

MSMPER201

Monitor and Control Work Permits

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

MSMPER201 Monitor and Control Work Permits

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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Evaluation Copy Only

1.1 Introduction

This course is based on the unit of competency **MSMPER201 Monitor and Control Work Permits**.

You will learn about:

- ◆ Identifying and monitoring permit conditions.
- ◆ Controlling work permit systems.
- ◆ Confirming compliance with the permit.
- ◆ Identifying non-compliance and taking action.

In some organisations permits are known as 'clearances'.



1.1.1 Overview

The monitoring and control of work permits may be carried out by the standby person or other appropriately qualified personnel.



During this activity the individual will monitor the work situation for conformance to the permit. The individual will immediately intervene if the parameters of the permit are exceeded or work goes ahead outside the boundaries set by the permit.

The monitoring of the operational conditions in which a permit to work has been issued includes the required activities and functions associated with the production/process of chemical, hydrocarbons, oil, and other process manufactured products.

While this role involves high levels of responsibility it is usually guided by the permit process and may be performed by any competent operator.

1.1.1.1 Purpose of Permits

A permit is used to:

- ◆ Identify the scope of a specific task and where the work will be conducted.
- ◆ Identify hazards and controls associated with the work task (JSEA process).
- ◆ Identify the personnel who have specific responsibilities.
- ◆ Identify the personnel performing the work.
- ◆ Assign responsibility for various tasks.
- ◆ Identify potential issues with other work activities being conducted at the same time through permit review meetings.
- ◆ Identify energy isolations/lockout/tag outs that will be in effect for the work that is being conducted.



1.2 Understand the Work Permit System

The work permit system covers the issue of any and all work permits, and is used by organisations to control worksite situations and tasks involving identified hazards.



1.2.1 Work Permit Responsibilities

There are 4 main levels of responsibility for work permits:

Level of Responsibility	Responsibilities and Duties
1. Permit Authority	<p>This person is responsible for the overall operation of the permit system/procedure and is usually carried out by the Facility/Site/Project Manager.</p> <p>Duties include:</p> <ul style="list-style-type: none"> ◆ Ensuring regular monitoring and auditing of permit procedures occurs, taking appropriate steps based on the results of audits and making recommendations for system improvement. ◆ Authorising personnel involved in the permit process to do their job. ◆ Ensuring all workers are appropriately trained and competent. ◆ Authorising work permits.
2. Area Authority	<p>This person is responsible for the day-to-day management of the work permit process within their area or scope of responsibility. There can be multiple personnel with this role on a site or premises. The role can be assigned to any individual, although it is normally a person in a management position.</p> <p>Duties include:</p> <ul style="list-style-type: none"> ◆ Ensuring appropriate risk assessment has been carried out. ◆ Ensuring appropriate controls are identified for each hazard. ◆ Ensuring control measures are in place and that all workers involved in the task have been fully briefed and understand the task. ◆ Ensuring isolation requirements are adhered to including approving designs, controlling implementation, making sure isolations are in place before a permit is issued and removed after the work is completed. ◆ Ensuring worksite inspections are carried out at all required times. ◆ Ensuring appropriate handovers occur at each shift change, crew change or other change out/over.

Level of Responsibility	Responsibilities and Duties
3. Issuing Authority	<p>This person is responsible for the management and safety of all activities within the designated area. They may be a manager, or assistant to a manager helping to ensure the safe control of work activities. They must have additional training and understanding of safe practices.</p> <p>Duties include:</p> <ul style="list-style-type: none"> ◆ Issuing work permits. ◆ Being on site for the duration of the time any permit they have issued is in operation. ◆ Confirming appropriate hazards and controls have been identified by working closing with the personnel responsible for completing the work. ◆ Confirming hazard controls are applied before allowing work to begin. ◆ Ensuring workers fully understand the task and have been briefed. ◆ Authorising continuation of work where required. ◆ Monitoring permit requirements including work time limits. ◆ Ensuring all personnel operating under the work permit are appropriately trained and competent.
4. Work Team Leader	<p>This person is responsible for carrying out the work governed by the permit.</p> <p>Duties include:</p> <ul style="list-style-type: none"> ◆ Initiating the work permit and identifying hazards and control measures. ◆ Participating in the Risk Assessment. ◆ Holding meeting to ensure all personnel involved in the job understand the scope of work, the hazards and the associated controls. ◆ Ensuring only authorised personnel participate in the work. ◆ Ensuring work is stopped and reassessed when conditions change. ◆ Communicating with appropriate personnel about any issues that arise. ◆ Ensuring agreed supplementary controls are recorded in the work permit. ◆ Ensuring the work completed is all within the scope of the work permit. ◆ Maintaining a record of any issues that occurred during the work to improve work in the future. ◆ Ensuring the worksite is kept in a clean and safe condition at all times. ◆ Ensuring appropriate handovers occur at each shift change, crew change or other change out/over.

