



Australian Government

UEGNSG137 Operate and maintain gas station water bath heaters

Release: 1

UEGNSG137 Operate and maintain gas station water bath heaters

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 maintain gas station water bath heaters and associated equipment in accordance with relevant legislation, codes of practice, industry standards and regulations.

It includes operating and maintaining both gas fired and electric water bath heaters in trunk receiving stations (TRS) and pressure reduction stations.

This unit applies to the following the types of gas facilities, subject to work health and safety (WHS)/occupational health and safety (OHS) and duty of care requirements being met for the workplace:

- Trunk Receiving Station (TRS)
- Pressure Reduction Station

This unit is intended for non-electrical workers and electrical work is undertaken by a person with an unrestricted or restricted electrical licence.

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

Pre-requisite Unit

Not applicable.

Competency Field

Gas Cross 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 operate and maintain gas station water bath heaters

- 1.1** WHS/OHS workplace procedures and environmental risk control measures for the site are identified, evaluated and prioritised
- 1.2** Work schedules, plans, specifications and job instructions are obtained and interpreted to determine job requirements
- 1.3** Job requirements and workplace procedures for the work are obtained and discussed with relevant person/s to confirm the work schedule and respective responsibilities
- 1.4** WHS/OHS, environmental and sustainable energy policies and procedures are obtained and applied
- 1.5** Hazards and WHS/OHS risks are assessed and prioritised and control measures implemented and monitored in accordance with workplace procedures
- 1.6** Relevant work permit and/or notification is obtained to access, isolate/de-energise systems and perform the work in accordance with regulatory requirements and workplace procedures
- 1.7** Equipment, tools and personal protective equipment (PPE) required for the work are identified, scheduled, obtained and checked for correct operation and safety in accordance with workplace procedures
- 1.8** Appropriate person/s are consulted to ensure the work is coordinated effectively with others involved
- 1.9** Materials, manuals, plans, diagrams, drawings and resources required for work are confirmed, scheduled and obtained in accordance with workplace procedures
- 1.10** Responsibilities for first aid and other emergency incidents at the worksite are confirmed with relevant person/s in accordance with workplace procedures
- 1.11** Third party issues are referred to relevant person/s in accordance with workplace procedures
- 1.12** Site preparation, safety plan and work schedule are confirmed with relevant person/s in accordance with

		workplace procedures
2 Operate and maintain gas station water bath heater	2.1	WHS/OHS risk control measures, schedule of work and workplace procedures for carrying out work are followed
	2.2	Materials, tools, equipment and measuring devices required for the work are selected and used correctly and safely in accordance with manufacturer instructions and workplace procedures
	2.3	Hazardous activities are conducted safely in accordance with job instructions, regulatory requirements and workplace procedures
	2.4	Work is conducted to industry standards without waste of materials or damage to apparatus, circuits and the surrounding environment or services using sustainable energy principles
	2.5	Hazard warnings and safety signs are recognised, hazards and WHS/OHS risks and incidents are assessed and reported to authorised person/s for directions in accordance with workplace procedures
	2.6	Information on gas temperature, water levels and utility supply gas is collected, analysed and reported in accordance with workplace procedures
	2.7	Maintenance of components is conducted in accordance with work schedule and workplace procedures
	2.8	Water bath heater components are maintained and operated in accordance with workplace procedures
	2.9	Faults and operational conditions of the components are identified, repaired/replaced, tested and reported in accordance with requirements and workplace procedures
	2.10	Unplanned events and non-routine events are referred to authorised person/s for directions in accordance with workplace procedures
	2.11	Quality and safety checks are carried out in accordance with industry standards, work instructions and workplace procedures
3 Complete work and relevant documentation	3.1	WHS/OHS risk control measures and workplace procedures for work completion are followed

- 3.2 Work site is tidied and made safe in accordance with workplace and environmental procedures
- 3.3 Tools, equipment and any surplus resources and materials are cleaned and securely stored in accordance with workplace and environmental procedures
- 3.4 Appropriate person/s are notified of work completion in accordance with workplace procedures
- 3.5 Work completion documentation is completed and provided to appropriate 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 UEGNSG137A Operate and Maintain Gas Station Water Bath Heaters.

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 UEGNSG137 Operate and maintain gas station water bath heaters

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 problem-solving techniques
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - emergency response procedures
 - maintaining a safe and clean workplace
 - working safely with hazardous materials and equipment
 - hazard identification and reporting
 - implementing risk control measures
- collecting, analysing and reporting on utility supply gas and temperature control systems
- completing required documentation and reporting
- 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
- fault-finding and troubleshooting water bath heater faults
- obtaining and interpreting relevant technical drawings, diagrams, schedules and manuals
- obtaining relevant work permits
- operating and maintaining gas station water bath heaters and components
- operating, adjusting/testing and fault-finding water bath heaters and components
- repairing and replacing water bath components
- selecting correct materials, equipment, tools, personal protection equipment (PPE) and measurement devices.

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:

- fault-finding and troubleshooting techniques to identify water bath heater faults

- gas fired and electric water bath heaters, including:
 - operation
 - components
 - skid layouts
- hazardous activities, including:
 - lifting, climbing, working in confined spaces and aloft, and use of power tools
- isolate and de-energise systems
- manufacturer specifications, manuals and procedures
- operating modes, including:
 - dual heater skid operation
 - automatic
 - manual
 - set point control
- relevant equipment, tools and measurement devices
- relevant industry standards, guidelines, codes of practice, legislation and regulations
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements, including:
 - hazards, risk assessment and control measures
 - environmental and sustainable energy principles and practices
 - using correct PPE
- relevant work permits
- relevant workplace policies and procedures
- reporting and documentation requirements
- routine inspection requirements
- technical plans, diagrams and drawings
- temperature control systems
- water bath heater maintenance and operation
- water levels and utility supply.

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

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>