will be an integral part of permit system. Engineer-in-charge shall ensure that the stand by person has been imparted training for the job and he knows the job. He should remain in touch with persons inside during the job.