



Australian Government

UEGNSG134A Establish a utilities infrastructure work site

Release 1

UEGNSG134A Establish a utilities infrastructure work site

Modification History

This unit is a revised version of the UEG11 unit UEGNSG105B Establish the work site.

Unit Descriptor

Unit Descriptor 1) Scope:

1.1) Descriptor

This unit covers establishing utilities infrastructure work sites in accordance with relevant legislation, standards, codes and established procedures.

It encompasses planning and scheduling work, organising resources, materials, procedures and the site for the required work.

Application of the Unit

Application of the Unit 2)

This competency standard shall apply to when establishing a utilities infrastructure work site. These include workplaces in the gas industry (transmission and distribution construction), electricity supply industry (transmission and distribution and generation), the electrotechnology industry and the water industry.

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 entry level AQF 2 competency for new entrants in the utilities 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, Workplace Health and Safety/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 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 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 a utilities work site

- 1.1 WHS/OHS, environmental and sustainable energy measures, policies and procedures relevant for the site are identified, accessed and understood.
- 1.2 Relevant requirements and established procedures for the site are provided and 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 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 Resources including equipment, tools, materials, drawings, notices and personal protective equipment required for the job are identified, obtained and checked for correct operation and safety.
- 1.7 Relevant responsibilities associated with related work safety and emergency procedures for an incident at the work site are checked and confirmed.
- 1.8 Client issues are referred to appropriate persons in accordance with industry standards.

ELEMENT	PERFORMANCE CRITERIA
	1.9 Site preparation, safety plan and the work schedule are confirmed in accordance with established procedures.
2 Establish a utilities work site	2.1 WHS/OHS risk control measures, schedule of work and standard operating procedures for carrying out the work are followed.
	2.2 Machines/plant/equipment is confirmed as being safe where necessary in strict accordance WHS/OHS requirements and procedures.
	2.3 Appropriate tools and equipment are selected and used correctly and safely.
	2.4 Establishing the work site is carried out efficiently, to the required standard without waste of materials or damage to apparatus, circuits, the surrounding environment or services and using sustainable energy principles.
	2.5 Any 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
	2.8 Routine quality and safety checks of the work are carried out in accordance established procedures.
3 Complete work and relevant documentation.	3.1 WHS/OHS risk control work completion measures and procedures are followed.
	3.2 Work site is tidied 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 the completion of the work according to established procedures.
	3.5 Relevant work completion documentation is

ELEMENT**PERFORMANCE CRITERIA**

completed accurately and provided to the 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 establishing the work site.

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-G134A Establish a worksite in a utilities industry environment

Evidence shall show an understanding of establishing utilities industry work sites to an extent indicated by the following aspects:

- T1. High risk utility industry work activities – awareness
- T2. Site inspection
- T3. Prestart checks
- T4. Correctly interpret and comply with Safety Signs including workplace Hazards, Warnings and PPE requirements
- T5. Risk Assessment, controls, precautions and conditions;
 - hazard identification, including confined spaces, trenching and shoring
 - field risk assessment
 - hierarchy of controls
- T6. Protocols for dealing with accidents and emergencies
- T7. Basic drawings and diagrams
- T8. Relevant equipment, tools and machinery
- T9. Stakeholder communication
- T10. Security requirements
- T11. Storage
- T12. Council and Community requirements / restrictions
- T13. Short and Long term site requirements

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:
 - Establish a utilities infrastructure work site as described in 9) Range 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. Identifying, locating and interpreting relevant information procedures	At least 4	<ul style="list-style-type: none"> • Access and use plans, drawings and maps • Utilise Dial Before You Dig information or its equivalent application • Obtain procedures and work instructions • Correctly interpret and follow instructions • Advise stakeholders of upcoming work • Utilise and participate in

		<p>the preparation of a safe work method statement or JSA</p> <ul style="list-style-type: none"> • Work in accordance with all work permits/precautions as necessary
B. Procedures to control and minimise the impact of an environmental incident	At least 6	<ul style="list-style-type: none"> • Locate all assets in area • Check all materials and equipment • Access all relevant MSDS sheets • Identify and monitor all possible environmental hazards • Utilise control measures for identified hazards • Correctly use PPE appropriate to the Industry • Perform machinery daily log checks and verify operator qualifications
C. Risk control procedures	At least 3	<ul style="list-style-type: none"> • Inspect site • Isolated work site • Erect barricades • Layout warning and safety signs • Establish a muster point where appropriate • Log all steps onto permit or work sheet • Control traffic • Isolate gas supply and detect gas • Follow emergency response plans, • Follow safe lift plans, • Follow JSA, • Work with contractors
D. WHS/OHS procedure	All	<ul style="list-style-type: none"> • Work utilising relevant OHS legislation, regulations, policies and

S		procedures <ul style="list-style-type: none"> • Maintain a safe and clean workplace • Work safely with hazardous materials and equipment • Apply safe manual handling techniques • Communicate effectively in the workplace • Apply basic planning skills
E. Unplanned events	At least one occasion	<ul style="list-style-type: none"> • 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 8.3)
specific
resources for
assessment**

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.

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

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 utilities work sites including:

- Above ground level sites
- Below ground level sites
- Public sites, requiring pedestrian and traffic control
- Private sites

Generic terms used throughout this Vocational Standard shall be regarded as part of the Range Statement in which competency is demonstrated. The definition of these and other terms that apply are given in UEG Training Package.

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:

- Responsibility
- Work plans
- Procedures
- Documentation

Unit Sector(s)

Utilities

Competency Field

Competency Field 11)
Cross discipline