



Australian Government

UEGNSG349 Carry out surveillance of gas transmission pipelines

Release: 1

UEGNSG349 Carry out surveillance of gas transmission pipelines

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 carry out ground surveillance of gas transmission pipelines, complete work and relevant documentation, and report in accordance with relevant legislation, standards, codes of practice and workplace procedures.

It includes threat mitigation through identifying non-conformances, areas to be monitored and inspection of easement, pipe work, structures, fittings and equipment in accordance with organisational and statutory requirements.

Aerial surveillance is not covered by this unit.

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

Pre-requisite Unit

Not applicable.

Competency Field

Gas Transmission

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to carry out surveillance of gas

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,

transmission pipelines	cultural and heritage measures for the site are identified, obtained and applied
1.2	Job requirements and workplace procedures for the surveillance work are discussed with relevant person/s to confirm the work schedule
1.3	WHS/OHS, environmental and sustainable energy policies and procedures are obtained and communicated to relevant person/s
1.4	Work is prioritised and sequenced for completion within acceptable timeframes following consultation with relevant person/s in accordance with workplace procedures
1.5	Hazards are identified, WHS/OHS and environmental risks are assessed and control measures prioritised, implemented and monitored in accordance with workplace procedures
1.6	Scope of work and level of responsibility under the relevant work authorisation/permit/ notification is obtained and confirmed with relevant person/s in accordance with workplace procedures
1.7	Plant, equipment, tools and personal protective equipment (PPE) required for gas pipeline surveillance work are identified, obtained and checked for correct operation and safety in accordance with workplace procedures
1.8	Communication issues with relevant stakeholders are resolved and work coordinated in accordance with workplace procedures
1.9	Person/s participating in the work are briefed and responsibilities confirmed in accordance with workplace procedures
1.10	Site preparation, safety plan and work schedule are confirmed with relevant person/s in accordance with workplace procedures
2 Carry out surveillance of gas transmission pipelines	2.1
	WHS/OHS risk control measures, schedule of work and workplace procedures for carrying out work are followed
2.2	Relevant materials, tools, equipment and measuring devices are selected and used correctly and safely in

accordance with workplace procedures and manufacturer instructions

- 2.3 Dealings with customers are consistent with workplace procedures and the special needs of customers are identified and considered in targeting client service
- 2.4 Ground surveillance work is carried out to the required standard, without waste of materials or damage to apparatus, equipment, and the surrounding environment or services using sustainable energy principles
- 2.5 Leakages and damaged pipes, structures, systems and fittings are recorded in accordance with workplace procedures
- 2.6 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 established procedures
- 2.7 Unplanned events in the pipeline surveillance work are dealt with in accordance with level of responsibility and workplace procedures
- 2.8 System breaches, faults and operational conditions of the pipeline network are identified and resolved, where possible, and reported to relevant person/s in accordance with workplace procedures
- 2.9 Pressure and flow fluctuations outside of acceptable limits are investigated and resolved, where possible, and reported to relevant person/s in accordance with workplace procedures
- 2.10 Key issues are identified, solutions/options developed, implemented and communicated to relevant stakeholders in accordance with workplace procedures
- 2.11 Quality checks of the work are undertaken in accordance with job instructions and workplace procedures

3 Complete work and relevant documentation

- 3.1 WHS risk control work measures for work completion are followed
- 3.2 Work area is tidied and made safe in accordance with workplace procedures
- 3.3 Tools and equipment are cleaned, checked and securely

stored in accordance with workplace procedures

- 3.4** Relevant person/s are notified of work completion, non-conformances and proposed solutions/options are reported in accordance with workplace procedures
- 3.5** Relevant records, reports and documentation are completed, processed 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 UEGNSG349A Carry out surveillance of gas transmission pipelines.

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 UEGNSG349 Carry out surveillance of gas transmission pipelines

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 work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - hazard identification and reporting
 - implementing risk control measures
 - maintaining a safe workplace
- analysing surveillance information
- applying problem-solving techniques, including implementing solutions
- applying sustainable energy and environmental, cultural and heritage principles and practices
- carrying out ground surveillance on gas transmission pipelines
- communicating effectively with others
- completing work and relevant documentation, including:
 - completing required documentation and reports
 - following work schedule, safety plan and job requirements
 - working within agreed timeframes
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- following workplace procedures
- identifying and investigating pressure and flow fluctuations, including operational conditions
- identifying encroachments, system breaches, faults and risks and taking appropriate action
- preparing to carry out surveillance of gas transmission pipelines
- selecting correct materials, equipment, tools, personal protection equipment (PPE) and measurement devices
- working in accordance with relevant work permit/notifications.

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:

- cultural and heritage requirements in relation to pipeline surveillance
- effective communication techniques
- overview of pipelines, components and their respective functions, including:
 - surveillance information
 - field monitoring of pipelines and components includes pressure and flow limits
 - identification and documentation of potential encroachment
 - procedures and methods for ground surveillance work
 - techniques to identify system faults and operational conditions
- pipeline risks managed through surveillance
- problem-solving techniques
- quality checks
- relevant industry standards, guidelines, codes of practice and regulations
- relevant plant, tools, equipment, measuring devices and PPE
- relevant stakeholders, including:
 - authorised persons, authorities and clients
 - rights and responsibilities
- relevant work permits and/or notifications
- relevant WHS/OHS legislated requirements, including:
 - environmental and sustainable energy principles and practices
 - hazard warnings and safety signs
 - hazards, risk assessment and control measures
- relevant workplace policies and procedures
- relevant workplace documentation
- site preparation, safety plans, job requirements and work schedules
- techniques to identify damaged and leaking pipes, fittings and appurtenances.

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

Links

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