



Australian Government

UEGNSG015 Coordinate gas transmission pipeline repairs and modifications

Release: 1

UEGNSG015 Coordinate gas transmission pipeline repairs and modifications

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 coordinate and conduct gas transmission pipeline repairs and modifications.

It includes identifying and attending to leaks which may be classified into Class 1-4 and coordinating and undertaking the repair or modification and minor maintenance of equipment, as required. It also includes inspecting, testing and re-establishing/recommissioning transmission pipeline to operational conditions and completing relevant documentation.

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 Plan for the coordination of repairs and modifications of a gas transmission pipeline

PERFORMANCE CRITERIA

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

1.1 Workplace safety, environmental and sustainable energy practices for the site are identified, obtained and understood

- 1.2 Job requirements are obtained and interpreted from plans, specifications and instructions
 - 1.3 Relevant job requirements and workplace procedures for work activities are discussed with relevant person/s, including third parties, to determine and confirm work schedule and respective responsibilities
 - 1.4 Hazards are identified, workplace safety and environmental risks are assessed, and control measures are prioritised, implemented and monitored in accordance with workplace procedures
 - 1.5 Scope of responsibility under the relevant job requirements, including all work permits and/or relevant notifications, is determined and confirmed to access the services and perform work in accordance with job requirements and workplace procedures
 - 1.6 Equipment, tools and personal protective equipment (PPE) needed to carry out work activities are identified, obtained and checked for correct operation and safety in accordance with workplace procedures and manufacturer instructions
 - 1.7 Materials, plans, diagrams, drawings and resources required for work are confirmed and obtained in accordance with workplace procedures
- 2 **Coordinate and conduct repairs or modifications for gas transmission pipelines**
 - 2.1 Workplace safety and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
 - 2.2 Appropriate materials, tools and equipment are selected and used safely in accordance with manufacturer instructions and workplace procedures
 - 2.3 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures
 - 2.4 Gas transmission pipeline repairs and modifications are carried out in accordance with the work schedule and workplace procedures
 - 2.5 Hazardous activities are conducted safely in accordance with regulatory requirements and workplace procedures

- 2.6 Alarms, codes and hazard warnings are correctly recognised, and the correct response strategy is selected and applied in accordance with workplace procedures
 - 2.7 Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements
 - 2.8 Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures
- 3 **Re-establish transmission pipeline to operational conditions and complete relevant documentation**
 - 3.1 Pipeline is re-established to meet approved repair and commissioning procedures
 - 3.2 Workplace safety risk control measures for work completion are followed
 - 3.3 Quality and safety checks of the work are conducted in accordance with job requirements, workplace procedures and community and industry standards
 - 3.4 Worksite is cleaned, reinstated and made safe in accordance with workplace procedures
 - 3.5 Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures
 - 3.6 Incidents are reported and followed up as required in accordance with workplace procedures
 - 3.7 Relevant person/s is notified of work completion in accordance with workplace procedures
 - 3.8 Work completion documentation is completed accurately and provided to relevant 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 supersedes and is equivalent to UEGNSG305 Coordinate gas transmission pipeline repair and modifications.

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 UEGNSG015 Coordinate gas transmission pipeline repairs and modifications

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 workplace safety requirements, including:
 - applying sustainable energy and environmental principles and practices
 - ensuring emergency response procedures are in place
 - identifying and reporting hazards
 - implementing risk control measures
 - selecting and using correct personal protective equipment (PPE)
 - working safely with hazardous materials and equipment (e.g., pipelines coated with asbestos)
- carrying out correct venting, purging and pressurising procedures
- carrying out sign-off procedures
- communicating instructions/schedules
- communicating with other authorities and relevant stakeholders
- completing relevant reports, records documentation and drawings
- conducting briefings
- conducting final inspections of repairs/modifications
- conducting quality and safety checks
- coordinating repairs or modifications for gas transmission pipelines
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- following workplace procedures
- identifying repairs/modifications
- inspecting and testing equipment
- interpreting technical drawings, plans and materials lists
- isolating/de-energising systems
- liaising and communicating with relevant parties
- monitoring pipeline system during repair work
- obtaining approvals from relevant authorities

- obtaining relevant work permits
- operating gas detector
- planning for the coordination of repairs and modifications of gas transmission pipeline
- positioning road signs, barriers and warning devices
- recommissioning/re-establishing pipeline, including re-establishing transmission pipeline to operational condition
- removing, repairing and testing pipeline coating
- rehabilitating/reinstating worksite
- checking/completing testing of repairs
- updating drawings/plans to reflect repairs/modifications.

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:

- appropriate tools and equipment to inspect and test the pipeline system
- hazardous activities, including lifting, climbing, working in confined spaces and aloft
- information relevant to pipeline repair and modification
- inspecting and testing procedures
- preparation for testing and inspection of pipeline system
- preparation of worksite for repairs/modifications work
- problem-solving techniques
- record maintenance procedures
- venting, purging and pressurising techniques
- relevant industry standards, guidelines, codes of practice and regulations
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety analysis (JSA) or risk mitigation processes
- relevant technical drawings, plans, material lists or specifications
- relevant workplace safety requirements, including:
 - legislated work health and safety (WHS)/occupational health and safety (OHS) requirements
 - legislated industry/technical specific requirements
 - workplace safety procedures
 - manufacturer requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- repair work and amendments or modifications
- requirements for recording and interpreting test data
- site inspection procedures
- traffic management plans
- transmission pipeline repairs and modifications.

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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