



Australian Government

UEGNSG227 Assist with the construction and laying of gas distribution mains

Release: 1

UEGNSG227 Assist with the construction and laying of gas distribution 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 constructing and laying gas distribution mains, and completing relevant documentation whilst working under supervision.

It 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 construction and laying gas distribution mains

PERFORMANCE CRITERIA

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

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) and environmental workplace procedures and risk control measures for the site are identified and applied
- 1.2** Job requirements and workplace procedures for the site

are obtained and discussed with supervisor to confirm the work schedule

- 1.3** Hazards are identified and reported to the supervisor to assess risks and control measures implemented in accordance with workplace procedures
- 1.4** Scope of work and responsibility under the relevant work permit/notification is obtained and confirmed with supervisor in accordance with job requirements and workplace procedures
- 1.5** Equipment, plant, tools and personal protective equipment (PPE) required to construct and lay gas distribution mains are identified, obtained and checked for operation and safety in accordance with workplace procedures
- 1.6** Supervisor is consulted to ensure work is coordinated effectively with others involved
- 1.7** Materials, plans, diagrams, drawings and resources required to construct and lay gas distribution mains are obtained in accordance with workplace procedures
- 1.8** Safety and emergency procedures for an incident at the work site are checked and confirmed with supervisor
- 1.9** Third-party issues are referred to supervisor as required in accordance with workplace procedures
- 1.10** Site preparation, safety plan and work schedule are confirmed with supervisor in accordance with workplace procedures

2 Assist in the construction and laying of gas distribution mains

- 2.1** WHS/OHS and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
- 2.2** Materials, tools, equipment and measuring devices required for the work are selected and used correctly and safely in accordance with manufacturer instructions and workplace procedures
- 2.3** Hazardous activities including lifting, climbing, using power tools, and working in excavations and trenches are conducted safely in accordance with WHS/OHS workplace procedures and job instructions

- 2.4 Assistance in preparing and trenching the excavation for laying of pipe is provided in accordance with industry standards and workplace procedures
 - 2.5 Assistance in constructing and laying of gas distribution mains is provided in accordance with industry standards and workplace procedures
 - 2.6 Work is carried out to the required standard without waste of materials or damage to apparatus, equipment, and the surrounding environment or services using sustainable energy principles
 - 2.7 WHS/OHS risks, incidents, accidents and unplanned events are reported to the supervisor in accordance with workplace procedures
- 3 **Complete the work and relevant documentation**
 - 3.1 WHS/OHS and environmental risk control measures for work completion are followed
 - 3.2 Supervisor is notified of work completion in accordance with workplace procedures
 - 3.3 Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures
 - 3.4 Work site is tidied and made safe in accordance with workplace procedures
 - 3.5 Relevant work documentation is completed and provided to the supervisor 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 replaces and is equivalent to UEGNSG227A Assist with the construction and laying of gas distribution 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 UEGNSG227 Assist with the construction and laying of gas distribution 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 work health and safety (WHS)/occupational health and safety (OHS) requirements
- applying sustainable energy and environmental principles and practices
- assisting in cutting, joining, laying, covering and connecting gas distribution services pipelines
- assisting in isolating, venting, purging and testing for soundness and leaks, and commissioning and making safe gas services
- assisting in the construction and laying of a service to a main
- communicating effectively with others
- completing required documentation and reporting
- completing work and relevant documentation
- conducting quality and safety checks
- consulting supervisor to coordinate 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 a service to a main
- referring third-party issues to supervisor
- reporting WHS/OHS risks and incidents to supervisor
- reporting WHS/OHS 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:

- 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
- 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 materials, plans, diagrams, drawings and resources
- relevant materials, tools, equipment, plant, measuring devices and personal protective equipment (PPE)
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated 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
- trenching requirements for service pipelines, including:
 - bedding materials
 - trench width and depth
 - required coverage 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.

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

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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