



Australian Government

**UEGNSG132A Carry out basic work
activities in a gas industry work
environment**

Release 1

UEGNSG132A Carry out basic work activities in a gas industry work environment

Modification History

This unit is a revised version of the UEG11 unit UEGNSG102B Carry out work activities in a utilities industry work environment.

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This unit covers basic work activities carried out on a gas industry work site in accordance with relevant legislation, standards, codes and established procedures.

It encompasses following procedures to correctly and safely carry out the work using appropriate materials, tools, and measuring devices.

Application of the Unit

Application of the Unit 2)

This competency standard shall apply to any safe workplace 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 2 entry level competency for new entrants in the gas industry. It is suitable for pre-employment and employment-based programs under an approved contract of training.

Licensing/Regulatory Information

License to practice 3)

During Training:

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 skills and knowledge described in this unit are not subject to licence regulation other than those directly related to Workplace Health and Safety (WHS)/ Occupational Health and Safety (OHS), gas industry safety and compliance, industrial relations, environmental protection, telecommunications, anti-discrimination and training.

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:

UEGNSG141A Apply Workplace Health and Safety regulations, codes and practices in the gas industry

UEGNSG005A Prepare to work 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
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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 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 Prepare to carry out basic work activities**

- 1.1 WHS/OHS, environmental and sustainable energy measures, policies and procedures relevant for the workplace are identified, accessed and understood.
- 1.2 Relevant requirements and established procedures for the workplace are provided and

ELEMENT**PERFORMANCE CRITERIA**

		discussed with relevant persons to establish and confirm the work schedule.
	1.3	Hazards are identified and reported to relevant persons to assess the risks and implement control measures according to established procedures.
	1.4	Scope of work is received and confirmed with relevant persons according to requirements and established procedures
	1.5	Appropriate persons are consulted to ensure the work is carried out effectively with others.
	1.6	Tools, equipment and personal protective equipment needed to carry out the work are identified, obtained and checked for correct operation and safety.
	1.7	Materials, plans, diagrams, drawing and resources required for the work are received in accordance with established routines and procedures.
	1.8	Workplace preparation, safety plan and the work schedule are confirmed in accordance with established procedures.
2 Carry out basic work activities	2.1	WHS/OHS and risk control measures, schedule of work and standard operating procedures for carrying out the work are followed.
	2.2	Machines/plants/equipment are confirmed as being safe where necessary in strict accordance with WHS/OHS requirements and procedures.
	2.3	Appropriate materials, tools, equipment and measuring devices are selected and used correctly and safely.
	2.4	Work is carried out efficiently, to the required quality standard without waste of materials or damage to apparatus, equipment, the surrounding environment or services and using sustainable energy principles.
	2.5	Any WHS/OHS risks and incidents are reported

ELEMENT**PERFORMANCE CRITERIA**

- to the immediate authorised persons at the workplace for directions according to established procedures
- 2.6 Procedures for referring non-routine events to immediate supervisor for directions are followed.
- 2.7 Routine quality and safety checks are carried out in accordance with work instructions.
- 3 Check the results of the completed work**
- 3.1 WHS/OHS risk control work completion measures and procedures are followed.
- 3.2 Workplace is tidied, re-instated and made safe in accordance with established procedures.
- 3.3 Tools, equipment and measuring devices are cleaned and securely stored.
- 3.4 Appropriate persons are notified of work completion according to established procedures
- 3.5 Relevant work documentation is completed accurately and provided to appropriate persons in accordance with established procedures

Required Skills and Knowledge

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

Evidence shall show that knowledge has been acquired of safe working practices for carrying out work in a gas industry environment.

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 is provided below. It forms an integral part of this unit.

KS01-G132 Work in a gas industry environment

A

Evidence shall show an understanding of the basic work activities carried out at a gas industry workplace in accordance with relevant legislation, standards, codes and established procedures to an extent indicated by the following aspects:

T1. Basic gas industry calculations relevant to the work activities which may include volumes, area, pressures and measurements.

