



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **UEGNSG215A Conduct excavations in the gas industry**

**Release: 1**

## **UEGNSG215A Conduct excavations in the gas industry**

### **Modification History**

Not applicable.

### **Unit Descriptor**

#### **Unit Descriptor**

#### **1) Scope:**

##### **1.1) Descriptor**

This Unit covers the requirements of performing excavations in the utilities industry. This competency standard covers the preparation and planning stages for excavation as well as the actual excavation. The planning process covers Dial Before you Dig, site preparation and traffic control. Included is the use of tools, plant and equipment PPE and basic visual and operation checks.

### **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,

**License to practice**                   **3)**  
 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 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 for the operating of plant and equipment to perform underground utilities excavation work	1.1 Work instructions are received and confirmed
	1.2 Relevant requirements and established procedures to be followed for the work to be performed are discussed with all persons to establish and confirm the work schedule
	1.3 OHS, environmental and sustainable energy policies and procedures to be followed for the work to be performed are received and confirmed
	1.4 Suggestions to assist with operating support plant and equipment used for underground utilities services are made to others involved in the work
	1.5 Hazards are identified, OHS risks assessed and control measures are prioritised, implemented and monitored including emergency exits kept clear according to established procedures
	1.6 Scope of responsibility under the relevant work permit is received and confirmed according to requirements and established procedures with relevant persons
	1.7 Types of equipment, tools and personal protective equipment required for the job are obtained in working order and operated in accordance with manufacturer's specifications

ELEMENT	PERFORMANCE CRITERIA
	and according to established procedures
	1.8 Relevant responsibilities associated with First Aid and other related work safety procedures at the worksite are confirmed in accordance with requirements and established procedures to ensure safety measures are followed in the instance of an incident.
	1.9 Client issues are referred to appropriate persons in accordance with industry and community standards
	1.10 Location of other services and site preparation is confirmed according to given instructions using the work schedule for a quality outcome and to minimise risk and damage to property, commerce and individuals according to established procedures
	1.11 Road signs, barriers and warning devices are confirmed as positioned in accordance with given instructions and requirements including traffic management plans
2 Operate plant and equipment for underground utilities excavation work	2.1 OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards
	2.2 Site hazards such as lifting, climbing, working in confined spaces, excavations, trenches and/or aloft, use of power tools equipment, techniques and practices are safely followed in accordance with given instructions and according to requirements confirmed to minimise OHS risks
	2.3 Operational knowledge for operating support plant and equipment used for underground utilities services is confirmed to ensure completion in an agreed timeframe and to quality standards with a minimum of waste according to requirements and established procedures
	2.4 Plant and equipment is used safely and in accordance with requirements and established

ELEMENT	PERFORMANCE CRITERIA
	procedures
	2.5 Minor maintenance is undertaken to plant and equipment in accordance with requirements and established procedures
	2.6 Operating support plant and equipment used for underground utilities services are checked for faults and are used in accordance with given instructions and established procedures.
	2.7 Hazard warnings and safety signs are recognised and hazards and assessed OHS risks are reported to the authorised persons for directions according to established procedures
	2.8 Non-routine events are referred to the authorised persons for directions according to established procedures
	2.9 Problems associated with operating support plant and equipment used for underground utilities services are dealt with using known solutions and skills related to routine procedures to ensure work instructions and established procedures are met
	2.10 Ongoing checks of work quality are undertaken in accordance with given instructions and established procedures
3 Complete the operating of plant and equipment to perform underground utilities excavation work	3.1 Work undertaken is checked against work schedule and anomalies reported to authorised persons in accordance with established procedures
	3.2 Accidents and incidents are actioned and reported to authorised persons in accordance with established procedures
	3.3 Backfilling is performed and the work site is rehabilitated, cleaned up and made safe in accordance with the work schedule, given instructions and established procedures
	3.4 Tools, equipment and any surplus resources and materials are, where appropriate, cleaned,

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	checked and returned to storage in accordance with established procedures
3.5	Appropriate persons are notified of work completion and all safety provisions for isolation or lock out are implemented according to established procedures
3.6	Work completion records, report forms and data sheets are completed accurately in accordance with given 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 used for underground utilities services and to carry out excavation work.

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

### **KS01-G215 Underground excavation plant and equipment**

#### **A**

#### 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 2.1.2 Identify roles of statutory authorities

Evidence shall show an understanding of the roles of statutory authorities (government agencies, both State and Federal) that operate in the Gas Industry, including

identifying:

- Statutory bodies
- Roles of statutory bodies
- Employer and employee responsibilities to statutory bodies.

