



Australian Government

UEGNSG101 Undertake gas leak surveys

Release: 1

UEGNSG101 Undertake gas leak surveys

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 undertake gas leak surveys within the gas supply industry, operate gas detection equipment within guidelines and evaluate survey readings. 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

Elements describe the essential outcomes.

1 Prepare to carry out gas leak survey

PERFORMANCE CRITERIA

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

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) workplace procedures and environmental, sustainable energy policies and procedures, cultural and heritage measures for the site are reviewed
- 1.2** Job requirements and workplace procedures for the leak survey are discussed with relevant person/s to confirm the work schedule
- 1.3** Work is prioritised and sequenced for completion within

agreed timeframes following consultation with relevant person/s in accordance with workplace procedures

- 1.4** Relevant plans and resources required for the survey are confirmed, scheduled and obtained in accordance with workplace procedures
- 1.5** Relevant access permissions are obtained to perform leak survey in accordance with workplace procedures
- 1.6** Detection equipment is identified, obtained and checked for current calibration, correct operation and safety in accordance with workplace procedures
- 1.7** Personal protective equipment (PPE) required for the leak survey are identified, obtained and checked for correct operation and safety in accordance with workplace procedures
- 1.8** WHS/OHS, environmental risks and hazards are identified, assessed and control measures prioritised and implemented in accordance with workplace procedures
- 1.9** Person/s participating in the leak survey work are briefed and responsibilities confirmed in accordance with workplace procedures

2 Carry out gas leak survey

- 2.1** WHS/OHS, workplace, environmental, sustainable energy policies, cultural and heritage measures for the site are followed and procedures applied
- 2.2** Materials, plant, tools, equipment, detection equipment and PPE are used in accordance with workplace procedures and manufacturer instructions
- 2.3** Leak survey work is carried out to the required standard, without damage to apparatus, equipment, and the surrounding environment and services using sustainable energy principles
- 2.4** Leakages and damaged assets, structures, systems and fittings are reported in accordance with the work schedule and workplace procedures
- 2.5** WHS/OHS risks and hazards are monitored and reported to authorised person/s for directions in accordance with workplace procedures

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| | 2.6 | Survey readings are evaluated and classified, key issues are identified and solutions and options developed, and communicated to relevant stakeholders in accordance with workplace procedures and appropriate actions implemented |
| | 2.7 | Incidents and unplanned events in the gas leak survey work are dealt with in accordance with workplace procedures |
| | 2.8 | Dealings with the public are consistent with workplace procedures |
| 3 Complete work and relevant documentation | 3.1 | Completed work is checked for compliance against the work plan and workplace procedures |
| | 3.2 | Appropriate tools, detection instruments, equipment and vehicles, if required, are cleaned, checked and securely stored in accordance with workplace procedures |
| | 3.3 | Survey reports, work records and documentation are completed and appropriate personnel 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 is a new unit.

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 UEGNSG101 Undertake gas leak surveys

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 one occasion and includes:

- applying planning skills
- applying problem-solving techniques and implementing solutions
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - hazard identification and reporting
 - implementing risk control measures
 - maintaining a safe work environment
 - working safely with hazardous materials and equipment
- applying sustainable energy and environmental, cultural and heritage principles and practices
- carrying out gas leak survey
- checking, testing and verifying equipment as per procedures
- communicating effectively with stakeholders
- completing required documentation and reporting
- dealing with unplanned events and situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- evaluating survey results
- following work schedule, safety plan and job requirements
- identifying and using venting locations including, but not limited to, pits, drains and cracks in pavements
- identifying leaks, breaches, threats, faults and possible causes
- interpreting relevant drawings, plans and diagrams
- responding to and classifying survey readings
- selecting and using correct materials, equipment, tools, personal protection equipment (PPE) and measuring devices
- working in accordance with relevant access permissions
- working within agreed timeframes.

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:

- asset plans and diagrams
- cultural and heritage requirements in relation to gas leak survey
- gas industry infrastructure
- gas leak classifications
- gas leak survey techniques, including different types of survey methods and responses to survey information
- leak survey problem-solving techniques
- relevant equipment specifications
- relevant industry standards, guidelines, codes of practice and regulations
- relevant stakeholder awareness, including authorised persons, authorities, land owners and clients, including access permissions
- relevant WHS/OHS legislated requirements, including:
 - environmental and sustainable energy principles and practices
 - hazard warnings and safety signs
 - hazards, risk assessment and control measures
 - safe work method statements (SWMS) and job safety assessments
- relevant workplace documentation, including safety plans, work schedules and jobs requirements
- safe operation and use of relevant tools, equipment, detection instruments, measuring devices and PPE
- techniques to evaluate survey information
- types and characteristics of gases.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment evidence must be gathered on an existing gas network in the workplace.

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 may 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 for undertaking gas leak surveys
- applicable documentation, including workplace procedures, equipment specifications,

regulations, codes of practice and operation manuals.

Assessment is to be based on the performance of the individual candidate. If assessment tasks are undertaken as a group, each candidate must be assessed in each component of the task.

Links

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