



**Australian Government**

# **UEGNSG013 Construct, lay and connect a gas distribution service to a main**

**Release: 1**

# UEGNSG013 Construct, lay and connect a gas distribution service to a main

## 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 excavate bed preparation and construct, connect, test, commission and reinstate a gas service to a main; and complete the work and relevant documentation.

It includes installing the meter in accordance with industry standards and regulatory requirements. It also includes using relevant tools and equipment, working safely in accordance with workplace procedures and complying with relevant legislative, standards and code requirements.

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 construct and lay a gas service to a plastic 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 Pressure, diameter and volume of pipe is confirmed as being classified as a distribution service against industry standards
  - 1.8 Materials, plans, diagrams, drawings and resources required for work are confirmed and obtained in accordance with workplace procedures
- 2 **Construct and lay a gas 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 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures
  - 2.4 Site is prepared for laying of pipe in accordance with industry standards and workplace procedures
  - 2.5 Construction and laying of gas services to main are

- conducted in accordance with industry standards and workplace procedures
- 2.6** Gas distribution service is connected, tested and commissioned
- 2.7** Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements
- 2.8** 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 equivalent to UEGNSG212 Construct, lay and connect a gas distribution service to a plastic main and supersedes UEGNSG213 Construct, lay and connect a gas distribution service to a plastic main.

## 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 UEGNSG013 Construct, lay and connect a gas distribution service to a main

## Modification History

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

## 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 industry standards, guidelines, codes of practice and regulations
- applying relevant workplace safety requirements
- applying sustainable energy and environmental principles and practices
- checking tools, equipment, plant and personal protective equipment (PPE) for correct operation and safety
- cleaning, checking and storing tools and equipment
- communicating effectively with others
- completing required documentation and reporting
- conducting quality and safety checks
- connecting a service to a main
- constructing and laying a gas service to a main
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- identifying and correctly reading plans, drawings, manuals and diagrams
- identifying plant and equipment and safe operating parameters/requirements
- maintaining a clean work area
- obtaining relevant resources, tools, equipment and materials to conduct the work
- preparing the excavation site
- preparing to construct and lay a gas service to a main
- testing pipework
- purging and commissioning a gas service
- 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

- effective communication techniques
- environmental and sustainable energy principles and practices
- excavation and bedding requirements for service pipelines
- gas distribution service connection methods to main
- gas distribution service industry standards and definitions
- gas distribution service pipeline types, characteristics and components
- hazardous activities, including the use of power tools, lifting, climbing and working in confined spaces, excavations and trenches
- installation and testing of service pipelines
- gas main pipeline types, characteristics and components
- pipework tests
- quality and safety checks
- relevant industry standards, codes of practice, legislation and regulations
- relevant manufacturer specifications
- relevant plans, diagrams and drawings
- relevant materials, tools, equipment, plant and PPE
- relevant safe work method statements (SWMS)/job safety analysis (JSA) or risk mitigation processes
- relevant workplace safety requirements, including:
  - legislated workplace safety requirements
  - legislated industry/technical specific requirements
  - workplace safety procedures
  - manufacturer requirements
  - hazards, risk assessment and control measures
  - dangers of working with live gas
- relevant work permits and/or notifications
- relevant workplace documentation
- relevant workplace policies and procedures
- site preparation, safety plans, job requirements and work schedules
- third-party issues.

## 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

Companion Volume Implementation Guides are found in VETNet -

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