#### 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 2.1.6 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 2.1.8 Control traffic at the worksite

Evidence shall show knowledge and skills in coordinating

traffic flow at a workplace where traffic control is required, that is, where work is conducted on or near a road, indicated by the following:

- Read and interpret relevant traffic authority regulations for traffic control at a worksite
- Identify signs and devices required to control pedestrians and traffic at a worksite depending on traffic flow volumes
- Apply techniques for controlling pedestrians and traffic at various worksites
- Use procedures for monitoring traffic controls
- Set up and monitor pedestrian and traffic controls

#### 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 2.1.18 Conduct tasks to complete work activities

Evidence shall show ability to organise the activities to complete a job in a Gas Industry workplace, indicated by the following:

- Locate and organise equipment, tools and machinery required to complete tasks safely and efficiently
- Complete tasks according to planned sequences and within appropriate timeframes
- Understand quality assurance and work according to established and standard operating procedures

#### 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 2.1.20 Customer relations

Evidence shall show an understanding of the requirements for providing good customer relations to Gas Industry stakeholders, indicated by the following:

- Notify stakeholders of activities
- Communicate with stakeholders within scope of responsibilities
- Refer stakeholders to appropriate parties
- Demonstrate understanding of ring fencing requirements (if applicable)
- Keep the customer informed on job progress
- Provide good customer relations

#### G 2.1.21 Undertake 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 2.2.5 Read and interpret specifications

Evidence shall show an ability to read and interpret

specifications found in drawings and procedures used in a Gas Industry workplace, indicated by the following:

- Interpret specifications including material types and units of measure
- Interpret gas specifications such as pressure ratings and class of pipe and fittings
- Understand the need to use only approved/specified materials

#### 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 2.2.34 The selection, the use and application of materials

Evidence shall show an understanding and ability to use correct tools, materials and equipment to undertake work on a gas industry workplace, indicated by the following:

- Appropriate tools, materials and equipment are identified for preparing the site, excavating trenches and reinstating the site
- Safety requirements for using tools, materials and

equipment

- Correct use of appropriate PPE
- Procedures for using, cleaning and storing tools, materials and equipment
- Procedures for checking tools, materials and equipment
- Reporting faulty tools, materials and equipment

#### G 2.2.37 Excavate trenches

Evidence shall show an understanding of the excavation of a Gas Industry workplace trench, indicated by the following:

- An understanding of spotter/competent observer requirements
- Identify environmental and safety hazards, assess risks and implement control measures
- Safety requirements and procedures for excavating and shoring trenches in a variety of conditions surface types, soil types, weather, traffic, time of day, location
- Regulations and requirements for working in confined spaces and shoring
- Purpose and techniques of excavation in excavating trenches, shoring, battering and exposing other services
- Understand depth and grade of trench requirements against specifications
- Use a variety of excavation and shoring techniques to suit varying conditions (surface types, soil types, weather, traffic, time of day, location)
- Demonstrate understanding of when to manually excavate instead of mechanical excavation

#### G 2.2.38 Reinstate site

Evidence shall show an understanding and ability to reinstate a gas industry excavation site, indicated by the following:

- An understanding of spotter/competent observer requirements
- Identify Environmental and Safety Hazards, assess risks and implement control measures
- Standard operating procedures to identify procedures for backfilling and consolidation
- Procedures for pipe padding/bedding
- Procedures for trench padding/bedding and compaction, backfilling and consolidations
- Trench and site restoration and reinstatement techniques including marker tape
- Ground surface level finishes
- Notification of appropriate authorities and requirements

for temporary or permanent restorations

#### G 2.2.41 Boring and Drilling Operations

Evidence shall show an ability to perform boring and drilling operations, indicated by the following:

- Use of dial before you dig services
- An understanding of the environmental benefits of using underground boring machines
- An understanding of when boring machines would be preferred over trenching methods
- An understanding of spotter/competent observer requirements
- Use of electronic and manual service locators
- Identify environmental and safety hazards, assess risks and implement control measures
- Knowledge of the range of boring and drilling equipment and machinery
- Safety requirements and procedures for boring and drilling operations in a variety of conditions surface types, soil types, weather, traffic, time of day, location
- Regulations and requirements for working in confined spaces and shoring
- Trench and site restoration and reinstatement techniques including marker tape
- Ground surface level finishes
- Maintain a log/record of bored pipe

