

MSMPER205

Enter Confined Space

Learner Guide Instructions

Who is this document for?

The learner.

What is in this document?

- Course information that matches the PowerPoint presentation.
- Review questions.
- Practical assessment instructions for learners.

What do you need to do before you use it for the first time?

1. Rebrand the document.
2. Review the document as part of your validation process.
3. Set the reading and test time limits that are highlighted in pink at the end of the document.

See the 'Read Me First' document for a complete set of instructions on how to use these resources.

LEARNER GUIDE

MSMPER205 Enter Confined Space

Learner Name:	
Learner ID:	
Learner Contact Number:	
Learner Email Address:	
Date Training Commenced:	

This Book Contains:

- Course Information.
- Review Questions.
- Practical Assessment overview and instructions.

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1.1 Introduction

These materials are based on the national unit of competency **MSMPER205 Enter Confined Space**.

You will learn about:

- ◆ Planning for confined spaces work.
- ◆ Confined spaces entry permits.
- ◆ Choosing and checking safety equipment.
- ◆ Preparing and working safely in a confined space.
- ◆ Exiting the confined space and finishing the work.



1.1.1 Overview



Working in confined or enclosed spaces can be extremely dangerous and can lead to serious injury, illness or death for individuals or whole groups of workers.

A confined space can increase a worker's risk of being overcome by fumes, gases or lack of oxygen, damage to hearing through increased noise or vibration, extreme temperatures and injury through falls and slips.

It is very important that you have the ability to correctly identify a confined space in order to ensure the appropriate permit is issued.

1.1.2 What is a Confined Space?

The Code of Practice published by Safe Work Australia (Feb 2014) defines a confined space as an enclosed or partially enclosed space that:

Is not designed or intended primarily to be occupied or entered by a person.

Has a restricted means of entry and exit.

Is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space.

Presents a risk to health and safety from:

- ◆ An atmosphere that does not have a safe oxygen level, or
- ◆ Contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion, or
- ◆ Harmful concentrations of any airborne contaminants, or
- ◆ Engulfment.



The **Australian Standard (AS2865-2009)** definition for confined space is:

An enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following:

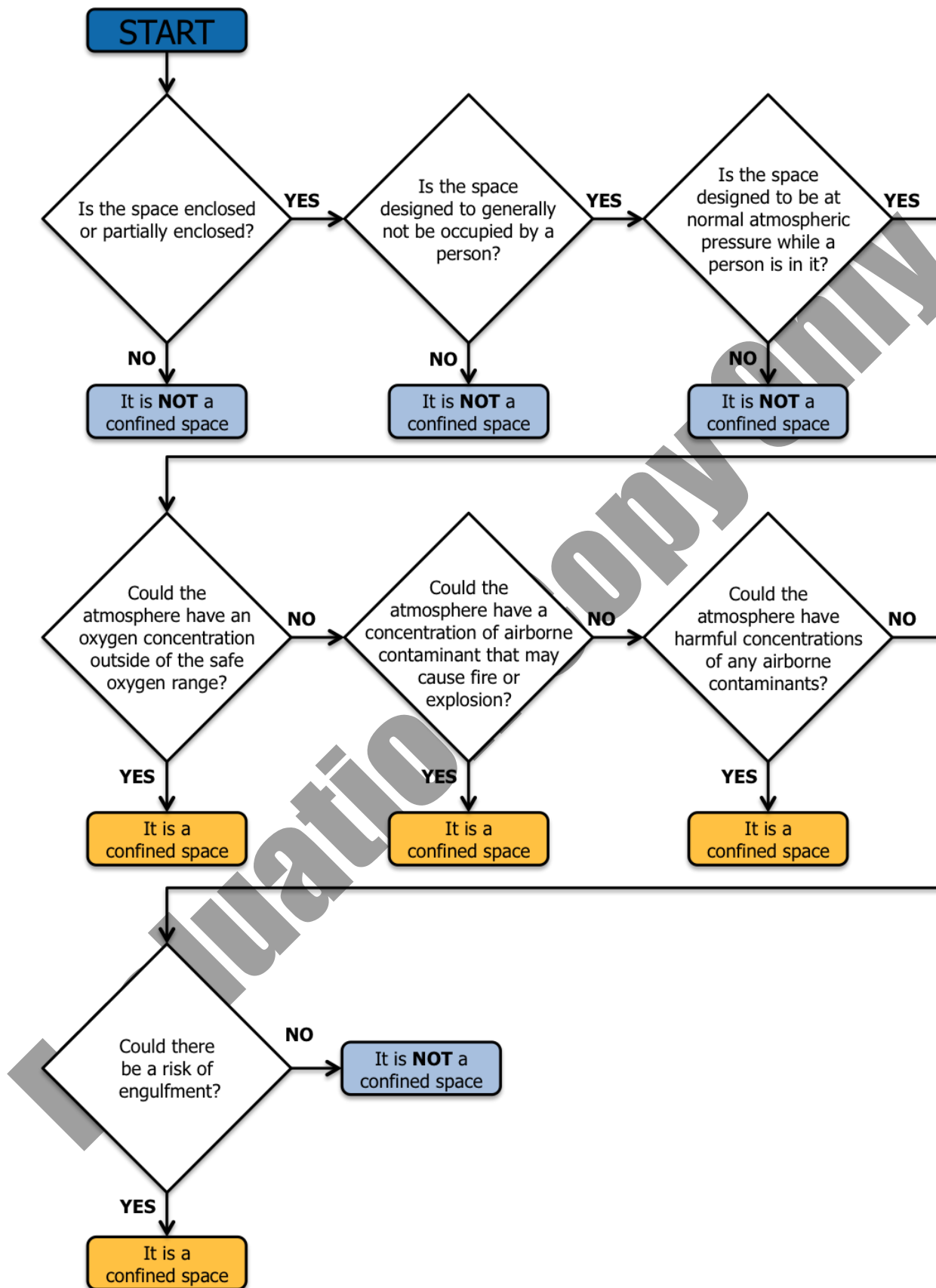
- a) An oxygen concentration outside the safe oxygen range.
- b) A concentration of airborne contaminant that may cause impairment, loss of consciousness or asphyxiation.
- c) A concentration of flammable airborne contaminant that may cause injury from fire or explosion.
- d) Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning.

Confined spaces may include:

- ◆ Culverts and storm water systems.
- ◆ Pipes and live or inactive sewer mains.
- ◆ Shafts, ducts and access chambers.
- ◆ Pits, trenches and gullies.
- ◆ Environmental traps and tanks.
- ◆ Box girders and bridge voids.
- ◆ Storage tanks, process vessels, boilers, pressure vessels, silos and other tank-like compartments.
- ◆ Tank cars.
- ◆ Shipboard spaces entered through a small hatchway or access point such as:
 - ◆ Cargo tanks.
 - ◆ Cellular double bottom tank.
 - ◆ Duct keels.
 - ◆ Ballast.
 - ◆ Oil tanks.
 - ◆ Void spaces (not including dry cargo holds).



You can use a chart like the one shown below to work out if the work area is a confined space.



NOTE: This chart reflects the definition of a confined space as it appears in the Work Health & Safety (WHS) regulations.

1.1.3 Confined Space Entry

According to Australian Standard AS2865 a person is considered to have entered a confined space:

'When a person's head or upper body is within the boundary of the confined space.'

Inserting an arm into a confined space for the purpose of atmospheric testing is not considered to be entry to a confined space.

Anyone entering a confined space must have specific training and a good understanding of Australian Standard AS 2865-2009. Even with a permit, you must have confined space training before entering the space.

1.2 Planning Entry to a Confined Space

Before you enter a confined space, you must be aware of basic safety information relating to confined spaces and you will need a confined spaces entry permit. This permit must conform to the requirements of **AS2865-2009 Confined Spaces** or other appropriate standard.



