

MSAPMPER300B Issue work permits

Unit Descriptor

This competency unit addresses the need for personnel who issue work permits to understand the permit system, know the limitations of each permit and make decisions regarding the need for and correct use of each permit. This competency unit includes the issue of any and all permits. It applies to the issuing of permits covering a single plant or plant area such as might be an operators scope of responsibility.

Employability Skills

This unit contains employability skills.

Prerequisite Unit(s)

MNMC205A Conduct local risk assessment

Application of the Unit

This competency applies to personnel who are required to issues appropriate permits to work to persons conducting a variety of activities in workplace environments in which hazards exist or specific procedures need to followed and monitored to protect the safety of personnel and the integrity of plant or process. It includes:

- reviewing the conditions under which the work will be undertaken
- examining the site to determining the hazards and safety requirements applicable to the site
- ensuring the appropriate permit(s) is (are) selected depending on the organisations procedures
- determining the appropriate conditions for the permit(s)
- raising, authorising and issuing the necessary permit(s)
- monitoring compliance with the permit conditions
- reporting any indiscretions or violations of permit conditions and where necessary revoking permits
- managing the permit process especially in shift hand overs or extensions to work activities
- withdrawing and signing off work permits on completion of the work and verification that the requirements of the permit have been complied with.

Unit Sector

No sector assigned

ELEMENT

PERFORMANCE CRITERIA

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| 1. Identify need for work permit | 1.1 Understand work permit system.
1.2 Identify and confirm with appropriate personnel the need for work permit.
1.3 Identify the correct permit for each situation. |
| 2. Prepare work site for authorised work | 2.1 Undertake an inspection of the work site.
2.2 Identify OHS and environmental requirements.
2.3 Conduct hazard identification and risk assessment.
2.4 Ensure work site is prepared in accordance specified work permit conditions.
2.5 Check permit conditions and report to appropriate personnel.
2.6 Identify need for and carry out testing in accordance with standard operating procedures. |

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| 3. Raise and issue work permits | 3.1 Ensure conditions are documented on permit.
3.2 Ensure appropriate testing carried out and results documented on permit.
3.3 Determine an appropriate validity period
3.4 Check that permit conditions are met (ie validate permit).
3.5 Complete and authorise permit.
3.6 Ensure recipient(s) is advised of and agrees to abide by the requirements of the permit(s).
3.7 Ensure recipient(s) signs permit(s). |
| 4. Monitor work for compliance | 4.1 Undertake regular site inspections.
4.2 Monitor conditions and work progress and respond appropriately to changing conditions and circumstances.
4.3 Ensure permit currency and revalidate as required.
4.4 Ensure permit is displayed in prominent position.
4.5 Identify and, act on incidences of non-compliance and report promptly to relevant personnel.
4.6 Report any issues which arise with regard to work under the permit in accordance with procedures. |
| 5. Receive end of day report | 5.1 Receive end of day report from permit recipients
5.2 Confirm job progress and status.
5.3 Revalidate/arrange for revalidation of permit as required
5.4 Confirm work area has been left safe
5.5 Handover ongoing permits and status of suspended permits to oncoming shift. |
| 6. Close work permit | 6.1 Inspect job status.
6.2 Check that work undertaken satisfies permit conditions.
6.3 Ensure that work site is ready for a safe return to working conditions.
6.4 Check required returns to work status have been completed.
6.5 Sign off documentation and close permit in accordance with standard operating procedures.
6.6 Communicate work site and process status to relevant personnel. |

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills

Competence includes the ability to select, apply and/or explain:

- appropriate PPE
- Australian Standard AS2865 - Safe working in a confined space
- Australian Standard AS1674.1 Safety in welding and allied processes (covers all hotn work)
- types of permits and what they cover
- hazards associated with each type of permit
- permit control system
- hazards of the area for which permit is being issued
- hazards that may be created by the interactions of the permit, the process and the plant area
- identification of container and goods coding and HAZCHEM markings
- production workflow sequences
- focus of operation of work systems and equipment
- application of relevant agreements, codes of practice and other legislative requirements
- methods of hazard analysis
- hazards of the materials and process and appropriate hazard control procedures, including hierarchy of control
- identification and correct use of equipment, processes and procedures
- selecting appropriate tests and knowing what the tests are for
- conducting and interpreting tests for contaminant gases and other hazards
- testing - types of testing may include:
 - atmospheric, including explosivity, O₂
 - flammability
 - toxicity
 - temperature
 - humidity
 - combustibles' oxygen, enriched or reduced
- estimating ventilation required for making vessels safe (eg for confined space entry, hot work)y including applying the formula for factors such as:
 - space turnover rate,
 - number of turnovers
- challenging/checking performance of monitoring and testing equipment against a standard sample
- supervision/monitoring of contractors.

Some sources of underpinning OHS knowledge include appropriate OHS and Dangerous Goods legislation, Australian Standards and ASCC, State or Territory codes such as:

- NOHSC:1010 - National Standard for Plant
- AS4024.1 Safeguarding of machinery - general principles
- NOHSC: 1003 National exposure standards for atmospheric contaminants in the occupational environment.

The regulatory framework to include:

- OHS
- EPA
- OHS authorities and NOHSC
- licence and certification requirements

- company policy and permit control systems
- other relevant standards.

This unit requires the ability to:

- read and correctly interpret complex P&IDs
- speak clearly and unambiguously in English

explain, describe and verify sometimes complex needs and issues.

Required knowledge

Knowledge and understanding of the materials, equipment and process sufficient to recognise situations requiring different types of work permits and then implement the appropriate action.

Knowledge of the organisation's standard procedures and work instructions and relevant regulatory requirements under which permit systems operate, along with the ability to implement them within appropriate time constraints and in a manner relevant to the job.

Knowledge of the relevant requirements under AS2865.

Writing is required to the level of completing workplace forms and producing reports.

Numeracy is required to the level of being able to correctly differentiate between high and low pressures and temperatures, voltages or masses.

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Codes of practice/ standards

Where reference is made to industry codes of practice, and/or Australian/international standards, the latest version must be used.

Context

This competency covers the issue of any and all work permits. Permits are called clearances by some organisations. The types of permit include:

- cold work
- excavation
- vehicle entry
- minor repairs
- working at heights
- hot work
- confined space
- electrical
- increased hazard
- other relevant permits.

Requirements identified on the permit may include testing of atmospheric conditions, ventilation and control measures such as isolation, barriers, tag out/lockout signs, communications, incident response.

A 'competent person' is a person who has, through a combination of training, education or experience, acquired knowledge and skills enabling that person to correctly perform a specified task.

Safety structures and controls may include automatic plant shut down buttons, cords/lanyards, alarms, barriers, guards, earth leakage devices, tag out/lock out procedures, warning lights.

The work permit system

The work permit system includes:

- types of permits
- legislative/regulatory/standards framework
- roles and responsibilities of parties under the permit system
- equipment which can and cannot be used for types of permit
- alternative ways of conducting a job

Confined space

The Australian Standard definition given for confined space entry is used in this Training Package, viz: AS2865:

an enclosed or partially enclosed space which:

- a. is at atmospheric pressure during occupancy*
- b. is not intended or designed primarily as a place of work*
- c. may have restricted means for entry and exit, and*
- d. may:*

(i) have an atmosphere which contains potentially harmful levels of contaminant

(ii) not have a safe oxygen level

1 cause engulfment.

Examples include but may not be limited to:

- storage tanks, tank cars, process vessels, boilers, pressure vessels, silos and other tank-like compartments
- open-topped spaces such as pits or degreasers
- pipes, sewers, shafts, ducts and similar structures
- shipboard spaces entered through a small hatchway or access point, cargo tanks, cellular double bottom tanks, duct keels, ballast and oil tanks and void spaces (but not including dry cargo holds).

