



Australian Government

UEGNSG025 Monitor and operate complex flow control, measuring and regulating devices

Release: 1

UEGNSG025 Monitor and operate complex flow control, measuring and regulating devices

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 monitor and operate complex flow control, measuring and regulating devices to monitor and control gas supply in gas distribution system in accordance with relevant legislation, codes of practice, regulations and workplace procedures.

It includes on-site local inspecting and controlling of gas flow and pressure; local monitoring of gas flow, pressure and measurement; recording and reporting on anomalies to gas flow pressure and measurement; and controlling the system to organisational and statutory requirements.

This unit applies to gas distribution systems, subject to all work health and safety (WHS)/occupational health and safety (OHS) and duty of care requirements being met for the workplace.

The application of the skills and knowledge described in this unit may require a license or permit to practice in the workplace.

Other conditions may apply under state and territory legislative and regulatory licensing requirements which must be confirmed prior to commencing this unit.

Pre-requisite Unit

Not applicable.

Competency Field

Pressure Control Discipline

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Prepare to monitor and operate gas flow control, measuring and regulating devices

- 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 Monitor and operate gas flow control, measuring and regulating devices

- 2.1** Gas flow device and equipment performance information is collected and reported in accordance with workplace and job requirements
- 2.2** Workplace safety and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
- 2.3** Appropriate materials, tools and equipment are selected and used safely in accordance with manufacturer instructions and workplace procedures

- 2.4 Dealings with customers are consistent with workplace procedures and the specific needs of customers are identified and considered in targeting client service
 - 2.5 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures
 - 2.6 Routine inspections of system are scheduled and monitored in accordance with the work schedule and workplace procedures
 - 2.7 Alarms, codes and hazard warnings are correctly recognised, and the correct response strategy is selected and applied in accordance with workplace procedures
 - 2.8 Unplanned events and non-routine problems are identified and actioned in accordance with workplace procedures
 - 2.9 Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures
- 3 **Control and adjust flows and complete records and reports**
 - 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 Gas flows and diversions are determined to facilitate repair or emergency activities in accordance with organisational job requirements
 - 3.7 Relevant person/s is notified of work completion in accordance with workplace procedures
 - 3.8 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 replaces and is equivalent to UEGNSG811 Monitor and operate complex flow control, measuring and regulating devices for gas distribution.

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 UEGNSG025 Monitor and operate complex flow control, measuring and regulating devices

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 relevant workplace safety requirements, including:
 - applying workplace procedures and practices
 - using of risk control measures
- completing required documentation and reporting requirements
- monitoring and operating of complex gas flow control with the following constants and variables:
 - inspecting and controlling
 - regulation of flow and pressure
 - measuring
 - recording and reporting
 - regulation of flow and regulation devices
 - regulation of the system
 - equipment
 - organisational and statutory requirements
- dealing effectively with unplanned events in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- monitoring and operating supervisory control and data acquisition (SCADA) for gas distribution systems in accordance with relevant legislation, industry standards, codes of practice, regulations and workplace procedures.

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:

- component types, function and operation, including data collection and equipment control functions
- gas flow control device operation
- gas station operation requirements and procedures

- principles of SCADA use in monitoring and control of applicable organisational gas infrastructure
- relevant job safety analysis (JSA) or risk mitigation processes
- relevant legislation, industry standards, codes of practice and regulations
- relevant manufacturer specifications, manuals and procedures
- relevant organisation gas facility manuals, schematics, SCADA displays, switches and procedures
- relevant workplace documentation
- relevant workplace policies and procedures
- SCADA gas flow measurement equipment
- SCADA operated gas conditioning and monitoring equipment, principles of operation, components and fault finding, adjustments and minor repairs
- SCADA operated pressure control equipment
- 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.

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 personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

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