1.2.1 Regulatory Requirements

When planning entry to a confined space it is essential to be aware of the regulatory frameworks that could impact your activities.

The regulatory frameworks and requirements that you should be familiar with include:

- ◆ Work Health & Safety (WHS) regulations and authorities.
- ◆ Environmental regulations and guidelines.
- ◆ National/state/territory confined space entry regulations.
- ◆ Licence and certification requirements.
- ◆ Organisational requirements and policies relating to the permit control system.
- ◆ All other relevant Australian Standards, codes of practice, regulations, policies and procedures.



This information should be readily available within the policies and procedures for your organisation or your local WHS authority website.

1.2.2 Organisational Policies and Procedures

It is also essential that you understand and are able to follow your organisation's confined space policies and procedures.

This includes all relevant written procedures, work instructions, permit requirements, temporary instructions and relevant industry and government codes and standards.



This may include:

- ◆ Internal permit control systems.
- ◆ Process isolation procedures.
- ◆ Mechanical and electrical isolation procedures.
- ◆ Communication protocols and procedures.
- ◆ Atmospheric testing, monitoring and management procedures.
- ◆ Permit requirements.
- ◆ Risk control measures.
- ◆ All other site or organisational procedures and processes used for confined space activities and tasks.

1.3 Get Your Work Details

You need to be clear about what work you will be doing. Make sure you have everything about the job to apply for a confined spaces permit before you start. This includes what you will be doing, how you will be doing it and what equipment you will be using.

You need to know why you are entering the confined space to identify any dangers and work out the details for a work permit.

There are many reasons why you would need to enter a confined space:

- ◆ Cleaning and removing waste.
- ◆ Repair work, for example welding or cutting.
- ◆ Installing pumps and motors.
- ◆ Painting, sand blasting or applying surface coatings.
- ◆ Reading meters, gauges and dials.
- ◆ Installing, repairing or inspecting telephone, electrical or fibre optic cables.
- ◆ Tapping, coating or testing steam, water or sewage systems.
- ◆ Inspecting plant or equipment.
- ◆ Constructing a confined space, for example an industrial boiler.
- ◆ Rescuing people from a confined space.



1.3.1 Work Method Statements

Many worksites require a Work Method Statement (WMS) before any high risk work can start. A Work Method Statement is a list of steps that outlines how a high risk job will be done and includes any hazards that occur at each step, and what you need to do about them.

These statements can also be known as a Safe Work Method Statement (SWMS), Job Safety Analysis (JSA) or Safe Operating Procedure (SOP).

To fill out a Work Method Statement you need to complete the following steps:

- 1** Break the job down into steps and think about what needs to happen in each one.
- 2** Think about and list any hazards that may exist at each step.
- 3** Work out the best way to deal with the hazards to make the work as safe as possible.
- 4** Work out who is responsible for each step in the job, who is responsible for dealing with the hazards and who is supervising the whole job.
- 5** Make sure the work method statement is explained to everyone and that they clearly understand what they need to do.

1.3.2 Keeping Everyone Safe

Work health and safety (WHS) laws say that all companies and workers need to keep themselves and other people safe while they work. This is called a duty of care.

To keep yourself and other workers safe you need to:

- ◆ Follow your instructions.
- ◆ Follow all workplace rules.
- ◆ Make sure all equipment is safe to use.
- ◆ Carry out your work safely.
- ◆ Report any problems.



You can get this information from:

- ◆ Worksite policies, procedures, bulletins and memos.
- ◆ Federal, state and local regulatory authorities.
- ◆ Australian Standards and legislative requirements relating to work in confined spaces.
- ◆ Instructions, plans, charts, diagrams, maps and engineer's drawings.
- ◆ Signage and labels.
- ◆ Safety Data Sheets (SDS) and manufacturers' instructions.
- ◆ Safe Operating Procedures (SOP)/Job Safety Analysis (JSA)/ Work Method Statements (WMS).



