



Australian Government

UEPOPS318 Operate and monitor compressed gas systems

Release: 1

UEPOPS318 Operate and monitor compressed gas systems

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Application

This unit involves the skills and knowledge required to operate compressed gas systems excluding air steam.

Compressed gas is gas contained under pressure, usually in a cylinder. Typically, a compressed gas system in a power generation facility will consist of a bulk compressed gas supply system rather than individual cylinders.

Competency in this unit requires the ability to plan work, operate compressed gas system plant, test compressed gas system plant, analyse compressed gas system plant faults, monitor and inspect compressed gas system plant and the completion all documentation. Individuals will, in general, work under supervision, in a power generation facility as a maintenance operator.

Power generation plant operators are typically trained and authorised to isolate, prepare plant and issue permits to work.

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

Note: Workplace practice

The application of the skills and knowledge described in this unit may require a licence or training permit to practice in the workplace where work is carried out on gas and electrical installations. Additional conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

There are no prerequisite units.

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Plan and prepare work

- 1.1** Safety issues related to operating and monitoring compressed gas system plant are identified, in accordance with workplace procedures and Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations and legislative requirements
- 1.2** Work requirements are identified, in accordance with workplace procedures, from appropriate personnel and documentation
- 1.3** Documentation to determine compressed gas system plant status is assessed and evaluated, in accordance with workplace procedures
- 1.4** Inspection for compressed gas system plant service is carried out, in accordance with workplace procedures and manufacturers' operational requirements
- 1.5** Compressed gas system plant operational prerequisites are established, in accordance with workplace procedures and manufacturers' recommendations
- 1.6** Sequence for recommissioning of compressed gas system plant is determined, in accordance with workplace procedures and site requirements

2 Operate compressed gas system plant

- 2.1** Compressed gas system plant is operated, in accordance with workplace procedures and manufacturers' operating recommendations
- 2.2** Compressed gas system plant is monitored and observed, in accordance with workplace procedures, to detect deviations from normal operating conditions
- 2.3** Corrective actions are taken to rectify compressed gas system plant abnormalities, in accordance with workplace procedures and site requirements
- 2.4** Compressed gas system plant is identified and removed from service, in accordance with workplace procedures and site requirements

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| | 2.5 | Corrective actions are taken, in accordance with workplace procedures when compressed gas system plant abnormalities are identified during removal from service |
| 3 Test compressed gas system plant operation | 3.1 | Operational tests are performed, in accordance with workplace procedures |
| | 3.2 | Compressed gas system plant is observed for correct operational response, in accordance with workplace procedures |
| | 3.3 | Corrective action is taken, in accordance with workplace procedures, when response does not meet with documentation, plant integrity or personnel safety requirements |
| | 3.4 | Compressed gas system plant is returned to required operational status upon completion of test, in accordance with workplace procedures |
| 4 Analyse compressed gas system plant faults | 4.1 | Causes of abnormal compressed gas system plant operating conditions are identified, in accordance with workplace procedures, and by analysing technical and operational information |
| | 4.2 | Corrective action is taken, in accordance with workplace procedures |
| | 4.3 | Compressed gas system plant integrity and personnel safety is maintained, in accordance with workplace procedures, and in consultation with appropriate personnel and technical and operational documentation |
| 5 Monitor and inspect compressed gas system plant | 5.1 | Compressed gas system plant to be monitored and/or inspected is physically identified, in accordance with workplace procedures |
| | 5.2 | Compressed gas system plant is monitored and/or inspected, in accordance with workplace procedures, for normal operation or to detect deviations |
| | 5.3 | Corrective action is taken, in accordance with workplace procedures |
| | 5.4 | Appropriate personnel are notified, in accordance with workplace procedures, when defects are detected |
| 6 Complete documentation | 6.1 | Compressed gas system plant problems, movements and |

status are reported, in accordance with workplace procedures

- 6.2** Documentation is updated, 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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPOPS318B Operate and monitor compressed gas systems.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>

Assessment Requirements for UEPOPS318 Operate and monitor compressed gas systems

Modification History

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and includes:

- analysing compressed gas systems plant faults using data analysis techniques and tools
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including:
 - emergency procedures
 - risk control measures
 - safe work practices
- communicating with personnel
- completing documentation using recording procedures
- identifying compressed gas system plant status
- implementing legislation, industry standards, codes of practice and regulations
- interpreting manufacturers' specifications and manuals
- monitoring and inspecting compressed gas systems plant operation
- operating compressed gas system plant
- organising resources
- planning and preparing work
- preparing compressed gas system plant and/or equipment for operation
- recognising and responding to abnormal compressed gas system plant operating conditions
- testing compressed gas system plant operationally using diagnostic and testing techniques
- working with permit to work system

Knowledge Evidence

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

- compressed gas system plant and equipment, its location and operating parameters
- compressed gas system plant status
- legislation, industry standards, codes of practice and regulations

- manufacturers' specifications and manuals
- permit to work system
- typical arrangements of power production plant
- WHS/OHS legislated requirements including:
 - emergency procedures
 - risk control measures
 - safe work practices
- workplace documentation
- workplace policies and procedures

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 processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

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 currently used in industry
- applicable documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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