



Confined Space Entry
Doc No: CMR WHS STD 003

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1. Introduction

1.1 Purpose

The purpose of this standard is to provide guidance on how to:

- Manage the risks associated with entering a confined space. This is supported by the Confined Space Bow Tie Risk Assessment.
- Implement the Confined Space Entry Core Mandatory Requirement (CMR). This is supported by CMR FRM 003a Confined Space Poster and Core Mandatory Requirement (CMR) Standard.

1.2 Scope

In scope - All MPC Kinetic controlled work sites.

Out of Scope – Works outside of MPC Kinetic control.

1.3 Authorised User

All Field Employees and Contractors who are:

- Trained and certified in their role related to the confined space entry
 - Authorized to enter the confined space on the work permit.
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2. Critical Control Implementation

2.1 Business Unit/Project Requirements

2.1.1 Identify Confined Spaces

All potential confined spaces must be identified for the project or workplace.

All identified confined spaces must be documented on a site confined space register.

To determine whether the area is a confined space use the criteria outlined in Appendix A, How to identify a Confined Space.

A confined space may also be identified by:

- Obtaining a copy of the asset/facility owners confined space register
- Observing the work environment to identify signage indicating that a confined space exists.

Regular monitoring of the construction activities should be conducted to ensure that a confined space has not been introduced to the work area e.g. temporary excavation becomes a confined space.

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2.1.2 Install Warning Signs

Where a confined space is identified, a warning sign must be installed at the access point/s.

The warning sign must be in place:

- If the space is open
- During preparation for work
- During work.
- After work is completed.

The sign must meet Australian standards and clearly state “Danger Confined Space” and only authorized entry under a permit.



2.2 Actions required prior to Confined Space Entry

2.2.1 Develop Safe Work Method Statement

A documented Safe Work Method Statement (SWMS) or equivalent must be developed to eliminate or minimise the risks associated with working inside a confined space.

The content of the SWMS must be developed after reviewing the hazards, risks and control measures documented in the relevant HSE Risk Register.

The risk assessment must consider the specific risks associated with the individual confined space. This may include:

- The immediate effects of harmful airborne contaminants inside the space
- Fire or explosion from the ignition of flammable contaminants
- Difficulty rescuing and treating an injured or unconscious person
- Asphyxiation resulting from oxygen deficiency or immersion in a free-flowing material, such as water or other liquids.

A copy of the SWMS must be retained for a minimum of 28 days after the completion of the work.

If a notifiable incident occurs, the SWMS must be retained for at least 2 years.

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2.2.2 Permit to Work Requirements

All work within a confined space must be conducted using an authorised confined space entry permit.

The permit must be issued in accordance with WHS PRO 056 Permit to Work Procedure or any client requirements.

The permit must be in writing and should be recorded WHS FRM 056 Confined Space Entry Permit.

As a minimum, the permit must:

- Identify the specific confined space to which the permit relates



NOTE: A confined space entry permit only applies to one space.

- Clearly describe the work to be carried out in the confined space
- Set out the system of work and the risk control measures
- Document the time period that the permit is in operation
- Record the names dates and times when persons have entered and exited the space.

The confined space entry permit must be kept close to the access point during the work.

A confined space permit must be re-validated if:

- The person with direct control of work changes
- A change in conditions occur
- The work scope changes.

Before the confined space can be returned to service, the Supervisor of the work must document that:

- The work in the confined space has been completed.
- All persons involved in the carrying out of the work have left the confined space.

A copy of the permit must be retained:

- For a minimum of 28 days after the completion of the work.
- If a notifiable incident occurs, the permit must be retained for at least 2 years.

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| 2.2.3 | Confirm Safe Access Points | <p>Access points must be confirmed they are large enough to:</p> <ul style="list-style-type: none"> • Allow people wearing protective clothing and equipment to get in and out. • Make a rescue possible. <p>If equipment such as electrical cables, leads, hoses and ventilation ducts are in the access hole, then a second access point must be made.</p> <hr/> |
| 2.2.4 | Isolate Services | <p>Any energy systems connected to the space must be isolated and de-energised.</p> <p>Authority must be obtained from the relevant asset owner or client prior to isolating any system.</p> <p>Only authorized persons must verify energy systems are isolated and de-energised, with the responsible MPC Kinetic Supervisor receiving written confirmation of the isolation.</p> <p>Lock Out Tag Out must be applied to prevent inadvertent reactivation of the energy.</p> <hr/> |
| 2.2.5 | Eliminate Hot works | <p>Elimination of hot work inside the confined space must be implemented, wherever possible.</p> <p>This will remove ignition sources in an atmosphere containing flammable gas or vapours.</p> <hr/> |