If you think something is dangerous, tell your boss or supervisor as soon as possible.

1.3.2.1 Safety Data Sheets

A Safety Data Sheet (SDS) has important information about a hazardous chemical (which may be hazardous substance and/or dangerous goods) and must include details about:

- ◆ The hazardous substance's product name.
- ◆ The chemical and generic name of certain ingredients.
- ◆ The chemical and physical properties of the hazardous substance.
- ◆ Health hazard information.
- ◆ Precautions for safe use and handling.
- ◆ The manufacturer's or importer's name, Australian address and telephone number.



The SDS gives you information on what to do if there is exposure to the hazardous material, for example if there is a spill, or if you are working with the substance.

Review Questions

1.	Why might a worker need to enter a confined space? List 5 reasons.	<input type="checkbox"/>
1.	Evaluation Copy	
2.		
3.		
4.		
5.		

1.4 Work Permits

A work permit is a document that outlines every part of the job (who, what, where, when, why and how the job will be done) and all of the safety measures that must be taken.

There are a number of jobs that can require a work permit including:



- ◆ Working in a confined space.
- ◆ Working at heights.
- ◆ Cold work/general permit to work – work that WILL NOT generate any source of ignition such as a flame, spark or temperature high enough to ignite flammable material.
- ◆ Hot work – work that WILL generate a source of ignition such as a flame, spark or temperature high enough to ignite flammable material.
- ◆ Excavation – issued for the penetration of any ground surface with mechanical excavating equipment.
- ◆ Operation of plant.
- ◆ Minor repairs.
- ◆ Other special permits such as plumbing/gas/electrical work.

All confined spaces work must be done in line with a confined space work permit.

1.4.1 Work Permit Details

The details in the permit should cover the hazards and hazard controls that have been identified.

A confined space permit should include the following:

- ◆ Location, description and duration of work to be done.
- ◆ Hazards that may be encountered.
- ◆ Atmospheric test and monitoring requirements and results.
- ◆ Hot work.
- ◆ Authorisation for work to be done.
- ◆ Isolation, lock-out and tagging processes.
- ◆ Hazard control measures (for example signs, barriers, ventilation and purging).
- ◆ Personal protective equipment and clothing needed for the job.
- ◆ Size of work crew.
- ◆ Stand-by personnel and emergency response and rescue arrangements.
- ◆ Other requirements determined by a risk assessment and in accordance with the code of practice and AS2865.



Once issued, you will need to check that the details in the work permit match the job including hazards, control measures and equipment.

Changes to work conditions or identifying new hazards can mean the permit has to be cancelled before the work has been finished. The permit may have to be re-issued to address the latest information.

An example Confined Spaces Work Permit can be found in [Appendix A](#).



1.4.1.1 Conditions to be Met

Each permit will show what conditions must be met before activities can start. You must ensure you know and understand what these requirements are before you start activities.



Normally these conditions and requirements will include:

- ◆ Duration of activities.
- ◆ Safety requirements and hazard controls.
- ◆ Emergency response requirements.
- ◆ Tests and monitoring to be done before entering the confined space.
- ◆ Continuous monitoring conditions for while the confined space is occupied.
- ◆ Other organisational specific requirements.

By understanding the requirements of the permit, you are able to meet the requirements.

At all times the permit requirements must be met or the permit will be cancelled.

1.4.1.2 Documented Risk Assessment

In order for the permit to be authorised in the first place a risk assessment will need to have been completed. This will outline any identified hazards or risks and the control strategies that must be in place for the permit work to begin.

It is important that you check this information so that you can prepare for the task properly. You will also need to cross check the details of the risk assessment against the actual physical work area to ensure that nothing has been overlooked in the permit preparation.



Review Questions

2.

What is a work permit?

3.

List 5 details that should be in a confined space work permit.

1.

2.

3.

4.

5.