



Australian Government

UEGNSG342A Maintain pipeline easements

Release 1

UEGNSG342A Maintain pipeline easements

Modification History

This unit replaces UEGNSG302B Maintain pipeline easements

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This unit covers maintaining gas pipeline easements to ensure the easement is secure and effective in accordance with relevant legislation, standards, codes and established procedures.

It encompasses inspecting and maintaining the physical condition of the easement and associated infrastructure (signage, fencing and gates) through vegetation, erosion and encroachment management.

Application of the Unit

Application of the Unit 2)

This competency standard shall apply to any safe work site where utility industry pipeline easements exist, 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 entry level AQF 2 competency for new entrants 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 (WHS)/Occupational Health and Safety (OHS), 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 persons who 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

Prerequisite Unit(s) 4)

- UEGNSG005A Prepare to work in the Australian gas industry
- UEGNSG132A Carry out basic work activities in a gas industry work environment
- UEGNSG140A Apply with 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 Inspect and prepare to maintain pipeline easement	1.1 Work instructions are received and confirmed
	1.2 WHS/OHS and environmental measures for the site are identified, obtained and understood.
	1.3 Topographical and geographical maps are confirmed and relevant requirements and established procedures for the site are discussed with relevant persons to establish and confirm the work schedule.
	1.4 WHS/OHS, environmental and sustainable energy policies and procedures are received and confirmed
	1.5 Easement is inspected and assessed using appropriate mediums and civil activities to determine the maintenance required in accordance with standard operating procedures relevant requirements
	1.6 Suggestions to assist with maintaining pipeline easements are made to others involved in the work
	1.7 Hazards are identified, WHS/OHS risks assessed and control measures are prioritised, implemented and monitored clear according to established procedures

ELEMENT**PERFORMANCE CRITERIA**

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|---|---|
| 1.8 | Scope of responsibility under the relevant work permit/authorization is received and confirmed with relevant persons according to requirements and established procedures |
| 1.9 | Tools, equipment and personal protective equipment required to carry out the work are identified, obtained and checked for operation and safety |
| 1.10 | Materials, plans, diagrams, drawings and resources required for work are confirmed, scheduled and obtained in accordance with established procedures |
| 1.11 | Relevant responsibilities associated with related work safety and emergency procedures for an incident at the worksite are checked confirmed |
| 1.12 | Client issues are referred to appropriate persons in accordance with industry and community standards |
| 1.13 | Site preparation, safety plan and the work schedule are confirmed in accordance with established procedures. |
| 2 Maintain pipeline easement and surrounding environment | 2.1 WHS risk control measures, schedule of work and standard operating procedures for carrying out the work are followed |
| | 2.2 Appropriate materials, tools, equipment and measuring devices are selected and used correctly and safely. |
| | 2.2 Hazardous activities such as lifting, climbing, working in confined spaces, excavations, trenches, or aloft, and use of power tools, techniques and practices are conducted safely in accordance with given instructions and requirements |
| | 2.3 Work area is isolated and made safe and civil activities and maintenance of pipeline easements is carried out in accordance with given |

ELEMENT	PERFORMANCE CRITERIA
	instructions and established procedures
	2.4 Easement maintenance is carried out efficiently in an agreed timeframe and to required standards with a minimum of waste of materials or damage to apparatus, circuits, the surrounding environment or services and using sustainable energy principles
	2.5 WHS/OHS risks and incidents are reported to the immediate authorised persons for directions according to established procedures
	2.6 Procedures for referring non-routine events to the immediate authorised persons for directions are followed
	2.7 Remedial action associated with maintaining pipeline easements are dealt with in accordance with established procedures
	2.8 Ongoing checks of quality of the work are undertaken in accordance with given instructions and established procedures
3 Complete work and relevant documentation	3.1 WHS risk control work completion measures and procedures are followed.
	3.2 Pipeline easement is monitored to ensure pipeline integrity and the work undertaken is checked against work schedule and anomalies reported to authorised persons in accordance with established procedures
	3.2 Work site is rehabilitated, cleaned up and made safe in accordance with established procedures
	3.3 Tools, equipment and any surplus resources and materials are cleaned, checked and securely stored
	3.4 Appropriate persons are notified of work completion according to established procedures
	3.5 Work completion documentation is completed accurately and provided to appropriate persons

ELEMENT

PERFORMANCE CRITERIA

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 for maintaining pipeline easements to perform work in a utilities industry work environment.

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

KS01-G342A Pipeline easement maintenance

Evidence shall show an understanding of inspecting and maintaining pipeline easements in accordance with relevant legislation, standards, codes and established procedures to an extent indicated by the following aspects:

T1. Relevant legislation, regulations, standards and codes

T2. Easement maintenance requirements under AS2885

T3. Easement access

- topographical and geographical maps
- pipeline route and appropriate method for accessing pipeline
- enterprise procedures, plans and drawings

T4. Relevant safety hazards and mitigation measures

- Vehicles in rough terrain
- Natural emergencies – e.g. bushfire
- Fauna control – e.g. snakes and ticks
- Environmental and cultural hazards
- PPE and MSDS/SDS

T5. Inspect pipeline easement

- procedures
- tools and equipment
- gathering evidence of required maintenance

T6. Maintenance of signage, access points and fencing

T7. Vegetation control and weed mitigation

- regulations

REQUIRED SKILLS AND KNOWLEDGE

- monitoring
- maintenance procedures
- tools and equipment

T8. Erosion control

- regulations
- causes
- monitoring
- prevention and maintenance procedures
- tools and equipment

T9. Civil works activities which may affect pipeline easement (laying geo-textile, gabion baskets, concreting, reseeding of environment, cased crossings)

T10. Reporting and documentation

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 the 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 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 work performance 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.
 - Inspecting and maintaining pipeline easements as described in 9.) Range Statement and including:

Range of tools/equipment/procedures/workplace		
Group No	The minimum number of items on which skill is to be demonstrated	Item List
A. Requirements	All	<ul style="list-style-type: none"> • OHS and environmental legislative requirements • Erosion control documentation • Vegetation control

		documentation <ul style="list-style-type: none"> • Pipeline alignment drawings • Topographical maps • Geographical maps • Pipeline access route manuals • MSDS information
B. Maintenance procedures	All	<ul style="list-style-type: none"> • Laying of geo-textile • Gabion baskets • Concreting • Reseeding the environment • Cased crossings • Fauna and flora control • Communicating with third parties
C. Unplanned events	At least one occasion	Respond to 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:

- 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.
- 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. 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 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, 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.

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

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

UEGNSG140A Apply with environmental policies and procedures in the utilities industry

UEGNSG134A 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 Competency Standard Unit shall be demonstrated in relation to inspecting and maintaining of pipeline easements.

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:

- Records/documentation
- Third parties
- Civil activities
- Reports

Unit Sector(s)

Utilities Industry

Competency Field

Competency Field 11)

Transmission.