



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **UEGNSG003A Locate, prove and protect gas distribution assets**

**Release: 1**

## UEGNSG003A Locate, prove and protect gas distribution assets

### Modification History

Not applicable.

### Unit Descriptor

#### Unit Descriptor

#### 1) Scope:

##### 1.1) Descriptor

This competency standard unit is for locating, proving and protecting gas distribution assets. Holders of this competency standard unit will be competent in using gas industry tools and equipment and following relevant gas industry regulation standards, codes of practice and standard operating procedures to locate, prove and protect gas distribution assets from damage, to ensure there is no loss of life, injury or loss of service as a result of work conducted on or near a gas distribution assets. The competency standard unit also includes the relevant occupational health and safety requirements and the relevant knowledge of excavation methods utilised in accessing underground utilities industry assets. Communication techniques for dealing with a variety of stakeholders is also required for this competency standard unit as is completing the required regulatory and company records and documentation.

Note: this competency standard unit does not include the supervision of third party works near a gas distribution asset.

### 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. It could also apply, where applicable to other workplaces in the electricity supply industry (transmission and distribution and generation), the electrotechnology industry and the water industry, subject to all Occupational Health and Safety and duty of care

requirements being met for the workplace.

## Licensing/Regulatory Information

### License to practice 3)

The skills and knowledge described in this unit are not subject to licence regulation other than those directly related to Occupational Health and Safety, gas/electricity/water 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.

## Pre-Requisites

### Prerequisite Unit(s) 4)

### Competencies 4.1)

Nil

### 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

**Employability Skills 5)**

This competency standard shall apply to any basic and safe work site where Gas Industry operations occur. It could also apply, where applicable to other workplaces in the electricity supply industry (transmission and distribution and generation), the electrotechnology industry and the water industry, subject to all Occupational Health and Safety and duty of care requirements being met for the workplace.

**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**

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1 Prepare to locate, prove and protect gas distribution assets	1.1 Instructions for the preparation of the work activity are received and confirmed to ensure clear understanding
	1.2 OHS, environmental and sustainable energy policies and procedures are received and confirmed to ensure they are understood as to be applied in the carrying out of the work
	1.3 Equipment, tools and personal protective equipment needed to locate, prove and protect gas distribution assets are identified, scheduled and checked to ensure they work correctly as intended and are safe to use in accordance with established procedures
	1.4 Appropriate persons are consulted to ensure the work is coordinated effectively with others involved
	1.5 Resources and materials needed to locate, prove

ELEMENT	PERFORMANCE CRITERIA
	and protect gas distribution assets are confirmed, scheduled and obtained in accordance with established procedures
	1.6 Schedule of work including practices for working safely are confirmed in accordance with established procedures
2 Carry out the location, proving and protecting of gas distribution assets	2.1 OHS policies and procedures and safe work practices required for the locating, proving and protection of gas distribution assets are followed to eliminate or minimise incidents and hazards
	2.2 Further instructions are sought from appropriate persons for unplanned events or conditions occurring
	2.3 Standard operating procedures are followed effectively and the appropriate tools are used correctly to locate and prove the location of the gas distribution assets
	2.4 Gas distribution asset location is clearly marked
	2.5 Effective communication occurs with third parties prior to undertaking activities to ensure the protection of the gas distribution asset
	2.6 Schedule of work is regularly checked and followed to ensure work is completed in an agreed time, to a quality standard and with a minimum of waste
3 Completion of relevant documentation for locating, proving and protecting gas distribution assets is undertaken	3.1 Appropriate persons are notified of completion of the work and provided with the location and proving of assets report and documentation
	3.2 Equipment and tools and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

8) This describes the essential 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 activities in a utilities industry work environment.

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies.

