



Australian Government

UEGNSG029 Process, mix and blend industrial gases

Release: 1

UEGNSG029 Process, mix and blend industrial gases

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 process, mix and blend industrial gas.

It includes processing and monitoring industrial gases; applying relevant emergency response procedures in an emergency; using appropriate materials, tools and equipment; and completing relevant documentation.

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

Pre-requisite Unit

Not applicable

Competency Field

Gaseous Fuel Vessels

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to process, mix or blend industrial gases

PERFORMANCE CRITERIA

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

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|------------|---|
| 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 **Process, mix or blend industrial gases**
 - 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 Hazardous activities are conducted safely in accordance with regulatory requirements and workplace procedures
 - 2.5 Alarms, codes, and hazard warnings are correctly recognised, and the correct response strategy is selected and applied in accordance with workplace procedures
 - 2.6 Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements

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| | 2.7 | 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 replaces but is not equivalent to UEGNSG618 Process liquefied petroleum gas (LPG).

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 UEGNSG029 Process, mix and blend industrial gases

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 industry standards, guidelines, codes of practice and regulations
- applying relevant workplace safety requirements, including:
 - identifying and reporting hazards
 - implementing risk control measures
 - selecting and using correct personal protective equipment (PPE)
 - working safely with hazardous materials and equipment
- applying sustainable energy and environmental principles and practices
- communicating with relevant person/s
- completing shutdown
- 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 procedures for emergency response, including:
 - equipment failure
 - gas leaks and fire
 - hazards and incidents
- following workplace procedures
- identifying and reporting anomalies
- monitoring and adjusting controls
- obtaining and complying with relevant work permits/authorisations
- obtaining and using relevant equipment, including
 - control and monitoring equipment
 - mixing/sampling equipment
 - pumps/compressors
 - valves
 - vessels

- operating valves in correct sequence
- preparing to mix, blend and/or process industrial gas
- mix, blend and/or process industrial gas
- reporting anomalies.

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:

- compliance requirements
- equipment/tools, including:
 - analytical judgements for appropriate adjustments to plant and equipment
 - types, selection, manufacturer specifications/instructions, testing and set-up
 - variations and irregularities identification
- fault-finding and troubleshooting techniques
- hazardous activities, including lifting, climbing, working in confined spaces or aloft, and use of power tools
- mix, blend and/or process industrial gas, including:
 - requirements, applications, methods and procedures
 - gas analysis equipment
 - gas alarm and communication equipment
- oral and written communication techniques
- product specifications and quality assurance documentation
- quality and safety checks
- relevant industry standards, guidelines, codes of practice and regulations
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety analysis (JSA) or risk mitigation processes
- 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
- relevant work permits/authorisations.

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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