Australian Government

UEGNSG331A Establish right of way access for transmission pipeline construction

Release 1

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

UEGNSG331A Establish right of way access for transmission pipeline construction

Modification History

This unit is a revised version of the UEG11 unit UEGNSG320A Establish right of way access for transmission pipeline construction

Unit Descriptor

Unit Descriptor **1) Scope:**

1.1) Descriptor

This unit covers the establishing right of way access for gas transmission industry in accordance with relevant legislation, standards, codes and established procedures.

It encompasses the provision of access for operators to survey, clear, ditch, lower in, backfill and reinstate the pipeline easement and covers; Access preparation; Permits; Verification and identification of 3rd party assets; Environmental and cultural heritage controls.

Application of the Unit

Application of the Unit **2)**

This competency standard shall apply to any basic and safe work site where Gas transmission pipeline construction 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 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/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. 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

Prerequisite Unit(s) **4)**

	gas industry
UEGNSG005A	Prepare to work in the Australian 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 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 establish right of way access for transmission pipeline construction	1.1	WHS/OHS and environmental measures for the site are identified, obtained and understood.
	1.2	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.
	1.3	WHS/OHS, environmental and sustainable energy policies and procedures are received and confirmed.
	1.4	Suggestions to assist with construction of Right Of Way for easements are made to others involved in the work.
	1.5	Hazards are identified, WHS/OHS risks assessed and control measures are prioritised, implemented and monitored according to established procedures.
	1.6	Scope of responsibility under the relevant work permit and/or relevant notification is received and confirmed with relevant persons according to requirements and established procedures
	1.7	Tools, equipment and personal protective equipment needed to carry out the work are identified, scheduled, obtained and checked for operation and safety.
	1.8	Materials, plans, diagrams, drawings and resources required for work are confirmed, scheduled and obtained in accordance with established procedures
	1.9	Relevant responsibilities associated with first aid and other related work safety procedures for an incident at the worksite are checked and confirmed.

ELEMENT	PERFORMANCE CRITERIA	
	1.10	Third party issues are referred to appropriate persons in accordance with established procedures.
	1.11	Site preparation, safety plan and the work schedule are confirmed in accordance with established procedures.
2 Establish right of way access for transmission pipeline construction	2.1	WHS/OHS 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.
	2.3	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
	2.4	Work area is cordoned off and made safe for the construction of pipeline easements in accordance with established procedures.
	2.5	Construction of a pipeline easement is carried out efficiently, in an agreed timeframe and to required standard without waste of materials or damage to apparatus, circuits, the surrounding environment or services and using sustainable energy principles.
	2.6	WHS/OHS risks and incidents are reported to the immediate authorised persons for directions according to established procedures.
	2.7	Procedures for referring non-routine events to the immediate authorised persons for directions are followed.
	2.8	Remedial action associated with the access for pipeline construction is dealt with in accordance with established procedures.
	2.9	Routine quality checks are carried out in

ELEMENT	PERFORMANCE CRITERIA	
		accordance with work instructions
3 Complete work activities and relevant documentation	3.1	WHS/OHS risk control work completion measures and procedures are followed.
	3.2	Work site is rehabilitated, cleaned up and made safe in accordance 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 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 using of equipment and tools to perform work in a transmission pipeline construction industry work 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-G331A Right of way access for transmission pipeline construction

Evidence shall show an understanding of establishing right of way access for transmission pipeline construction in accordance with relevant legislation, standards, codes and established procedures to an extent indicated by the following aspects:

T1. Relevant legislation, regulations, codes

T2. Enterprise procedures, plans and drawings

T3. Relevant safety hazards and mitigation measures

- Vehicles in rough terrain
- Natural emergencies – e.g. bushfire
- Fauna control – e.g. snakes and ticks

T4. Surveying right of way

T5. Survey markers and off set markers, their meaning and relevant work applications.

T6. Exposing, surveying and re-instating ((third party) assets safely and effectively

- use of marker tape, bedding materials, marker post signage

T7. Clear and grade

T8. Environmental and cultural hazard and mitigation measure for right of way

T9. Vegetation clearing

T10. Top soil management

T11. Weed mitigation

T12. Erosion and sediment control

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 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 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 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
  - Demonstrate an appropriate level of employability skills
  - Conduct work observing the relevant Anti-discrimination legislation, regulations, polices and workplace procedures
- Demonstrate performance across a representative range of contexts from the prescribed items below:
  - Establishing right of way access for transmission pipeline construction as described in 9.) Range Statement and including:

Range of tools/equipment/procedures/workplace

Group	The minimum number of items on which skill is to be demonstrated	Item List
A Procedures	All	OHS, environmental and cultural legislative and regulatory requirements. Interpret survey set out. Follow third party procedures for verification and identification of assets to ensure their preservation. Abiding by restrictions of the Right of Way and access. Erosion control processes. Choose and operate appropriate plant for ground conditions (separation of top soil, sub soils etc.).
B Unplanned events	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 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 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.

UEGNSG140A	Apply with environmental policies and procedures in the utilities industry
UEGNSG134A	Establish a utilities infrastructure work site
UEGNSG136A	Carry out transmission pipeline construction work activities

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 establishing pipeline easements in accordance with relevant legislation, standards, codes and established procedures.

This includes the application of relevant WHS/OHS, environmental and cultural legislative and regulatory requirements, interpretation of survey set out, following third party procedures for verification and identification of assets, abiding by restrictions of the Right of Way and access, erosion control processes, and selecting and operating appropriate plant autonomously on at least two occasions.

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:

- Access preparation
- Permit to Work
- Permit to Access Land
- Approval for construction
- Stake holder approvals
- Verification and identification of third party assets
- Environmental and cultural heritage controls

Unit Sector(s)

Gas Industry

Competency Field

Competency Field **10)**

Transmission discipline.