



Australian Government

Department of Education, Employment and Workplace Relations

UEGNSG125A Carry out transmission pipeline construction work activities

Release: 1

UEGNSG125A Carry out transmission pipeline construction work activities

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

Undertake scheduled work activities in a transmission pipeline construction industry workplace in an agreed time and to a quality standard. All work is carried out in accordance with established procedures and in a safe manner following OHS policies and procedures. The types of work activities include cleaning the work site as well as following OHS policies and procedures; using tools and equipment; following established procedures and requirements; using safety equipment and personal protective equipment and following emergency/hazardous work situations procedures.

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

License to practice**3)**

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 limits the age of operating certain equipment.

Pre-Requisites**Prerequisite Unit(s)****4) Prerequisites:****4.1) CSU(s): Competencies**

Granting of competency in this unit shall be made only after competency in the following unit(s) has/have been confirmed:

Nil

4.2) L&N: Literacy and numeracy skills

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
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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 undertake work activities	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 to be applied in the carrying out of the work
	1.3 Equipment, plant, tools and personal protective equipment needed to do the work 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 do the work 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 work as instructed	2.1 OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards
	2.2 Schedule of work is followed to ensure work is completed in an agreed time, to a quality

ELEMENT**PERFORMANCE CRITERIA**

- standard and with a minimum of waste
- 2.3 Operational knowledge for utilising correct and safe use of basic equipment and tools to perform work is confirmed to ensure completion in an agreed time and to a quality standard with a minimum of waste according to requirements and established procedures
- 2.4 Further instructions are sought from appropriate persons for unplanned events or conditions occurring
- 2.5 On going checks of quality of the work are undertaken in accordance with instructions and requirements
- 3 Check the results of the completed work
- 3.1 Final checks are made to ensure the use of equipment and tools conforms with instructions and to requirements
- 3.2 Appropriate persons are notified of completion of the work
- 3.3 Equipment and tools and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures
- 3.4 Work area is cleaned up and made safe and sustainable energy practices are followed
- 3.5 Appropriate records are updated in accordance with instructions and 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 transmission pipeline construction industry work environment.

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

KS01- G125A **Transmission pipeline construction**

- G 1.1.1 Utilities industries calculations
Evidence shall show an understanding of performing calculations as required in utilities industries workplaces, indicated by the following:
- perform industry calculations
 - interpret graphs and tables
 - transpose formulas
 - calculations include, gas rates, pressure corrections, volumes, area, measurements purging calculations
 - systematic problem solving
- G 1.1.2 Use of equipment and tools in the utilities industries
Evidence shall show an understanding of using equipment and tools in utilities industries workplaces, specifically:
- correct use of utilities industry equipment and tools which include drills, shovels, hammers, knives, saws, hand tools, small generator sets, air compressors and hoses, pneumatic and/or electric hammers, rollers and compactors, concrete and ceramic cutters, boring equipment, trenching equipment.
 - correct use of utilities industry PPE.
- G 1.1.3 Overview of workings in the utilities industries
Evidence shall show an understanding of the different utilities industries, indicated by the following:
- overview of authorities and regulatory bodies
 - overview of the electrical supply (transmission and distribution and generation) industry
 - overview of the Gas Industry

- overview of the water industry
- overview of the telecommunications industry
- their impact on work to be undertaken and risks associated with work to be performed

Evidence Guide

EVIDENCE GUIDE

9) This provides essential advice for assessment of the unit of competency and must be read in conjunction with the performance criteria and the range statement of the unit of competency and the Training Package Assessment Guidelines.

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

9.1) Overview:

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 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** 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; and
 - Apply sustainable energy principles and practices as specified in the performance criteria and range; and
 - Demonstrate an understanding of the essential knowledge and associated skills as described in 'Essential Knowledge and Associated Skills' of this unit; and
 - Demonstrate an appropriate level of employability skills; and
 - Conduct work observing the relevant anti discrimination legislation, regulations, polices and workplace procedures; and
- Demonstrated performance across a representative range of contexts from the prescribed items below:

Range of tools/equipment/procedures/workplace		
Group No	The minimum number of items on which skill is to be demonstrated	Item List
A	All	Occupational Health and Safety policies and procedures followed
B	At least 6	Tools and equipment: General concrete mixer General vacuum cleaner General trolley Non pressurised pumps and hoses Wheelbarrows Traffic barriers Extra low voltage lighting equipment Hand held tools Holiday detection equipment Power tools

		Pressurised pumps and hoses Tru bend Hand wrapping machines Follow standard operating procedures
C	All	Utilities industries calculations
D	All	Read and interpret workplace documents Communicate in a team environment
E	At least one occasion	Dealing with an unplanned event by drawing on essential knowledge and associated skills to provide appropriate solutions

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 Competency Standard 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 carrying out work activities in a transmission pipeline construction industry work 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.

**Method of
assessment**

9.4)

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 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, 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.

UEGNSG128 Establish a transmission pipeline construction
A work site

Range Statement

RANGE STATEMENT

10) This relates to the unit of competency 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 work activities in a transmission pipeline construction industry work environment.

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:

OHS policies and procedures

Tools and equipment (1)

Appropriate persons (1)

Established procedures and requirements

Legislation

Safety Equipment

Personal Protective Equipment

Emergency and Hazardous Work Situations

Unit Sector(s)

Not applicable.

Competency Field

Competency Field **11)**

Cross discipline.