



Australian Government

UEGNSG332 Undertake hydro-testing for transmission pipeline construction

Release: 1

UEGNSG332 Undertake hydro-testing for transmission pipeline construction

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 hydro-testing on gas transmission pipelines at construction work sites, and complete hydro-testing activities and relevant documentation in accordance with relevant legislation, regulations, codes of practice and workplace procedures.

It includes undertaking hydro-testing using the relevant equipment and plant, identifying safety and environmental hazards, and assessing risks associated with hydro-testing and exclusion zones.

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

Pre-requisite Unit

Not applicable.

Competency Field

Transmission

Unit Sector

Gas Industry

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for hydro-testing for transmission pipeline construction

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 measures for the site are identified, obtained and applied

- 1.2 Job requirements and workplace procedures for the site are obtained and discussed with relevant person/s to confirm the work schedule
 - 1.3 WHS/OHS, environmental and sustainable energy policies and procedures are obtained and applied in accordance with workplace procedures
 - 1.4 Easement is inspected and testing procedures determined in accordance with workplace procedures and job requirements
 - 1.5 Recommendations to assist with testing of the construction pipeline are made to others involved in the work in accordance with workplace procedures
 - 1.6 Work site hazards are identified, WHS/OHS risks are assessed and control measures prioritised, implemented and monitored in accordance with workplace procedures
 - 1.7 Scope of work and level of responsibility under the relevant work permit/authorisation is obtained and confirmed with relevant person/s in accordance with job requirements and workplace procedures
 - 1.8 Tools, plant, equipment and personal protective equipment (PPE) required for the work are identified, scheduled, obtained and checked for operation and safety in accordance with workplace procedures and manufacturer instructions
 - 1.9 Materials, plans, diagrams, drawings and resources required for the work are confirmed, scheduled and obtained in accordance with workplace procedures
 - 1.10 Responsibilities for first aid, emergencies and other related work safety procedures for an incident at the work site are checked and confirmed with relevant person/s
 - 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 **Hydro test transmission pipeline construction**
 - 2.1 WHS/OHS risk control measures, schedule of work and workplace procedures for carrying out the work are

followed

- 2.2 Materials, tools, plant, equipment and measuring devices required for the testing 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 WHS/OHS workplace procedures and job instructions
 - 2.4 Work area is isolated, made safe and hydro-testing of pipeline construction is carried out in accordance job instructions, industry standards and workplace procedures
 - 2.5 Hydro-testing of pipeline construction is conducted in agreed timeframe and to industry standards, without waste of materials or damage to apparatus, and the surrounding environment or services using sustainable energy principals
 - 2.6 WHS/OHS risks and incidents are reported to authorised person/s for directions in accordance with workplace procedures
 - 2.7 Unplanned events are referred to authorised person/s for directions in accordance with workplace procedures
 - 2.8 Remedial action required when hydro-testing transmission pipeline construction is dealt with in accordance with workplace procedures
 - 2.9 Quality and safety checks are carried out in accordance with work instructions and workplace procedures
- 3 **Complete hydro-testing activities and relevant documentation**
 - 3.1 WHS/OHS risk control measures for work completion are followed
 - 3.2 Work site is rehabilitated, cleaned up and made safe in accordance with workplace procedures
 - 3.3 Tools, equipment and any surplus resources and materials are, cleaned, checked and securely stored in accordance with workplace procedures
 - 3.4 Relevant person/s are notified of work completion in accordance with workplace procedures

- 3.5** Work completion records, report forms and data sheets are completed accurately 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 UEGNSG332A Undertake hydro-testing for transmission pipeline construction.

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 UEGNSG332 Undertake hydro-testing for transmission pipeline construction

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:
 - hazard identification and reporting
 - implementing risk control measures
- applying relevant industry standards, guidelines, codes of practice and regulations
- applying sustainable energy and environmental principles and practices
- cleaning and storing tools, equipment, machinery and plant
- completing hydro-testing activities and relevant documentation
- dealing with unplanned events
- following manufacturer instructions
- following workplace policies and procedures
- inspecting and assessing easement
- isolating work area
- making recommendations to assist with testing
- minimising waste
- obtaining and interpreting relevant plans, drawings, diagrams and schedules
- obtaining job requirements, work instructions, safety plans and work schedules
- operating in a safe manner
- performing quality and safety checks
- preparing for hydro-testing for transmission pipeline construction
- referring third-party issues
- rehabilitating and maintaining a clean and safe work site
- selecting, testing and operating correct tools, plant, equipment, personal protective equipment (PPE) and machinery
- understanding and responding to instructions from relevant person/s
- undertaking hazardous activities in a safe manner
- undertaking hydro-testing of transmission pipeline construction.

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
- equipment, tools, materials and plant for hydro-testing
- first aid, emergency and safety procedures for incidents
- fundamentals of hydro-testing
- hydro-testing requirements and procedures
- problem-solving techniques
- quality and safety checks
- relevant industry standards, guidelines, legislation, codes of practice and regulations
- relevant manufacturer instructions
- relevant materials, plans, diagrams, drawings and resources
- relevant safety and environmental hazards and risk mitigation measures
- relevant tools, equipment and PPE
- relevant WHS/OHS legislated requirements
- relevant work permits/authorisations
- relevant workplace documentation
- relevant workplace policies and procedures
- remedial actions with hydro-testing
- site preparation, safety plans, job requirements and work schedules
- sustainable energy and environment principles and practices
- techniques to inspect and test easements
- techniques to isolate work area
- techniques to minimise waste
- third-party issues
- work site rehabilitation.

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.

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