### KS01-G003A Gas distribution assets

#### G 2.1.20 Customer relations

Evidence shall show an understanding of the requirements for providing good customer relations to Gas Industry stakeholders, indicated by the following:

- Notify stakeholders of activities
- Communicate with stakeholders within scope of responsibilities
- Refer stakeholders to appropriate parties
- Demonstrate understanding of ring fencing requirements (if applicable)
- Keep the customer informed on job progress
- Provide good customer relations

#### G 2.1.26 Communicate in the workplace

Evidence shall show an understanding and ability to communicate effectively in a Gas Industry work team indicated by the following:

- Effective use oral and written communications methods to achieve work related outcomes and solutions.
- Effectively receive, interpret and respond to workplace information and instructions
- Effectively convey and report work related information to fellow workers and customers
- Interact with fellow workers in a socially and culturally appropriate manner

#### G 2.2.5 Read and interpret specifications

Evidence shall show an ability to read and interpret specifications found in drawings and procedures used in a Gas Industry workplace, indicated by the following:

- Interpret specifications including material types and units of measure
- Interpret gas specifications such as pressure ratings and class of pipe and fittings
- Understand the need to use only approved/specified materials

#### G 2.2.33 Locate utilities and service

Evidence shall show an understanding and an ability to locate services, indicated by the following:

- Identification of relevant authorities or enterprises to contact regarding the location of other utilities services (gas, water, electricity, telecommunication, sewerage and stormwater)
- Read and interpret plans and drawings to identify the location of utilities and services
- Identification of utilities and services conduits and cables
- Correct use of electronic and manual service locators
- Apply hand excavation as required for the purposes of locating utilities and services

#### G 2.2.45 Read and Interpret Utilities Drawings and Diagrams

Evidence shall show a demonstrated ability to correctly identify, interpret and use drawings in Gas Industry workplaces, indicated by the following:

- Identify a range of plans and drawings typically used in the Gas Industry
- Identify the purpose and application of a range of drawings
- Identify commonly used symbols and abbreviations
- Read and interpret scales and legends
- Identify dimensions and orientations
- Identify accessibility of work site in relation to roadways
- Identify underground and overhead utilities and services such as gas, water, electricity supply and telecommunications
- Identify structures
- Identify key features from sectional details and elevations
- Interpret horizontal and vertical measurements

- Apply drawings and diagrams in a three dimensional environment



## Evidence Guide

### EVIDENCE GUIDE

9) 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

##### 9.1)

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 of evidence 9.2)

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 essential knowledge and associated 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 skills enabling employment
  - 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:

<b>Range of tools/equipment/procedures/workplace</b>		
<b>Group No</b>	<b>The minimum number of items on which skill is to be demonstrated</b>	<b>Item List</b>
A	All	Interpret alignment sheets, maps, technical drawings and symbols Service locators

		<p>Traffic barricades</p> <p>Correctly interpret plans, drawings and maps</p> <p>Obtain procedures and/or work instructions</p> <p>Correctly interpret instructions</p> <p>Advise stakeholders of upcoming work</p> <p>Advising third parties on work permit requirements</p> <p>Perform service location in the area</p> <p>Correct use of PPE required for locating services</p> <p>The use of traffic control management for own activities where appropriate</p> <p>Relevant OHS legislation, regulations, codes of practice, policies and procedures are applied</p> <p>Apply basic planning skills</p>
G	At least one occasion	Deal with an unplanned event by drawing on essential knowledge and associated skills to provide appropriate solutions incorporated in the holistic assessment with the above listed items

**Context of and specific resources for assessment 9.3)**

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 in locating, proving and protecting gas distribution assets.

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

**Method of assessment**

**9.4)**

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 Essential Knowledge and Associated 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 Essential Knowledge and Associated Skills described in this unit.

**Concurrent assessment and relationship with other units**

**9.5)**

There are no recommended concurrent assessments with this unit.

## Range Statement

### RANGE STATEMENT

**10)** 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/may be demonstrated in relation to carrying out work activities on Gas distribution assets.

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:

Legislation (2)

Safety equipment (2)

Emergency and hazardous work situations (2)

Established procedures and requirements

Personal Protective equipment

### Unit Sector(s)

Not applicable.

### Competency Field

**Competency Field**            **11)**

General Industry