



Australian Government

Department of Education, Employment and Workplace Relations

UEGNSG102B Carry out work activities in a utilities industry work environment

Release: 1

UEGNSG102B Carry out work activities in a utilities industry work environment

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This Competency unit covers basic work activities performed in a cross utilities environment. Essential components of this competency are risk assessment, hazard control, following procedures, using basic tools and maintaining a clean and safe worksite.

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 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.

License to practice**3)**

Commonwealth, State/Territory or Local Government legislation and regulations may exist that limit the age at which a person 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:

Nil

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	Writin	3	Numeracy	3
		g			

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 as 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 standard and with a minimum of waste

ELEMENT	PERFORMANCE CRITERIA
	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 Ongoing 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 in a gas industry environment.

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

KS01- G102B **Work in a gas industry environment**

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

G 2.1.3 Identify employment roles and responsibilities

Evidence shall show an understanding of the roles of major groups in the Gas Industry, that is employers and employees, including:

- The role of the employer
- Industry associations
- Employer obligations to safety
- Identification of disadvantaged and minority groups in Australian society
- Employers obligations to persons from disadvantaged and minority groups
- Employers obligations to occupational health and safety
- The role of commonwealth and state training regulatory authorities and industry skills councils and state training advisory bodies
- Roles and responsibilities of gas industry employees
- The employment contract
- Working to safety requirements
- Work according to lawful commands
- Belonging to employee organisations
- How to work with people from disadvantaged and minority groups
- Understanding the employees obligations to occupational health and safety
- Sources of support.

G 2.1.4 Apply relevant OHS regulations, policies and procedures

Evidence shall show an understanding of the basic workplace health and safety legislation and how this applies to individuals in a Gas Industry workplace, indicated by the following:

- Employer's responsibilities to relevant OHS legislation
- Employee's responsibilities to OHS legislation and organisation's policies and procedures
- OHS policies and procedures at the worksite.
- Australian Standards, guidelines and codes of practice

G 2.1.5 Work safely in the gas industry by reducing risk and using correct PPE

Evidence shall show an understanding of how to work safely in the gas industry indicated by the ability to:

- Correctly interpret and comply with Safety Signs

including workplace Hazards, Warnings and PPE requirements

- Correctly interpret gas markers
- Identify the correct PPE required for work in the Gas Industry
- Locate and comply with procedures for correctly checking, maintaining and storing PPE
- Apply the process of Hazard identification, Risk assessment and Control
- Complete Risk Assessment forms such as Work Permits and JHA's, JSA's, JSEA's, SWM's etc
- Report workplace hazards

G 2.2.48 Prepare an excavation site

Evidence shall show an understanding and ability to prepare the site for excavation on a gas industry workplace, indicated by the following:

- Use of Dial Before you dig services
- Preparation of traffic management plans
- Identify Environmental and Safety Hazards, assess risks and implement control measures
- Communicating with third parties, colleagues and customers regarding the excavation site
- Reading and interpreting job specifications and standard operating procedures
- Grades and depth required for excavation of trenches for gas pipelines
- Techniques for marking out trench location

Evidence Guide

EVIDENCE GUIDE

9) 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 9.1)

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 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
 - Apply sustainable energy principles and practices as specified in the Performance Criteria and range
 - Demonstrate an understanding of the essential knowledge and associated 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:

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 Hazard Identification Risk Assessment Implement control measures Correct use of PPE
B	At least 6	Tools and equipment: Tape measures Shovels Crowbars Probes Concrete mixers Wheelbarrows Traffic barriers and signs Lighting equipment

		Service locators Hand and power tools
C	All	Utilities industries calculations
D	All	Read and interpret workplace documents Read and interpret workplace plan and drawings Awareness of other utilities infrastructure and related hazards associated with activities Communicate in a team environment

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 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 in a gas industry 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 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 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 Units where listed.

UEENEEE10 Fabricate, dismantle, assemble of utilities industry
2A components

Or,

With the following units of competency if delivered in a Certificate II qualification

UEENEEE10 Apply Occupational Health and Safety regulations,
1A codes and practices in the workplace

UEGNSG104 Comply with environmental policies and
B procedures

UEGNSG105 Establish the work site
B

Range Statement

RANGE STATEMENT

10) 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 carrying out work in a gas industry 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.