



Australian Government

UEGNSG108 Operate and monitor pipeline control systems

Release: 1

UEGNSG108 Operate and monitor pipeline control systems

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 operate and monitor pipeline system.

It includes monitoring, operating and identifying faults on pipeline control system, compression systems, prime movers, instrument and control systems and valve systems, selecting and using relevant tools, equipment and testing devices to complete work and relevant documentation.

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

Pre-requisite Unit

Not applicable.

Competency Field

Cross Discipline Units

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan to operate and monitor pipeline control system

PERFORMANCE CRITERIA

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

- 1.1** Work schedule, drawings, plans, job requirements, and material lists are obtained, analysed and confirmed by site inspection, as required, and work planned and coordinated in accordance with workplace and environmental procedures
- 1.2** Work is prioritised and sequenced for completion within acceptable timeframes following consultation with

relevant person/s in accordance with workplace procedures

- 1.3** Hazards are identified, work health and safety (WHS)/occupational health and safety (OHS) risks are assessed and control measures prioritised, implemented and monitored in accordance with workplace procedures
- 1.4** Job requirements and workplace procedures for the work are obtained for work sites and communicated to relevant person/s in accordance with workplace procedures
- 1.5** WHS/OHS, environmental and sustainable energy policies and procedures related to the work are identified, obtained and applied to ensure safe systems of work are followed
- 1.6** Relevant work permit/s are obtained to coordinate and perform the work in accordance with regulatory and job requirements and workplace procedures
- 1.7** Person/s, equipment, tools and personal protective equipment (PPE) required for the job are identified, scheduled, obtained and checked for correct operation and safety in accordance with workplace procedures
- 1.8** Clients are provided with possible solutions and options within the scope, acceptable cost and job requirements parameters
- 1.9** Communication issues with relevant stakeholders are resolved and work coordinated in accordance with work schedule and workplace procedures
- 1.10** Person/s participating in work are briefed and responsibilities coordinated and authorised as required in accordance with workplace procedures
- 1.11** System status is confirmed through communication with pipeline control centre in accordance with workplace procedures

2 Operate and monitor pipeline control system

- 2.1** WHS/OHS risk control measures and environmental procedures are followed in accordance with workplace procedures
- 2.2** Hazardous activities are conducted safely in accordance with regulatory requirements and workplace procedures

- 2.3 Equipment and systems are inspected, tested and faults identified in accordance with work schedule, job requirements and workplace procedures
 - 2.4 Hazard warnings and safety signs are recognised, hazards and WHS/OHS risks assessed and reported to authorised person/s for directions in accordance with workplace procedures
 - 2.5 Operating conditions and performance of equipment and systems are monitored through checking gauge levels, temperatures and flow indicators in accordance with manufacturer instructions and workplace procedures
 - 2.6 Pipeline equipment and system performance information is monitored and reported to relevant person/s to ensure safe and efficient operation of the pipeline system in accordance with workplace procedures
 - 2.7 Fault finding and troubleshooting techniques are applied to identify repairs or maintenance required in accordance with job requirements and workplace procedures
 - 2.8 Work is coordinated to ensure completion in agreed timeframe and to industry standards with a minimum of waste in accordance with job requirements and workplace procedures
 - 2.9 Unplanned situations are responded to in accordance with workplace procedures, in a manner that minimises risk to personnel and equipment
 - 2.10 Quality and safety checks of work are conducted in accordance with job requirements, workplace procedures and industry standards
- 3 Complete work and relevant documentation**
- 3.1 Work undertaken is checked against work schedule for conformance and anomalies and proposed solutions reported to relevant person/s in accordance with workplace and environmental procedures
 - 3.2 Accidents and injuries are reported and followed up as required in accordance with workplace procedures
 - 3.3 Work site is rehabilitated, cleaned up and confirmed safe in accordance with workplace procedures
 - 3.4 Tools, equipment and any surplus resources and

materials are cleaned, checked and returned to storage in accordance with workplace procedures

- 3.5 Relevant work permit/s is signed off in accordance with job requirements and workplace procedures
- 3.6 Work completion records, reports, documentation and as installed/modified drawing/s are completed, processed and the appropriate person/s notified 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 UEGNSG108B Operate and monitor pipeline control systems.

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 UEGNSG108 Operate and monitor pipeline control systems

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 work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - ensuring emergency response procedures are in place
 - identifying and reporting hazards
 - implementing risk control measures
 - selecting and using correct personal protective equipment (PPE)
- applying sustainable energy and environmental principles and practices
- communicating with relevant authorities and stakeholders
- completing work and relevant documentation
- conducting quality and safety checks
- dealing with unplanned events/situations in accordance with workplace procedures, in a manner that minimises risk to personnel and equipment
- following workplace procedures
- interpreting technical drawings, plans and materials lists
- monitoring pipeline and system performance
- obtaining relevant work permits
- operating and monitoring the controls system
- rehabilitating and maintaining a clean work site.

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:

- communication techniques
- gas industry products, processes and characteristics
- hazardous activities, including lifting, climbing, working in confined spaces or aloft and using power tools

- inspecting and testing procedures
- operating conditions and performance of equipment and systems
- pipeline systems operating parameters
- problem-solving techniques
- quality and safety checks
- relevant industry standards, guidelines, codes of practice and regulations
- relevant manufacturer specifications
- relevant plant, equipment, tools and materials
- relevant risk mitigation processes, including:
 - environmental and sustainable energy principles and practices
 - hazard warnings and safety signs
 - hazardous materials
 - hazards, risk assessment and control measures
 - PPE
 - site inspections
- relevant stakeholders, including:
 - authorised persons, authorities, clients, tenants and land owners
 - workplace colleagues
 - relevant customers and suppliers
 - pipeline control centre
 - regulatory bodies
 - emergency response organisations
- relevant technical drawings, plans and material lists
- relevant WHS/OHS legislated requirements
- relevant work permits
- relevant workplace documentation, records and reports
- relevant workplace policies and procedures
- types of pipeline control systems, including:
 - compression systems, prime movers, instrument and control systems and valve systems.

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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