



Australian Government

Department of Education, Employment and Workplace Relations

UEGNSG210B Supervise and monitor contract staff for work on distribution pipelines

Release: 1

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Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This Competency Standard Unit covers the supervision and monitoring of contractors working in the field. It requires the application of skills and knowledge to provide information, guidance and direction to contractors in the conduct of their duties. It does not cover the high levels of technical expertise required to actually perform the services but focuses on the key knowledge and skills required to supervise and monitor the process from a contractor management perspective. The competency standard is applied against the procedures found under the latest version of AS 1697 Australian and New Zealand Standard.

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. Commonwealth, State/Territory or Local Government legislation and regulations may exist that limits the age of those who 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 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

Employability Skills

5)

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 Plan and prepare for supervising and monitoring contract staff

1.1 Works schedule(s), including drawings, plans, requirement, established procedures and material lists are detailed, analysed if necessary by site inspection and the extent of the preparation of the work determined for planning and coordination

1.2 Work is prioritised and sequenced for the most efficient and effective outcome following consultation with others for completion within acceptable timeframes to a quality standard and in accordance with established procedures

1.3 Risk control measures are identified, prioritised and evaluated against the work schedule

1.4 Relevant requirements and established procedures for the work are communicated to all persons and identified for all work sites

1.5 OHS, environmental and sustainable energy policies and procedures are obtained and confirmed for the purposes of the work performed and communicated

1.6 Relevant work permits are obtained to access and perform work according to requirements and established procedures

ELEMENT	PERFORMANCE CRITERIA
1.7	Resources including persons, equipment, tools and personal protective equipment required for the job are identified, scheduled and obtained and confirmed in working order
1.8	Contractual requirements, such as qualifications of personnel to perform the work, competency of the contractor, site induction and condition of equipment are confirmed
1.9	Relevant persons at work site are confirmed to be current in First Aid and other related work procedures according to requirements
1.10	Liaison and communication with authorised persons, authorities, clients and land-owners is completed so work can be carried out where necessary
1.11	Persons participating in the work are fully briefed and respective responsibilities coordinated and authorised where applicable in accordance with established procedures
1.12	Site is prepared according to work schedule and to minimise risk and damage to property, commerce and individuals in accordance with established procedures
1.13	Road signs, barriers and warning devices are positioned in accordance with requirements
2 Monitor and supervise contractor activities.	2.1 OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards 2.2 Lifting, climbing, working in confined spaces, excavations, trenches, or aloft, and use of power tools, techniques and practices are safely followed and currency according to requirements confirmed 2.3 Essential Knowledge and Associated Skills are applied to ensure completion in an agreed timeframe and to quality standards with a minimum of waste according to requirements

ELEMENT	PERFORMANCE CRITERIA
2.4	Contractor activity is carried out in accordance with the work schedule and to established procedures
2.5	Hazard warnings and safety signs are recognised and hazards are assessed and OHS risks are reported to the authorised persons for directions according to established procedures
2.6	Solutions to non-routine problems are identified and actioned using acquired Essential Knowledge and Associated Skills according to requirements.
2.7	Known solutions to a variety of problems are applied using acquired Essential Knowledge and Associated Skills
2.8	First Aid and other related work procedures are performed according to requirements and established procedures
2.9	Ongoing checks of work quality are undertaken in accordance with requirements and established procedures to ensure a quality outcome is achieved
3 Complete monitoring and supervision records.	3.1
	Inspection of the contract job is checked against works schedule to determine conformance with requirements and anomalies reported in accordance with established procedures
	3.2
	Accidents and injuries are reported and followed up in accordance with requirements and established procedures
	3.3
	Waste materials are safely disposed of and the work site is rehabilitated, cleaned up and made safe in accordance with given instructions and established procedures
	3.4
	Tools, equipment and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures

ELEMENT

PERFORMANCE CRITERIA

- 3.5 Relevant work permit(s) are signed off and equipment is returned to service in accordance with requirements
- 3.6 Data is accurately recorded and work completion records, reports as modified drawings and documentation and information are finalised and processed and appropriate persons notified

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 supervising and monitoring contract staff for work on distribution pipelines.

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

KS01- G210B Distribution pipeline contract staff

- G 2.1.1 Work in the gas sector
Evidence shall show an understanding of how work is conducted in the Gas Industry, specifically:
- The Gas Industry in Australia
 - Australian gas resources
 - Types of gas and uses
 - Combustion.
- 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 2.1.6 Work safely with hazardous materials and equipment
Evidence shall show an understanding of what constitutes hazardous materials and the equipment and processes used to safely work with these indicated by the following:
- Identify hazardous materials and equipment
 - Location and purpose of Material Safety Data Sheets (MSDS)
 - Read, interpret and discuss MSDS
 - Knowledge of methods for safe disposal of hazardous waste materials
 - Read, interpret and discuss relevant manufacturer's specifications
 - Use and dispose of hazardous materials and equipment safely
 - Use of spill kits and PPE
- G 2.1.7 Apply safe manual handling techniques in the workplace
Evidence shall show an understanding of manual handling and how to apply this knowledge to handling heavy and awkward objects in a Gas Industry workplace, specifically:
- Principles for managing manual handling
 - Characteristics and types of safe manual handling
 - Safe manual handling techniques
 - Manual handling and risk management
- G 2.1.9 Respond to emergency and accident situations