2.3 Training Requirements

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| 2.3.1 | Roles requiring certified training | <p>The following roles related to a confined space entry must be trained and certified:</p> <ul style="list-style-type: none"> • Persons entering the space. • Stand-by persons. • Supervisors. <hr/> |
| 2.3.2 | Accredited training requirements | <p>All accredited training must be provided by a Registered Training Organisation (RTO).</p> <p>Depending on the person's role, they must have been certified to:</p> <ul style="list-style-type: none"> • RIIWHS202 Enter and work in confined spaces. • PUASAR025 Undertake confined space rescue [if applicable]. • MSMWHS217 Gas test atmospheres [if applicable]. • MSMWHS216 Operate breathing apparatus [if applicable]. <p>Expiry of competencies for the above elements is 3 years.</p> <p>The Standby person requires the below competencies in addition to the above:</p> <ul style="list-style-type: none"> • HLTAID003 Provide First Aid • HLTAID002 CPR <hr/> |

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2.4 Atmospheric Testing

2.4.1 Atmospheric testing before entry Before entry, each confined space must have the atmosphere tested by a trained and certified person.

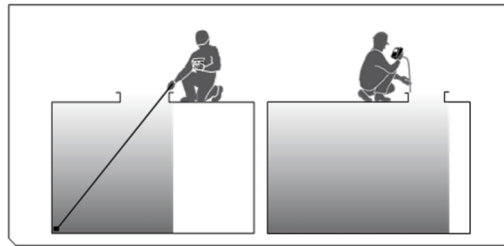
Tests may confirm:

- Unsafe oxygen level.
- Harmful contaminants above the relevant exposure standard.
- Flammable or combustible contaminant above 5% of its Lower Explosive Limit (LEL).

The atmosphere must be tested from outside the space and samples taken at:

- The top of the space.
- The work area.
- The bottom of the space.

The reading taken at the work area must be recorded on the Confined Space Entry Permit.



If the area cannot be reached while outside the space, breathing apparatus must be worn.

No person, whether wearing breathing apparatus or not, must enter any confined space where combustible gases exceed 5% of the LEL.

If any doubt exists as to the nature of any gas, specialist advice must be obtained before entry is permitted.

2.4.2 Atmospheric monitoring schedule

An atmospheric monitoring schedule must be documented on the confined space entry permit.

The monitoring method will be dependent on the risks associated with the specific Confined Space.

Monitoring frequency	Required in confined spaces which:
Continuous	<ul style="list-style-type: none"> • Are not frequently accessed, but conditions are controlled. • Have the potential for Hot Work. • Contain high levels of known contaminants. • Contain unidentified contaminants or materials. • Have poor ventilation. • You are unable to isolate contaminants.

	<ul style="list-style-type: none"> • Have poor access / egress. • Have restricted lighting / poor visibility.
Regular	<ul style="list-style-type: none"> • Are accessed regularly and entry is under controlled conditions. • Contain medium levels of known contaminants. • Have isolated materials or contaminants. • Have controlled release or predictable inflows of contaminants. • Has restricted access / egress.
Periodic	<ul style="list-style-type: none"> • May fit the definition of a confined space, but do not usually contain a build-up of contaminant or unsafe oxygen levels. • Are well ventilated. • Contain low risk contaminants. • Have open and easy access/ egress. • Have adequate lighting. • Have reduced or awkward working space.

2.4.3 Testing equipment

All testing equipment must be calibrated and certified.

Calibration must include:

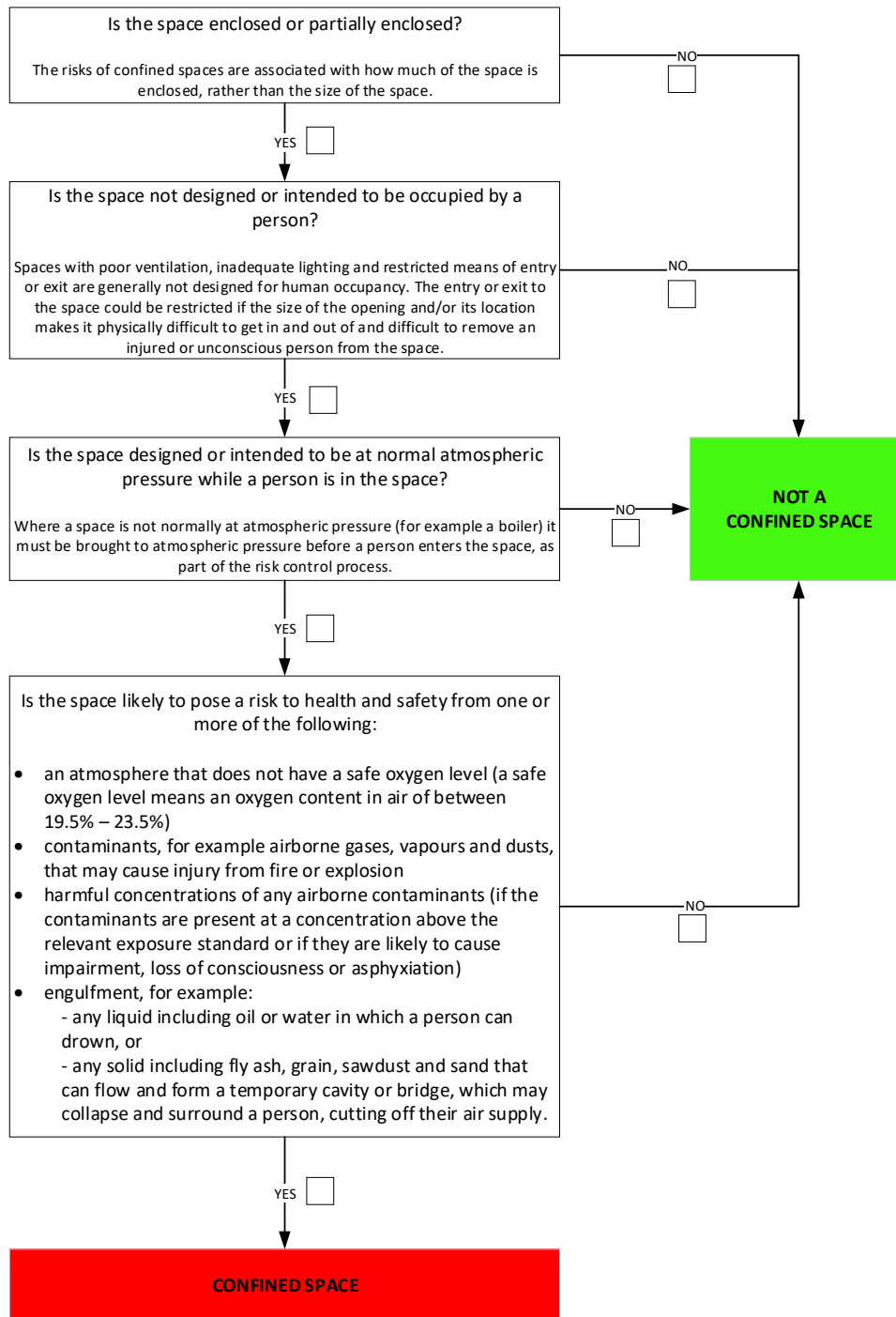
- Laboratory calibration conducted by a competent person to intervals specified by the manufacturer.
- Challenge (bump) testing against a known gas standard to ensure that sensors are functioning.

If the either calibration fails, the device must not be used.

2.5 Emergency Rescue Requirements

2.5.1 Rescue equipment	<p>All rescue equipment must be available and checked before work starts.</p> <p>Rescue equipment may include:</p> <ul style="list-style-type: none">• Gas detectors.• A light.• Tripod and winch.• Stretcher.• Safety harness.• Rescue lines.• Breathing apparatus. <p>These items must be inspected prior to use and tested by a third party according to the manufacturer’s requirements.</p> <p>Immediate access to this equipment must be planned before entering the space.</p> <hr/>
2.5.2 Appoint Stand-by Persons/s	<p>One or more trained and certified stand-by persons must be present outside the space when any person is inside.</p> <p>The stand-by person must be trained and certified for providing first aid and performing Cardiopulmonary Resuscitation (CPR).</p> <p>A positive communication system must always be established between people inside and the stand-by person/s.</p> <hr/>
2.5.3 Emergency recovery plan	<p>An emergency recovery plan must be developed to adequately respond to the potential emergencies specific to the confined space.</p> <p>The emergency recovery plan must be communicated to the relevant site personnel.</p> <p>Any person involved in rescue must be trained and certified.</p> <hr/>

Appendix A. How to identify a Confined Space



Note: Examples of a space, that are not classified as confined space:

- A mine shaft or the workings of a mine.
- Enclosed or partially enclosed spaces that at particular times have harmful airborne contaminants but are designed for a person to occupy e.g. abrasive blasting or spray-painting booths.
- Enclosed or partially enclosed spaces that are designed to be occasionally occupied by a person if the space has a readily and conveniently accessible means of entry and exit via a doorway at ground level e.g. store accessed by a LPG forklift to move stock – although the use of a LPG forklift in a cool store can be hazardous, the door at ground level means that once the alarm is raised, escape and rescue can happen quickly.
- Trenches based on the risk of structural collapse alone but will be confined spaces if they potentially contain concentrations of airborne contaminants that may cause impairment, loss of consciousness or asphyxiation.