1.2.2 Permit Control Systems

Each site will have a permit control system that is based on the tasks and activities being carried out.

You need to understand all aspects of the system that applies to your site. This could include:



- ◆ Types of permits.
- ◆ Frameworks relating to legislation, regulations and/or standards.
- ◆ Roles and responsibilities of concerned parties under the permit system.
- ◆ Equipment which can and cannot be used for different types of permits.
- ◆ Alternative ways of conducting a job.

As someone who monitors and controls permits, you need to understand your organisation's standard procedures and work instructions, and be able to implement them correctly, safely and within appropriate timeframes.

A working knowledge of the procedures used during all hazardous tasks and activities will ensure that you can monitor and control the conditions and requirements on the permit.



1.2.2.1 Permit Conditions

Requirements identified on the permit may include:

- ◆ Testing of atmospheric conditions.
- ◆ Ventilation.
- ◆ Control measures such as isolation, barriers, tag out/lockout signs.
- ◆ Communications.
- ◆ Incident response.

In monitoring and controlling permits it is important to make sure that the work will be carried out by a competent person. A 'competent person' is someone who has, through a combination of training, education or experience, acquired knowledge and skills so they can correctly perform a specified task.



1.2.2.2 Monitor Variables

During the permit process you will need to monitor key variables such as:

- ◆ Types of permit issued.
- ◆ Permit issuing procedures to be used if there are different procedures for different permit types.
- ◆ Protocols for extending the work activities beyond the end of shift.
- ◆ Permit handover procedures.
- ◆ Other appropriate protocols and processes as deemed correct by site conditions.



Review Questions

1.	What are the 4 main levels of responsibility for work permits?	<input type="checkbox"/>
<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>		

2.	What are 3 key variable you may need to monitor during the permit process?	<input type="checkbox"/>
<p>1.</p> <p>2.</p> <p>3.</p>		

1.3 Types of Work Permits

It is important to make sure the right type of permit has been issued for the activities you are monitoring and controlling. When determining the type of permit/s required you will need to take into account the materials, equipment, processes and organisational procedures involved in the activity or situation.

You can then be sure that the correct permit has been issued with the most appropriate conditions and requirements for the work being completed.

You will also be able to monitor the work to check it is being completed in accordance with the permit.

Always refer to your site procedures and safety officers if you need assistance in identifying the correct permit for each situation.



The types of permits and the work they cover include:

- ◆ Excavations, i.e. any pit or trench being dug.
- ◆ Cold work/general permit to work.
- ◆ Increased hazard permits.
- ◆ Electrical permit – for activities involving work with electricity or electrical appliances.
- ◆ Permits covering the use of plant and equipment that may present hazards to operators and the site.
- ◆ Confined spaces.
- ◆ Hot work, i.e. any activities that may generate a spark or situation that could result in ignition of a fire.
- ◆ Vehicle entry permits – used when vehicle access to an area is not standard.
- ◆ Minor works or repairs.
- ◆ Working at heights.
- ◆ Other special permits, e.g. plumbing, gas work.

1.3.1 Working in Confined Spaces



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 are able to correctly identify a confined space in order to ensure the appropriate permit is issued.

The Australian Standard (AS2865) defines a confined space as follows:

'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.'

The new Work Health & Safety (WHS) regulations also define the conditions that determine what a confined space is. You can use the table below to help you ascertain if the space that is to be worked in constitutes a confined space:

Question	Yes or No
1. Is the space enclosed or partially enclosed?	
2. Is the space not designed or intended primarily to be occupied by a person?	
3. Is the space designed or intended to be at normal atmospheric pressure while any person is in the space?	
4. Could the atmosphere have oxygen concentration outside of the safe oxygen range?	
5. Could the atmosphere have a concentration of airborne contaminant that may cause fire or explosion?	
6. Could the atmosphere have harmful concentrations of any airborne contaminants?	
7. Could there be a risk of engulfment?	
A space is classified as confined if you answer YES to all of questions 1-3 AND at least 1 of questions 4-7.	

It is important to note that not all states/territories have implemented the WHS regulations. Always check and adhere to the rules and guidelines that are applicable to the state/territory that you are working in.

Confined spaces may include:

- ◆ Pipes.
- ◆ Silos.
- ◆ Underground sewers.
- ◆ Shafts.
- ◆ Containers.
- ◆ Vats.
- ◆ Tanks.
- ◆ Pits.
- ◆ Ducts.
- ◆ Flues.
- ◆ Chimneys.
- ◆ Pressure vessels.
- ◆ Wet or dry wells.



