



Australian Government

UEGNSG142A Conduct isolations under the permit to work system for gas industry work sites

Release 1

UEGNSG142A Conduct isolations under the permit to work system for gas industry work sites

Modification History

This unit replaces UEG11 unit UEGNSG112B Conduct isolation procedures for permit to work system for a gas industry work site

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This unit covers the planning and carrying out of isolations under the permit to work system for a gas industry work site, in accordance with relevant legislation, standards, codes and established procedures.

Application of the Unit

Application of the Unit 2)

This competency standard shall apply to any basic and safe work site where Gas Industry operations occur, subject to all Workplace Health and Safety (WHS)/Occupational Health and Safety (OHS) and duty of care requirements being met for the workplace.

This unit is intended as an AQF 3 competency for workers in the gas industry. It is suitable for employment-based programs under an approved contract of training.

Licensing/Regulatory Information

License to practice 3)

During Training:

License to practice

3)

Competency development activities are subject to regulations directly related to licensing, workplace health and safety/occupational health and safety and where applicable contracts of training.

In the workplace:

The application of the skills and knowledge described in this unit require a license to practice in the workplace where work is carried out on electrical equipment or installations which are designed to operate at voltages greater than 50 V a.c. or 120 V d.c.

The skills and knowledge described in this unit are also subject to licence regulation directly related to Workplace Health and Safety (WHS)/ Occupational Health and Safety (OHS), gas/electricity/water industry safety and compliance, industrial relations, environmental protection, telecommunications, anti- discrimination and training.

Note:

Other conditions may apply under State and Territory legislative and regulatory requirements, for example:

1. Compliance with permits may be required in various jurisdictions and typically relates to the operation of plant, machinery and equipment such as elevating work platforms, powder operated fixing tools, power operated tools, vehicles, road signage and traffic control, lifting equipment.

Permits may also be required for some work environments such as hazardous areas, confined spaces, working aloft, near live electrical devices, site rehabilitation.

2. Compliance may be required in various jurisdictions relating to currency in First Aid, hazardous areas, confined space, lifting and risk safety measures

Commonwealth, State/Territory or Local Government legislation and regulations may exist that limit the age at which a person can operate certain equipment. Other conditions may apply to this competency under State and Territory legislative and regulatory requirements

Pre-Requisites

Prerequisite Unit(s) 4)

Competencies 4.1)

Granting of competency in this unit shall be made only after competency in the following unit(s) has/have been confirmed:

- UEGNSG005A Prepare to work in the Australian gas industry
- MSAPMOHS21 7A Gas test atmospheres
- UEGNSG132A Carry out basic work activities in a gas industry work environment
- UEGNSG140A Apply environmental policies and procedures in the utilities industry
- UEGNSG134A Establish a utilities infrastructure work site
- UEGNSG141A Apply Occupational Health and Safety regulations, codes and practices in the gas industry

Literacy and numeracy skills 4.2)

Participants are best equipped to achieve this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading 3 Writing 3 Numeracy 3

Employability Skills Information

Employability Skills 5)

This unit contains Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability

Employability Skills 5)

Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

Elements and Performance Criteria Pre-Content

6) Elements describe the essential outcomes of a competency standard unit *Performance Criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the Evidence Guide.*

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1 Plan and prepare for isolation,

- 1.1 WHS and environmental measures for the site are identified, obtained and understood.
- 1.2 Work requirements for the work are interpreted from plans, specifications and instructions
- 1.3 Relevant requirements and established procedures for the work are discussed with relevant persons to establish and confirm the work schedule and respective responsibilities.
- 1.4 WHS, environmental and sustainable energy policies and procedures are received and confirmed.
- 1.5 Hazards are identified, WHS risks are assessed and control measures are prioritised, implemented and monitored according to established procedures.
- 1.6 Scope of the responsibility under the relevant work permit and/or relevant notification is received and confirmed to access, isolate/de-energise systems and perform work according to requirements and established procedures

ELEMENT

PERFORMANCE CRITERIA

- | | | |
|----------------------------|------|---|
| | 1.7 | Isolation points are identified and communicated to the work party. |
| | 1.8 | Resources including persons and equipment, tools and personal protective equipment needed to carry out the work are identified, scheduled, obtained and checked for correct operation and safety |
| | 1.9 | Resources including persons and equipment required are identified, scheduled, coordinated and confirmed |
| | 1.10 | Appropriate persons are consulted to ensure the work is coordinated effectively with others involved |
| | 1.9 | Third party issues are referred to appropriate persons in accordance with established procedures, for example "low voltage electrical work" |
| | 1.10 | Persons participating in the work, including plant operators and contractors are fully briefed and respective responsibilities coordinated and authorised by permits to work where applicable in accordance with established procedures |
| | 1.11 | Site preparation, safety plan and the work schedule are confirmed in accordance with established procedures. |
| 2 Conduct isolation | 2.1 | WHS/OHS, environmental and sustainable energy policies and schedule of work and standard operating procedures for carrying out the work are followed. |
| | 2.2 | Appropriate materials, tools, equipment PPE and measuring devices are selected and used correctly and safely |
| | 2.3 | Work is carried out efficiently, to the required standard without waste of materials or damage to apparatus, circuits, the surrounding environment or services and using sustainable energy principles. |

ELEMENT	PERFORMANCE CRITERIA
	2.4 Hazard warnings and safety signs are recognised and WHS risks and incidents are reported to the immediate authorised persons for directions according to established procedures
	2.5 Isolations are completed, tagged, (locked out) and documented on work permit in accordance with established procedures and requirements.
	2.6 Solutions to non-routine problems are identified and actioned, according to requirements
	2.7 Ongoing checks of quality of the work are undertaken in accordance with established procedures
3 Conduct de-isolation and restoration	3.1 WHS risk control work completion measures and procedures are followed.
	3.2 De-isolations and restoration are performed, tags removed and results recorded in accordance with established procedures
	3.3 Tools, equipment and any surplus resources and materials are cleaned, checked and securely stored.
	3.4 De-isolations are confirmed with others involved in, or affected by the work in accordance with enterprise procedures
	3.3 Work completion documentation including relevant permits are completed accurately and provided to appropriate persons in accordance with established procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

7) *This describes the skills and knowledge and their level, required for this unit.*

Evidence shall show that knowledge has been acquired of safe working practices in conducting isolations under the permit to work system for a gas industry work sites.

