



Australian Government

UEGNSG010 Conduct general excavations

Release: 1

UEGNSG010 Conduct general excavations

Modification History

Release 1. This is the first release of this unit of competency in the UEG Gas Industry Training Package.

Application

This unit involves the skills and knowledge required to prepare, conduct and complete excavation work and relevant documentation in the utilities industry.

It includes site preparation and planning, including traffic control, and excavation and back filling work in accordance with relevant legislation, industry standards, codes of practice and workplace procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Gas cross discipline

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to conduct excavation work

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Workplace safety, environmental and sustainable energy practices for the site are identified, obtained and understood
- 1.2** Job requirements are obtained and interpreted from plans, specifications and instructions

- 1.3 Relevant job requirements and workplace procedures for work activities are discussed with relevant person/s, including third parties, to determine and confirm work schedule and respective responsibilities
 - 1.4 Hazards are identified, workplace safety and environmental risks are assessed, and control measures are prioritised, implemented and monitored in accordance with workplace procedures
 - 1.5 Scope of responsibility under the relevant job requirements, including all work permits and/or relevant notifications, is determined and confirmed to access the services and perform work in accordance with job requirements and workplace procedures
 - 1.6 Equipment, tools and personal protective equipment (PPE) needed to carry out work activities are identified, obtained and checked for correct operation and safety in accordance with workplace procedures and manufacturer instructions
 - 1.7 Materials, plans, diagrams, drawings and resources required for work are confirmed and obtained in accordance with workplace procedures
 - 1.8 Traffic management signs, barriers and warning devices are confirmed as correctly positioned with relevant person/s in accordance with job requirements, traffic management plans and workplace procedures
- 2 **Conduct excavation work**
 - 2.1 Workplace safety and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
 - 2.2 Appropriate materials, tools and equipment are selected and used safely in accordance with manufacturer instructions and workplace procedures
 - 2.3 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures
 - 2.4 Hazardous activities are conducted safely in accordance with regulatory requirements and workplace procedures
 - 2.5 Alarms, codes and hazard warnings are correctly recognised, and the correct response strategy is

		selected and applied in accordance with workplace procedures
	2.6	Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements
	2.7	Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures
3	Complete excavation work and relevant documentation	
	3.1	Workplace safety risk control measures for work completion are followed
	3.2	Quality and safety checks of the work are conducted in accordance with job requirements, workplace procedures and community and industry standards
	3.3	Worksite is cleaned, reinstated and made safe in accordance with workplace procedures
	3.4	Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures
	3.5	Incidents are reported and followed up as required in accordance with workplace procedures
	3.6	Relevant person/s is notified of work completion in accordance with workplace procedures
	3.7	Work completion documentation is completed accurately and provided to relevant person/s in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEG Gas Industry Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit supersedes and is equivalent to UEGNSG219 Conduct excavations in the utilities industry.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>

Assessment Requirements for UEGNSG010 Conduct general excavations

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant workplace safety requirements, including:
 - accessing and using relevant safety resources
 - dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
 - following emergency management plan
 - following safety and emergency procedures for incidents
 - identifying and reporting hazards
 - implementing risk control measures
 - selecting and using the correct personal protective equipment (PPE)
 - undertaking hazardous activities in a safe manner
- applying sustainable energy and environmental principles and practices
- completing excavation work and relevant documentation
- following manufacturer instructions
- following workplace policies and procedures, including:
 - obtaining relevant resources and materials for conducting excavation work, including shoring, trenching and backfilling
 - confirming location of other utility services
 - following excavation procedures
 - obtaining relevant work permits and notifications
 - undertaking preparatory procedures
 - implementing traffic control procedures
- identifying and checking tools, equipment and plant for correct operation and safety, including cleaning and storing tools, equipment, machinery and plant after use
- installing or re-instating markers part of confirmation of location
- obtaining, interpreting and completing workplace documents, including plans, drawings, work instructions, permits, maps, dial before you dig documentation, diagrams, schedules, and quality and safety checks
- obtaining job requirements, work instructions, safety plan and work schedule

- positioning traffic management signs, barriers and warning devices
- rehabilitating and maintaining a clean and safe worksite
- selecting and operating correct tools, plant, equipment and machinery to carry out general excavations.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- angle of repose, trench design limits and zone of influence limits
- environmental and sustainable energy principles and practices
- excavation of trenches and manholes
- excavation and shoring techniques to suit varying conditions, including:
 - surface types
 - soil types
 - weather
 - traffic
 - time of day
 - location
- quality and safety checks
- relevant manufacturer specifications
- relevant materials, tools, equipment, devices and PPE
- relevant permits and authorisations required
- relevant workplace safety requirements, including:
 - legislated work health and safety (WHS)/occupational health and safety (OHS) requirements
 - legislated industry/technical specific requirements
 - workplace safety procedures
 - manufacturer requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- relevant legislation, regulations, codes of practice and industry standards
- relevant plans, diagrams, maps and drawings
- relevant safety and environmental hazards and mitigation measures, including:
 - relevant utility notification and location services (dial before you dig)
 - hazards and field risk assessments
 - electrical, gases, toxins and fumes
 - security and fall prevention
 - prevention of trench collapse
 - confined spaces awareness
 - traffic hazards

- emergency control measures
- first aid, emergency and safety procedures for incidents
- hazards and hazardous activities in the workplace
- site preparation, work schedules, safety plans and job requirements
- trench and site restoration and reinstatement techniques, including:
 - ground surface level finishes
 - asset markers and signs
- techniques to identify and manage other utilities both underground and overhead
- techniques to minimise waste
- traffic management signs, barriers and warning devices.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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