



**Australian Government**

# **Assessment Requirements for UEGNSG102**

## **Prepare safe design specifications of a gas system**

**Release: 1**

# **Assessment Requirements for UEGNSG102 Prepare safe design specifications of a gas system**

## **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, performance criteria and range of conditions on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including using of risk control measures
- applying sustainable energy principles and practices
- assessing the impact of the gas system on the external environment
- complying with regulations, industry standards, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- dealing effectively with unplanned events in accordance with workplace procedures, in a manner that minimises risk to personnel and equipment
- evaluating gas system options
- identifying and engaging with relevant stakeholders
- identifying options for the gas system
- preparing design specifications, input and output performance criteria for the gas system
- read, analyse, interpret and record data.

## **Knowledge Evidence**

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

- applicable gas chemistry, properties and characteristics
- chemical and physical behaviours of different types of fuel gases
- engineering principles and operating principles of pipeline systems
- environmental impacts of gas installations and infrastructure on the environment
- gas system design specifications
- gas system environmental compliance
- processes to undertake a cost benefit analysis
- regulations, industry standards, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements

- relevant job safety assessments or risk mitigation processes
- relevant mathematical techniques and principles
- relevant WHS/OHS legislated, industry standards and codes of practice for the gas industry requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- safe design principles
- sustainable energy principles and practices
- theory and study of hazard and operability (HAZOP) and hazard analysis (HAZAN).

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within 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 personal protective equipment (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>