Evidence shall show knowledge and skills in dealing with emergency or accident situations at a Gas Industry workplace, indicated by the following:

- Situations of accidents and emergency
- Comply with procedures for accidents and incidents
- Correct use of emergency equipment and procedures for a fire
- Correct use of breathing apparatus
- Correct use of gas detectors/oxygen monitoring devices
- Correct use of emergency equipment and procedures for a gas leak or vapour emission
- Report emergencies and accidents

G 2.1.14 Read and interpret Gas Industry documents

Evidence shall show an ability to read and interpret Gas Industry documents indicated by the following:

- Understand and use signs, symbols terminology and legends as used in gas industry procedures and documents
- Identify, locate and implement gas industry standards, policies and procedures
- Interpret and read basic drawings and diagrams

G 2.1.15 Complete workplace forms, and reports

Evidence shall show an ability to complete routine Gas Industry forms, memos and reports either written or electronic, indicated by the following:

- Identify, locate, interpret and use workplace forms, and reports
- Enter the required information accurately on gas industry forms and reports

G 2.1.16 Identify requirements of work activity

Evidence shall show ability to:

- Clarify expected outcomes of a work activity in a Gas Industry workplace
- Receive, clarify and respond to verbal work instructions for work activity
- Interpret and discuss an organisation's policies, quality requirements and specifications for work activity

G 2.1.17 Apply basic planning skills

Evidence shall show a demonstrated ability to apply basic planning skills in a Gas Industry workplace, indicated by the following:

- Develop checklists of tasks

- Prioritise tasks
- Identify resources required to complete tasks safely and efficiently
- Identify resource or scheduling conflicts and apply solutions
- Develop time lines to complete tasks

G 2.1.19 Review work activities

Evidence shall show an ability to review work activities undertaken in a Gas Industry workplace, indicated by the following:

- Check work activities against a work plan
- Seek feedback on the outcome of work activities with appropriate persons
- Report outcomes of work activities in writing or orally according to enterprise procedures

G 2.1.21 Problem solving

Evidence shall show an understanding of the requirements to undertake basic problem solving in a Gas Industry workplace, indicated by the following:

- Demonstrate problem solving and diagnostics methodology
- Identify possible solutions
- Recommend probable solutions and
- Apply basic problem solving techniques

G 2.1.22 Operate in confined spaces

Evidence shall show an understanding of the requirements to recognise and operate in confined spaces in a Gas Industry workplace, indicated by the following:

- Knowledge of the requirements of Legislation, Regulations, Australian Standards and enterprise specific procedures for safe working in confined spaces
- Ability to recognise what a confined space is and the entry safety requirements
- Ability to understand and comply with manufacturers' guidelines for the safe use of PPE used in confined spaces
- Understand how and when to use gas detectors for confined spaces entry
- Understand how and when to use breathing apparatus and rescue and recovery equipment

Note: A confined spaces entry ticket would satisfy and exceed the requirements of this EKAS clause

G 2.1.25 Protect the environment

Evidence shall show an understanding and ability to perform work in the gas industry in a manner that protects the environment indicated by the following:

- Understanding of the relevant Commonwealth/State/Territory environmental legislation, regulations and codes of practice
- Understanding of employee's and employer's responsibilities to relevant environmental legislation, regulations and codes
 - Understanding and compliance with enterprise procedures for flora control
 - erosion control
 - fauna control
 - the protection of indigenous and cultural heritage sites
- Understanding the role of regulatory bodies in monitoring environmental activities, risk and incident compliance
- Understanding community expectations for protecting the environment
- Correct use of environment protection procedures, records, inspections and incident reporting
- Identifying environmental hazards
- Assessing environmental risks
- Implementing environmental control measures
- Ability to respond to workplace environmental incidents

Note: Environmental damage can be caused by chemicals, oil, water contamination, carcinogenic agents, gases, dusts, waste contamination and noise

G 2.1.26 Communicate in the workplace

Evidence shall show an understanding and ability to communicate effectively in a Gas Industry work team indicated by the following:

- Effective use oral and written communications methods to achieve work related outcomes and solutions.
- Effectively receive, interpret and respond to workplace information and instructions
- Effectively convey and report work related information to fellow workers and customers
- Interact with fellow workers in a socially and culturally appropriate manner

G 2.2.32 Comply with requirements for excavating and reinstating site
Evidence shall show an understanding of the requirements for preparing, conducting and completing an excavation indicated by the following:

- Identifying plans, codes, standards and drawings relevant to specific worksites
- Reading and interpreting relevant plans, codes, standards and drawings
- Regulatory requirements and procedures for excavating trenches and reinstating sites
- Apply shoring or benching requirements
- Notification of appropriate authorities and requirements for temporary or permanent restorations

G 2.2.33 Locate utilities and services
Evidence shall show an understanding and an ability to locate services, indicated by the following:

- Identification of relevant authorities or enterprises to contact regarding the location of other utilities services (gas, water, electricity, telecommunication, sewerage and stormwater)
- Read and interpret plans and drawings to identify the location of utilities and services
- Identification of utilities and services conduits and cables
- Correct use of electronic and manual service locators
- Apply hand excavation as required for the purposes of locating utilities and services

G 2.2.46 Use tools, plant and equipment relevant to the gas industry
Evidence shall show an ability to safely use tools, plant and equipment relevant to the Gas Industry, indicated by the following:

- Identify the various types, uses and application of tools, plant and equipment used in the Gas Industry
- Understand and comply with manufacturer's guidelines for the correct use of tools, plant and equipment used in the Gas Industry
- Understand and comply with the enterprises procedures for the correct use of tools, plant and equipment used in the Gas Industry
- Understand and comply with all OHS requirements for the correct use of tools, plant and equipment used in the Gas Industry
- Comply with power safety rules when using electrically operated tools, plant and equipment

- Identify site hazards, assess risks and implement control measures when using tools, plant and equipment used in the Gas Industry
- Comply with good manual handling techniques when lifting, moving or storing tools, plant and equipment

Tools and equipment may include but not limited to 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, etc.

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

G 3.1.2 Work independently in a Gas Industry environment

Evidence shall show an understanding of working independently in a Gas Industry environment, indicated by the following:

- understanding of how to work autonomously or under limited/remote supervision.

G 3.2.7 Prepare reports

Evidence shall show an understanding of the preparation of reports applicable to the commissioning and decommissioning of Gas Industry pipelines (Distribution), indicated by the following:

- Apply procedures and legislative requirements for maintaining appropriate reporting and recording systems
- Complete job records and process information to appropriate/relevant department
- Recorded non-conformances and incidents including customer outages in accordance with procedures and legislative requirements.

G 4.1.1 Operate and supervise in the Gas Industry

Evidence shall show an understanding of supervising and operating in a Gas Industry environment, indicated by the following:

- understanding and application of enterprise applicable standard operating procedures
- understanding and application of relevant enterprise permit to work systems
- understanding and application of alarm and communication systems
- understanding and application of relevant OHS and environmental legislative requirements including applicable emergency procedures
- demonstrate an understanding and application of planning, prioritisation and working autonomously in the Gas Industry.

G 4.1.3 Communicate effectively in the Gas Industry at a supervisory level

Evidence shall show an understanding of communication techniques required in supervisory roles in the Gas Industry, indicated by the following:

- communicate effectively with a variety of Gas Industry stakeholders, using strategies for dealing with difficult situations. The communication includes oral, written or electronic communications, : with various stakeholders including:
 - workplace colleagues
 - workplace managers
 - relevant customers and suppliers
 - regulatory bodies
 - property/land owners (including traditional land owners) and tenants
 - emergency response organisations

G 4.1.4 Understand Gas Industry products, processes and characteristics

Evidence shall show a comprehensive understanding of Gas Industry products and characteristics, indicated by the following:

- understand the Gas Industry products and the characteristics and tolerances of the product including:
 - principles of applicable gas laws
 - gas pressure

- gas temperature
- compressibility
- relative density – specific gravity
- hydrocarbon and water dew points
- components of applicable natural gases including LPG
- standard gas conditions
- combustion
- venting and purging principles
- Effects of temperature and pressure on infrastructure

G 4.1.5 Interpret Gas Industry drawings

Evidence shall show an ability to interpret and understand Gas Industry technical drawings, indicated by the following:

- understanding and interpreting relevant technical drawings including, but not limited to:
 - Process and Instrumentation Diagrams (PID)
 - Facility and pipeline construction and as-built drawings
 - Geographical Information System (GIS) drawings and data
 - Electrical drawings
 - Survey maps
 - Pipeline route maps and alignment sheets

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 the 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 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

**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	Have a working knowledge of the relevant sections of AS1697 Interpret technical drawings and symbols Ensure emergency response procedures in place Communicate schedules/coordinate to persons Carry out job safety analysis and inductions Obtain work permit Apply basic planning skills Work utilising relevant

		OHS and environmental legislation, regulations, codes of practice, policies and procedures. Maintain a safe clean workplace Contractor management Communicate effectively in the workplace Problem solving skills Maintain documentation Planning and organising
B	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 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 of supervising and monitoring contract staff for work on distribution pipelines.

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.

UEGNSG102B Carry out work activities in a utilities industry work environment

UEENEEE101 A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEGNSG104B Comply with environmental policies and procedures

UEGNSG105B Establish the work site

BSBFLM312B Contribute to team effectiveness

BSBFLM303C Contribute to effective workplace relationships

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 Competency Standard Unit shall be demonstrated in relation to supervising and monitoring contract staff. 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:

Tools and equipment (4)

Maps and drawings

Established procedures

PPE and First Aid equipment

Resources

Records/documentation

Safe working procedures

Operational

Relevant persons

Types of faults

Traffic control

Facility

Assessing risk

Competency

Gas/petrochemical liquid characteristics

Interpersonal skills

Permit to work

Unit Sector(s)

Not applicable.

Competency Field

Competency Field **11)**

Distribution.