T2. Basic graphs and tables interpretation

T3. Overview of basic problem solving processes

T4. Gas industry equipment/tools/measurement devices

- identification, selection and use of appropriate equipment/tools measurement devices for the relevant work activities
- dangers and precautions required when using equipment/tools/measurement devices in a gas industry environment

T5. Industry Personal Protection Equipment (PPE)

- requirements
- types and applications
- checking,
- maintaining
- storing
- correct use

T6. Overview of job specifications and standard operating procedures (SOP)

- types and examples
- following instructions
- working within SOPS

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 Workplace Health and Safety/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 skills and knowledge 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:
 - Carry out basic work activities in a gas industry work environment as described in 9.) Range Statement and including:

Range of Tools/Equipment/Procedures/Workplace		
Group No	The Minimum number of items on which	Item List

	skill is to be demonstrated	
A – WHS/O HS Procedures	All	Participate in: <ul style="list-style-type: none"> • Hazard Identification • Risk Assessment • Implement Control Measures
B – Tools/ Equipment	At Least 5	<ul style="list-style-type: none"> • Measurement Devices • Digging Tools • Probes • Lighting Equipment • Service Locators • Pneumatic Tools • Hand Tools • Power Tools • Metallic Welding equipment • Polyethylene welding equipment • Mobile plant • Fixed plant • Plant controls • Pipeline controls • Tanks • Cylinder filling scales • Dispenser guns • Load points • Compressors • Pumps, valves • Gas detectors • PPE • Barricades • Signage • Communication devices • Human machine interfaces
C – Workplace Procedures	At least 6	<ul style="list-style-type: none"> • Utilities industries calculations • Prestart checks, • Work in accordance with Permit to work, • Conduct basic risk

		assessment <ul style="list-style-type: none"> • Utilise and participate in JSA, • Work in accordance with work authorisation, • Complete task documentation. • Obtain and follow organisational procedures, • Follow manufacturer's instructions.
D – Unplanned events	On at least one occasion	Respond to an unplanned event by drawing on required skills and knowledge 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:

- WHS/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.

These should be part of the formal learning/assessment environment.

Assessment of this competency must also be undertaken in either an actual workplace or under a simulated work environment.

Note:

Where simulation is considered a suitable strategy for assessment, conditions must be authentic and as far as possible reproduce and

replicate the workplace and be consistent with the approved industry simulation policy.

The resources used for assessment should reflect current industry practices in relation to locating, proving and protecting utility assets.

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 Required Skills and Knowledge 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 Skills and Knowledge described in this unit.

Concurrent assessment and relationship with other units

8.5)

There are no recommended concurrent assessments with this unit, however in some cases efficiencies may be gained in terms of learning and assessment effort being concurrently managed with allied Units where listed.

And/or with the following units of competency if delivered in a Certificate II qualification:

- | | |
|------------|---|
| UEGNSG141A | Apply Workplace Health and Safety regulations codes and practices in the gas industry |
| UEGNSG140A | Apply environmental policies and procedures in the utilities industry |
| UEGNSG134B | Establish a utilities infrastructure work site |

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 carrying out basic work in a gas industry environment, which includes:

- Interpreting drawings, diagrams, schedules, procedures and manuals.
- Assembly and disassembly of mechanical components
- Monitoring pressures and flows
- Safe guarding an asset
- Sourcing and checking materials, equipment and tools on the job
- Selection and use of materials, tools, measurement devices and personal protection equipment.

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:

- OHS policies and procedures
- Tools and equipment
- Appropriate persons
- Established procedures and requirements
- Legislation
- Safety Equipment
- Personal Protective Equipment
- Emergency and Hazardous Work Situations

Unit Sector(s)

Not applicable.

Competency Field

Competency Field 11)

Utilities