



**Australian Government**

# **UEGNSG218A Carry out surveillance on gas distribution assets**

**Release 1**

# UEGNSG218A Carry out surveillance on gas distribution assets

## Modification History

This unit is a revised version of the UEG11 unit UEGNSG208B Gas distribution pipeline surveillance

## Unit Descriptor

### Unit Descriptor

#### 1) Scope:

##### 1.1) Descriptor

This unit covers carrying out surveillance on gas distribution assets in accordance with relevant legislation, standards, codes and established procedures.

It encompasses the areas to be monitored for security and condition; third party areas; system's pipe work; structures; fittings; equipment; organisational and statutory requirements and recording and reporting.

Note: Aerial surveillance is not covered by this unit, but UEGNSG315B

## Application of the Unit

### Application of the Unit 2)

This competency standard shall apply to gas distribution assets. It is 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 new and existing 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:

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

#### 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/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 limits the age of those who can operate certain equipment.

## 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 Occupational Health and Safety regulations, codes and practices in the workplace |
| UEGNSG005A | Prepare to work in the Australian gas industry   |
| UEGNSG140A | Apply environmental policies and procedures in the utilities 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 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 surveillance on gas distribution assets**

- 1.1      WHS/OHS and environmental measures for the site are identified, obtained and understood.
- 1.2      Relevant requirements and established procedures for the work are discussed with

**ELEMENT****PERFORMANCE CRITERIA**

- relevant persons to establish and confirm the work schedule.
- 1.3 WHS/OHS, environmental and sustainable energy policies and procedures are obtained and confirmed.
- 1.4 Work is prioritised and sequenced following consultation with others for completion within acceptable timeframes and in accordance with established procedures and surveillance KPIs
- 1.5 Hazards are identified, WHS/OHS risks are assessed and control measures are prioritised, implemented and monitored according to established procedures.
- 1.6 Scope of responsibility under the relevant work authorisation, permit and/or relevant notification is received and confirmed with relevant persons according to established procedures.
- 1.7 Resources including plant, equipment, tools and personal protective equipment required for gas distribution pipeline surveillance work are identified, obtained and checked for correct operation and safety.
- 1.8 Materials, plans, diagrams, drawings and resources required for work are confirmed, scheduled and obtained in accordance with established procedures
- 1.8 Liaison and communication issues with authorised persons, authorities and clients are resolved where necessary
- 1.9 Persons participating in the work are fully briefed and respective responsibilities confirmed in accordance with established procedures
- 1.10 Site preparation, safety plan and the work schedule are confirmed in accordance with established procedures.

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
<b>2 Carry out surveillance on gas distribution assets</b>	<p>2.1 WHS/OHS risk control measures, schedule of work and standard operation procedures for carrying out the work are followed</p> <p>2.2 Appropriate materials, tools, equipment and measuring devices are selected and used correctly and safely.</p> <p>2.3 Dealings with customers are consistent with standard operating procedures and the special needs of customers are identified and considered in targeting client service</p> <p>2.4 The work carried out efficiently, to the required standard without waste of materials or damage to apparatus, equipment, the surrounding environment or services and using sustainable energy principles</p> <p>2.5 Leakages and damaged assets and fittings are recorded in accordance with the work schedule and established procedures</p> <p>2.6 WHS/OHS risks and incidents are reported to the immediate authorised persons for directions according to established procedures</p> <p>2.7 System breaches, faults, non-routine events and the operational condition of the network are identified and reported according to established procedures.</p> <p>2.8 The key issues are identified and required solutions/options are developed, communicated and implemented according to established procedures.</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	2.9 Routine quality checks are carried out in accordance with work instructions
<b>3 Complete work and relevant documentation</b>	3.1 WHS/OHS risk control work completion measures and procedures are followed.
	3.2 Work area is tidied and made safe according to established procedures
	3.3 Tools and equipment are cleaned, checked and securely stored.
	3.4 Appropriate persons are notified of the work completion, non-conformances and proposed solutions/options in accordance with established procedures
	3.5 Surveillance completion documentation is completed accurately and provided to the appropriate personnel in accordance with established procedures.

## Required Skills and Knowledge

### 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 the gas distribution pipeline surveillance investigation of billing exceptions/conditions.

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-G218A Gas assets surveillance**

Evidence shall show an understanding of carrying out surveillance on gas distribution assets in accordance with relevant legislation, standards, codes and established procedures to an extent indicated by the following aspects:

- T1. WHS/OHS and emergency procedures and environmental, cultural and heritage requirements in relation to pipeline surveillance
  - flora, fauna, working outside
- T2. Documentation and communication relevant to pipeline surveillance
- T3. Land holder engagement
- T4. Information gathering techniques
- T5. Pipeline risks managed through surveillance
- T6. Signage
- T7. Third party activities
  - Authorities to stop 3rd party activities.
- T8. Easements and access rights
- T9. Types of assets
  - Pipes and other fittings that need monitoring, i.e. valves, CPS equipment etc.
- T10. Variation in surface condition, vegetation or fencing etc.
- T11. Impediments to access along easements'
- T12. Development encroachment (clearances)



## Evidence Guide

### EVIDENCE GUIDE

8) The Evidence Guide forms an integral part of this Competency Standard 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 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 practiced. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment

instruments are included for Assessors in the Assessment Guidelines of this Training Package.

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

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 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 surveillance on gas distribution assets as described in 9.) Range Statement and including:

<b>Group No</b>	<b>The minimum number of items on which skill is to be demonstrated</b>	<b>Item List</b>
<b>A Preparation procedures</b>	All	<ul style="list-style-type: none"> <li>• Operation of Dial Before You Dig services and how it applies to working or its equivalent near gas assets</li> <li>• Liaison with affected landowners and relevance of property visits</li> <li>• Deteriorating conditions, i.e.</li> </ul>

		visibility, warning signage
<b>B Surveillance procedures</b>	All	<ul style="list-style-type: none"> <li>• Different types of surveillance, i.e. vehicle, foot</li> <li>• Surveillance techniques</li> <li>• Identification of leaks, damaged assets, pipes and fittings and the recording of these in accordance with established procedures</li> <li>• Identifying non-conformances per company surveillance schedules</li> <li>• Recording information</li> </ul>
<b>C Unplanned events</b>	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 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 Competency Standard Unit.
- Appropriate environmental regulation and work practices.
- Appropriate organisational requirements.

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. Assessment must also integrate the employability skills.

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 Competency Standard 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 Competency Standard 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 competency standard units where listed.

- |            |   |
|------------|---|
| UEGNSG141A | Apply Workplace Health and Safety regulations codes and practices in the gas industry |
| UEGNSG132A | Carry out work activities in a gas industry work environment                          |
| UEGNSG133A | Comply with environmental policies and procedures in the utilities industry           |
| BSBFLM312B | Contribute to team effectiveness  |
| BSBFLM303C | Contribute to effective workplace relationships                                       |

## 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 Competency Standard Unit shall be demonstrated in relation to carrying out surveillance on gas distribution assets in accordance with relevant legislation, standards, codes and established procedures. This will include:

- Different types of surveillance, i.e. vehicle, foot etc.
- Liaison with affected landowners and relevance of properties
- Identification and recording non-conformances per company surveillance schedules for example leaks, pressure/flow, damaged assets, pipes and fittings

The following constants and variables included in the Element/Performance Criteria in this unit are fully described in the Definitions Section.

- Areas to be monitored
- Inspection of areas
- System's pipe work
- Structures
- Fittings
- Organisational and statutory requirements
- Recording and reporting

## Unit Sector(s)

Gas Industry

## Competency Field

Competency Field 11)

Distribution.