



Australian Government

UEGNSG009 Assist with the construction, laying and connection of gas distribution services to mains

Release: 1

UEGNSG009 Assist with the construction, laying and connection of gas distribution services to mains

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 assist with the construction, laying and connection of gas distribution services to mains.

It includes constructing, laying and connecting a gas distribution service to mains, and completing relevant documentation whilst working under direct supervision. It also includes the use of relevant tools and equipment and working safely in accordance with 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 Distribution

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

- 1 Prepare to assist in the construction and laying of a service to a main**

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
- 2 **Assist in the construction and laying of a service to a main**
 - 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 Assistance in preparing and trenching the excavation site for laying of pipe is provided in accordance with industry standards and workplace procedures
 - 2.4 Assistance in constructing and laying of gas services is provided in accordance with industry standards and workplace procedures
 - 2.5 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures

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| | 2.6 | Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures |
| 3 Complete 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 UEGNSG226 Assist with the construction, laying and connection of gas distribution services to mains.

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 UEGNSG009 Assist with the construction, laying and connection of gas distribution services to mains

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 controls for stray, static and induced electrical faults
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying relevant workplace safety requirements
- applying sustainable energy and environmental principles and practices
- assisting in the construction and laying of a service to a main
- assisting in the purging and commissioning of a gas service
- completing required documentation and reporting
- assisting in conducting quality and safety checks
- consulting supervisor to assist in coordinating work
- identifying and correctly reading plans, drawings, manuals and diagrams
- identifying plant and equipment and safe operating parameters/requirements
- maintaining a clean work area
- minimising waste
- obtaining job requirements and work instructions
- obtaining relevant resources, tools, equipment and materials to conduct the work
- preparing the excavation site
- preparing to assist construction and laying of a service to a main
- referring third-party issues to supervisor
- reporting workplace safety risks and incidents to supervisor
- reporting workplace safety risks, incidents, accidents and unplanned events to supervisor
- working in accordance with relevant work permit/notifications.

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:

- combustible gas, characteristics and properties, including but not limited to natural gas,

propane and hydrogen

- dangers of working with live gas
- dangers of working near plant
- controls for stray, static and induced electrical faults
- cutting, tapping and joining pipelines and fittings, including:
 - requirements under various conditions and inclement weather
 - methods, procedures and safety requirements
- effective communication techniques
- environmental and sustainable energy principles and practices
- gas service and gas main pipelines, including:
 - types and characteristics
 - pipe sizes
 - fittings
 - accessories
 - handling and storage
 - safety data sheets (SDS)
- hazards and hazardous activities in the workplace
- installation of service pipelines
- relevant legislation, industry standards, codes of practice and regulations, including relevant industry and technical standards
- relevant manufacturer instructions
- relevant plans, diagrams and drawings
- relevant materials, tools, equipment, plant, resources and personal protective equipment (PPE)
- 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 work permits and/or notifications
- relevant workplace documentation
- relevant workplace policies and procedures
- site preparation, safety plans, job requirements and work schedules
- techniques to minimise waste
- third-party issues
- transition fittings and adaptors to other piping materials
- installation methods for service pipelines, including:
 - bedding materials
 - trenched, open cut and trenchless
 - trench width and depth

- required installation depth in various locations
- pipeline support
- backfilling/compacting requirements
- surface reinstatement.

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.

Links

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