#### G 2.2.45 Read and Interpret Utilities Drawings and Diagrams

Evidence shall show a demonstrated ability to correctly identify, interpret and use drawings in Gas Industry workplaces, indicated by the following:

- Identify a range of plans and drawings typically used in the Gas Industry
- Identify the purpose and application of a range of drawings
- Identify commonly used symbols and abbreviations
- Read and interpret scales and legends
- Identify dimensions and orientations
- Identify accessibility of work site in relation to roadways
- Identify underground and overhead utilities and services such as gas, water, electricity supply and telecommunications
- Identify structures
- Identify key features from sectional details and



elevations

- Interpret horizontal and vertical measurements
- Apply drawings and diagrams in a three dimensional environment

#### 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 2.2.47 Clean, check, store and maintain tools, plant and equipment used in the Gas Industry

Evidence shall show an understanding of the cleaning, checking, storage and maintenance of tools, plant and equipment relevant to the Gas Industry, indicated by the following:

- Understand and comply with manufacturer's guidelines for cleaning, checking, storing and maintaining tools, plant and equipment used in the Gas Industry
- Understand and comply with the enterprises procedures for cleaning, checking, storing and maintaining tools, plant and equipment used in the Gas Industry

- Understand and comply with all OHS requirements for cleaning, checking, storing and maintaining tools, plant and equipment used in the Gas Industry
- Comply with power safety rules when cleaning, checking, storing and maintaining electrically operated tools, plant and equipment
- Perform inspections and checks on tools, plant and equipment
- Perform minor repairs on tools, plant and equipment
- Identify service requirements for tools, plant and equipment
- Comply with good manual handling techniques when lifting, moving or storing tools, plant and equipment
- Understand and comply with licence requirements for specific tools and equipment

#### 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 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 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.

<b>Range of tools/equipment/procedures/workplace</b>		
<b>Group</b>	<b>The minimum number of items on which skill</b>	<b>Item List</b>

No	is to be demonstrated	
A	At least 4	Interpret alignment sheets, maps, technical drawings and symbols Service locators Gas detectors Traffic barricades Lighting Fire fighting equipment
B	At least 5	Small generator sets Air Compressors and hoses Pneumatic and/or electric hammers Rollers and compactors Concrete and ceramic cutters Boring equipment Trenching equipment
C	At least 4	Correctly interpret plans, drawings and maps Submit Dial Before You Dig application Obtain procedures and/or work instructions Correctly interpret instructions Advise stakeholders of upcoming work Prepare a safe work method statement of JHA Obtain all work permits as necessary
D	At least 5	Perform service location in the area Procure all materials and equipment

		<p>Identify and control all possible environmental hazards</p> <p>Implement control measures for identified hazards</p> <p>Induct all site workers and explain all hazards</p> <p>Correct use of PPE appropriate to the Gas Industry</p> <p>Perform machinery daily log checks and verify operator qualifications</p>
E	At least 3	<p>Traffic control management</p> <p>Erect barricades</p> <p>Establish warning and safety signs</p> <p>Establish muster point where appropriate</p> <p>Complete permit</p>
F	All	<p>Relevant OHS legislation, regulations, codes of practice, policies and procedures are applied</p> <p>Maintain a safe, clean and healthy workplace</p> <p>Work safely with hazardous materials and equipment</p> <p>Apply safe manual handling techniques</p> <p>Appropriately respond to unplanned event</p> <p>Communicate effectively in the workplace</p> <p>Apply basic planning skills</p>
G	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
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**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 excavating for underground utilities services operating plant and equipment.

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

UEGNSG104B Comply with environmental policies and procedures

UEGNSG105B Establish the work site



## 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 may be demonstrated in relation to excavations in the utilities industry.

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:

Legislation (2)

Inspection (2)

Hand tools (2)

Power tools (2)

Plant and equipment (2)

Personal Protective Equipment (2)

OHS requirements (2)

Types of drawings (2)

Key features of site plans (2)

Key features of plans and elevations (2)

Types of structures (2)

Services (2)

Types of details (2)

Environmental features (2)

Orientation of the site (2)

Excavation tools (2)

Excavation (2)

## **RANGE STATEMENT**

Surface reinstatements (2)

Backfill (2)

## **Unit Sector(s)**

Not applicable.

## **Competency Field**

**Competency Field**            **11)**

Distribution.