A person is considered to have entered a confined space when their head or upper body is within the boundary of the confined space.

Anyone entering a confined space must have specific training and a good understanding of Australian Standard AS 2865.

Even with a permit, you must have confined space training before entering the space.

1.3.1.1 Types of Confined Space Work

There are many reasons why a worker may need to enter a confined space:

- ◆ Cleaning and removing waste.
- ◆ Repair work, e.g. welding or cutting.
- ◆ Installing pumps and motors.
- ◆ Painting, sand blasting or applying surface coatings.
- ◆ Reading of meters, gauges and dials.
- ◆ Installing, repairing or inspecting cables, e.g. telephone, electrical or fibre optic.
- ◆ Tapping, coating or testing of piping systems, e.g. steam, water or sewage.
- ◆ Inspection of plant or equipment.
- ◆ Constructing a confined space, e.g. industrial boiler.
- ◆ Rescuing people who are injured or overcome by fumes.





Some specific hazards associated with confined space work include:

- ◆ Atmospheric hazards.
- ◆ Fires and explosions.
- ◆ Heat or smoke.
- ◆ Obstructions.
- ◆ Limited head spaces.
- ◆ Slippery surfaces.

1.3.2 Hot Work

A hot work permit is issued for work that **WILL** generate any source of ignition, such as flame, spark or temperature sufficient to ignite flammable material.

'Hot work' can include tasks such as:

- ◆ Oxy cutting and welding.
- ◆ Brazing and soldering.
- ◆ Arc welding.
- ◆ Repairs and alterations done using heat producing equipment such as blow lamps.
- ◆ Grinding and high speed friction cutting.

If a worker has to undertake welding or any other allied process, they must abide by the requirements outlined in Australian Standard AS1674.1 Safety in welding and allied processes.

This standard covers all hot work activities and must be applied to all hot work in confined spaces.



Some specific hazards associated with hot work include:

- ◆ Manual handling.
- ◆ Heat.
- ◆ Fumes and gases.
- ◆ Shocks, sparks or incorrect wiring.

1.3.3 Working at Heights

Working at heights includes any situation where a worker, or other nearby person, is exposed to a risk of falling (from one level to another) that is likely to cause injury to the worker or person.

Generally this includes work conducted:

- ◆ In or on plant or a structure that is at an elevated level.
- ◆ In or on plant that is being used to gain access to an elevated level.
- ◆ Near an opening through which a person could fall.
- ◆ Near an edge over which a person could fall.
- ◆ On or near a surface through which a person could fall.
- ◆ On or near a slippery, sloping or unstable surface.



Wherever possible, the need to work at heights should be eliminated, however if this option is not reasonably practicable, the Code of Practice 'Managing the Risk of Falls at Workplaces' outlines the steps that should be taken to minimise the risk involved.



Any work that has to be conducted at heights requires adequate training, instruction and the employment of a system of fall protection.

Some specific hazards associated with working at heights include:

- ◆ Slippery surfaces.
- ◆ Sloping surfaces.
- ◆ Inadequate lighting.

1.3.4 Cold Work/General Permit to Work

A cold work or general permit is issued for non-routine hazardous work that **WILL NOT** generate any source of ignition, such as flame, spark or temperature sufficient to ignite flammable material (i.e. **NOT** hot work).

Some examples of these types of work include:

- ◆ High pressure water jetting.
- ◆ Removal of safety guards, handrails, gratings and fixed ladders.
- ◆ Pressure testing (all situations).
- ◆ Work involving spraying of pesticides or insecticides.
- ◆ Chemical cleaning or use of solvents.
- ◆ Handling of hazardous substances (e.g., toxic/corrosive chemicals, asbestos, etc.).
- ◆ Erecting or dismantling scaffolds.
- ◆ Any non-routine and potentially hazardous activity.
- ◆ Any activity requiring specific control measures to confirm safety.



1.3.5 Excavation

Excavation involves the penetration of any ground surface either by hand (e.g. with a shovel or jack hammer) or with excavating machinery (e.g. an excavator or backhoe).



This permit is required to ensure no underground services pose a risk to those working and to preserve the structural integrity of nearby structures.

Generally this kind of permit requires contact with an underground services authority to identify the position of underground utilities.

If excavation will be conducted by mechanical equipment (trenchers, backhoes etc.) a designated spotter may be required under permit conditions to ensure adequate observation to prevent contact with overhead power lines and to observe for any unusual objects or sounds from the excavation. In most cases this person will be dedicated to this role and identified by name in the permit.

Review Questions

3.	List 5 types of work permits.	<input type="checkbox"/>
1.		
2.		
3.		
4.		
5.		