Procedures

All operations are performed in accordance with procedures.

Procedures include all relevant workplace procedures, work instructions, temporary instructions and relevant industry and government codes and standards. These may include:

- OHS
- EPA
- OHS authorities and AASCC
- Australian Standards
- licence requirements
- company policy and permit control systems
- other relevant standards.

Preparation

Preparation of work site includes:

- mechanical, electrical and other energy sources, and process isolations
- de-energising all sources of energy/pressure
- purging of lines
- lock out/tag out procedures
- blinding/blanking lines.

Tools and equipment

This competency includes use of equipment and tools such as:

- writing instruments
- computers and printers
- calculators
- testing equipment.

Hazards

Typical hazards include:

- unsafe conditions developing through failure to conform with the provisions of the permit
- injuries to personnel
- equipment failures
- releases of toxic or noxious substances.

Returns to work status

Returns to work status may include:

- de-isolation
- removal of lockouts/tag outs
- removal of drain covers
- etc.

Problems

Anticipate and solve problems means resolve a wide range of routine and non-routine problems, using product and process knowledge to develop solutions to problems which do not have a known solution/a solution recorded in the procedures.

Typical process and product problems may include:

- selection of the wrong permit
- incorrect information being supplied with the permit
- errors being made in the completion of permit data
- failure to correctly correspond to the requirements of the permit
- failure to seek clarification when anomalies occur.

Variables

Key variables to be monitored include:

- types of permits being issued
- permit issuing procedures
- permit protocols for extended work activities beyond the end of shift
- permit hand-over procedures.

Health, safety and environment (HSE)

All operations to which this unit applies are subject to stringent health, safety and environment requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment of this unit should demonstrate competence on actual plant and equipment in a work environment.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Competence must be demonstrated in the ability to distinguish between situations requiring the major types of permits and to list the major requirements of each type of permit.

It is essential that competence is demonstrated in the knowledge and skills defined in this unit. These may include the ability to:

- correctly identify situations requiring work permits
- identify and apply legislative requirements, relevant standards and codes of practice (which may be incorporated in the organisation's procedures) to the issuing of work permits
- list the requirements of each type of permit
- plan own work process within workplace procedures and explain the reasons for the steps in the process.

Consistent performance should be demonstrated. For example, look to see that:

- correct permit issued
- hazards are identified and controlled in the permit by applying the hierarchy of control
- required personal protective equipment (PPE) is specified
- problems are anticipated
- problems are efficiently resolved.

These aspects may be best assessed using a range of scenarios/case studies/what ifs as the stimulus with a walk through forming part of the response. These assessment activities should include a range of problems, including new or unusual situations which may have been generated from the past incident history of the plant, incidents on similar plants around the world, hazard analysis activities and similar sources.

Context of and specific resources for assessment

Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria and skills and knowledge. A holistic approach should be taken to the assessment.

Competence in this unit may be assessed:

- by use of a suitable simulation and/or a range of case studies/scenarios. Simulations should be based on the actual plant and will include walk throughs of the relevant competency components
- through questioning and the use of "what if" scenarios both on the plant and off the plant.
- by a combination of these techniques.

In all cases it is expected that practical assessment will be combined with targeted questioning to assess the underpinning knowledge and theoretical assessment will be combined with appropriate practical/simulation or similar assessment.

Assessors need to be aware of any cultural issues that may affect responses to questions.

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.

This section should be read in conjunction with the Range Statement for this unit of competency. Resources required include suitable access to an operating plant or equipment that allows for appropriate and realistic simulation. A bank of case studies/scenarios and questions will also be required to the extent that they form part of the assessment method.

Questioning may take place either in the workplace, or in an adjacent, quiet facility such as an office or lunchroom. No other special resources are required.

Method of assessment

Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.

Guidance information for assessment

Assessment processes and techniques must be culturally appropriate and appropriate to the oracy, language and literacy capacity of the assessee and the work being performed.