



Australian Government

UEGNSG353 Carry out aerial surveillance of gas transmission pipelines

Release: 1

UEGNSG353 Carry out aerial 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 aerial surveillance of gas transmission pipelines, easements and/or surrounding environments; identify non-conformance; complete work and relevant documentation and report in accordance with relevant legislation, codes of practice, regulations, standards and workplace procedures.

It includes threat mitigation through identification of system non-conformance; areas to be monitored and inspection of areas system's, pipe work, structures, fittings and equipment in accordance with organisational and statutory requirements.

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 aerial surveillance of gas transmission pipelines

PERFORMANCE CRITERIA

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

1.1 Job requirements and relevant drawings, plans, maps, data, materials and equipment are examined to determine the extent of required work preparation in

accordance with workplace procedures

- 1.2 Job requirements and workplace procedures for the aerial surveillance work are communicated to all relevant person/s
 - 1.3 Work health and safety (WHS)/occupational health and safety (OHS) workplace procedures and environmental and sustainable energy policies and procedures for gas pipeline surveillance are obtained and applied
 - 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 Relevant work permits are obtained to access and perform work in accordance with job requirements and workplace procedures
 - 1.7 Persons, equipment, tools and personal protective equipment (PPE) required for the pipeline surveillance work are identified, scheduled, 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 work schedule and workplace procedures
 - 1.9 Person/s participating in the work are briefed and responsibilities confirmed in accordance with workplace procedures
 - 1.10 Work preparation, safety plan and work schedule are confirmed with relevant person/s in accordance with workplace procedures
- 2 Carry out aerial surveillance of gas transmission pipelines to identify non-conformance**
 - 2.1** WHS/OHS and risk control measures, schedule of work and workplace procedures for carrying out work are followed
 - 2.2** Aerial surveillance of pipelines, easements and/or surrounding environments is conducted and faults and/or

security breaches/threats reported to relevant person/s in accordance with workplace procedures

- 2.3 Surveillance information is analysed, key issues identified and information evaluated for relevance/ validity to the job requirements and confirmed by site inspection, as required
- 2.4 Dealings with customers are consistent with workplace procedures and the special needs of customers are identified and considered in targeting client service
- 2.5 Leakages, damaged pipes, fittings and appurtenances are recorded in accordance with workplace procedures
- 2.6 Hazard warnings and safety signs are recognised, hazards and WHS/OHS risks assessed and reported to authorised person/s for directions in accordance with workplace 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 pipelines are identified and resolved, where possible, and reported to relevant person/s in accordance with workplace procedures
- 2.9 Additional works in the vicinity of the pipelines are identified and reported to relevant person/s in accordance with workplace procedures

3 Complete work and relevant documentation

- 3.1 Information gathered is analysed, anomalies, options and proposed solutions are communicated to relevant stakeholders and implemented, as required, in accordance with work schedule and workplace procedures
- 3.2 Incidents and injuries are reported, as required, in accordance with workplace procedures
- 3.3 Solutions are implemented, documented and processed and the customer advised in accordance with workplace procedures
- 3.4 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 UEGNSG353A Carry out aerial 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 UEGNSG353 Carry out aerial 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 work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - maintaining a safe workplace
 - hazard identification and reporting
 - implementing risk control measures
 - working safely with hazardous materials and equipment
- analysing surveillance information
- applying planning skills
- applying problem-solving techniques
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying sustainable energy and environmental principles and practices
- carrying out aerial surveillance of gas transmission pipelines, easements and/or surrounding environments
- communicating effectively with others
- completing work and relevant documentation
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- following work schedule, safety plan and job requirements
- following workplace procedures
- identifying and evaluating threats to the integrity of transmission pipelines
- identifying faults
- identifying non-conformance
- implementing solutions
- interpreting technical drawings, plans, maps and data
- preparing to carry out aerial surveillance of gas transmission pipelines
- recording and reporting information
- 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:

- effective communication techniques
- gas industry facilities and infrastructure
- gas industry products, processes and characteristics
- gas transmission pipeline environmental protection processes
- gas transmission pipeline surveillance
- problem-solving techniques
- relevant facility and pipeline drawings, plans, maps, data and diagrams
- relevant gas industry documentation
- relevant industry standards, guidelines, codes of practice and regulations
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant stakeholders, including authorised persons, authorities, landowners and clients
- relevant tools, equipment and PPE
- relevant WHS/OHS legislated requirements, including:
 - hazards, risk assessment and control measures
 - environmental and sustainable energy principles and practices
 - hazard warnings and safety signs
- relevant work permits and/or notifications
- relevant workplace documentation
- relevant workplace documentation
- relevant workplace policies and procedures
- security breaches
- signs, symbols terminology and legends as used in gas industry
- site preparation, safety plans, job requirements and work schedules
- techniques to analyse surveillance information
- techniques to identify damaged and leaking pipes, fittings and appurtenances
- techniques to identify system faults and operational conditions.

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

Links

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