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies. The extent of the required skills and knowledge required is provided below. It forms an integral part of this unit.

KS01-G142A Gas industry worksite isolations

Evidence shall show an understanding of planning and carrying out of isolations under the permit to work system for a gas industry work site in accordance with relevant legislation, standards, codes and established procedures to an extent indicated by the following aspects:

T1. Relevant legislation, Australian Standards, codes, regulations and procedures requirements for and use of qualified specialists

- establishing the appropriate worksite

T2. Safety requirements

- hazards
- risk assessment
- control measures

T3. Gas industry drawings

T4. Permit to Work requirements and procedures

T5. Isolation requirements and procedures including:

- points of isolations to ensure a safe work area
- isolation methods including valves, circuit breakers, pneumatics, utility gas
- communication with the work party
- document, tag and lock-out identified isolation points

T6. De-isolation at the end of each job

- requirements
- procedures
- document any remaining points of isolation

Evidence Guide

EVIDENCE GUIDE

8) The Evidence Guide forms an integral part of this Unit and shall be used in conjunction with all components parts of this unit and performed in accordance with the Assessment Guidelines of this Training Package.

Overview of Assessment 8.1)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the Industry's preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accord with industry and regulatory policy in this regard.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Hence, sources of evidence need to be 'rich' in nature so as to minimise error in judgment.

Activities associated with normal every day work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practised. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included in the Assessment Guidelines of this Training Package.

**Critical aspects 8.2)
of evidence
required to
demonstrate
competency in
this unit**

Before the critical aspects of evidence are considered all prerequisites shall be met.

Evidence for competence in this unit shall be considered holistically. Each element and associated Performance Criteria shall be demonstrated on at least two occasions in accordance with the 'Assessment Guidelines — UEG11'. Evidence shall also comprise:

- A representative body of Performance Criteria demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:
 - Implement Occupational Health and Safety workplace procedures and practices including the use of risk control measures as specified in the Performance Criteria and range
 - Apply sustainable energy principles and practices as specified in the Performance Criteria and range
 - Demonstrate an understanding of the required knowledge and skills as described in this unit to such an extent that the learner's performance outcome is reported in accordance with the preferred approach; namely a percentile graded result, where required by the regulated environment
 - Demonstrate an appropriate level of employability skills
 - Conduct work observing the relevant Anti-discrimination legislation, regulations, policies and workplace procedures
- Demonstrate performance across a representative range of contexts from the prescribed items below:
 - Plan and carry out of isolations under the permit to work system for a gas industry work site in accordance with relevant legislation, code, regulations and procedures as described in 9.) Range Statement and including:

Range of tools/equipment/procedures/workplace
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Group No	The minimum number of items on which skill is to be demonstrated	Item List
A	All	<ul style="list-style-type: none"> • OHS legislation • Enterprise safety procedures, site safety and emergency procedures
B	All	<ul style="list-style-type: none"> • Risk management • Planning skills • Communication skills • Problem solving skills
C	All	Isolate a range of energy sources including: <ul style="list-style-type: none"> • Gas • Electricity • Pneumatics • Mechanical energy.
D	At least one occasion	Deal with an unplanned event by drawing on required knowledge and skills to provide appropriate solutions incorporated in the holistic assessment with the above listed items

Context of and specific resources for assessment 8.3)

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

- OHS policy and work procedures and instructions.
- Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed by this Unit
- Appropriate environmental regulation and work practices.
- Appropriate organisational requirements.
- Appropriate work environment, equipment and tools.

In addition to the resources listed above, in Context of and specific resources for assessment, evidence should show demonstrated competency of conducting isolations procedures for permit to work system for a Gas Industry work site

Assessment of this competency must also be undertaken in either an actual workplace or under a simulated work environment. Assessment must also integrate the employability skills in section 3.1 of this competency standard.

Method of assessment

8.4)

This Unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.

Note: Competent performance with inherent safe working practices is expected in the Industry to which this Unit applies. This requires that the specified Knowledge and Skills are assessed in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the required Knowledge and Skills described in this unit.

Concurrent assessment and relationship with other units

8.5)

There are no recommended concurrent assessments with this unit

Range Statement

RANGE STATEMENT

9) This relates to the competency standard unit as a whole providing the range of contexts and conditions to which the Performance Criteria apply. It allows for different work environments and situations that will affect performance.

This Unit shall be demonstrated in relation to conducting isolations under the permit to work system for a Gas Industry work site.

The following constants and variables included in the element/Performance Criteria in this unit are fully described in the Definitions Section of this volume and form an integral part of the Range Statement of this unit:

- Strategies
- Reference information
- Communication
- Documentation (5)
- Preparation and implementation strategies

Unit Sector(s)

Gas industry

Competency Field

Competency Field 11)

Cross discipline