



Australian Government

UEGNSG305 Coordinate gas transmission pipeline repairs and modifications

Release: 1

UEGNSG305 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 and 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 Identified repair/modification is communicated to all parties and work schedule/s, drawings, plans, job requirements and material lists are obtained, analysed and confirmed, as necessary, by site inspection

- 1.2** Plans, job specifications, other relevant information and workplace procedures for the work are obtained for all work sites and communicated to relevant person/s in accordance with workplace procedures
- 1.3** Work health and safety (WHS)/occupational health and safety (OHS), environmental and sustainable energy policies and workplace procedures are obtained and communicated to relevant person/s to ensure safe systems of work are followed
- 1.4** Work is prioritised and sequenced for completion within acceptable timeframes following consultation with others in accordance with workplace procedures
- 1.5** Hazards and WHS/OHS risks are identified, assessed and prioritised, and control measures implemented and monitored in accordance with workplace procedures
- 1.6** Relevant work permits are obtained to access, isolate/de-energise systems and perform the work in accordance with regulatory requirements and workplace procedures
- 1.7** Resources, including person/s, equipment, tools and personal protective equipment (PPE), required for the job are identified, scheduled, obtained and checked for correct operation and safety in accordance with workplace procedures
- 1.8** Responsibilities for first aid and other emergency incidents at the work site are confirmed with relevant person/s in accordance with workplace procedures
- 1.9** Communication issues with authorised persons, authorities, clients and land owners are resolved and work coordinated in accordance with workplace procedures
- 1.10** Site is prepared to minimise risk and damage to property, commerce and individuals in accordance with workplace procedures, job requirements and the work schedule
- 1.11** Persons participating in the work, including plant operators and contractors, are briefed and responsibilities confirmed in accordance with job requirements and workplace procedures

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| | 1.12 | Road signs, barriers and warning devices are positioned in accordance with job requirements and traffic management plan |
| 2 Coordinate and conduct repairs or modifications for gas transmission pipelines | 2.1 | WHS/OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards |
| | 2.2 | Hazardous activities are performed safely and currency maintained, as required, in accordance with regulatory requirements and workplace procedures |
| | 2.3 | Gas transmission pipeline repairs and modifications are coordinated to ensure completion in agreed timeframe, to industry standards and with a minimum of waste in accordance with job requirements |
| | 2.4 | Gas transmission pipeline repairs and modifications are carried out in accordance with the work schedule and workplace procedures |
| | 2.5 | Hazard warnings and safety signs are recognised and hazards and WHS/OHS risks assessed and reported to authorised person/s for directions in accordance with workplace procedures |
| | 2.6 | Pipeline repair/modification work is conducted and monitored and unplanned events, amendments and modifications in the pipeline repair are undertaken in accordance with workplace procedures |
| | 2.7 | Solutions to unplanned events and non-routine problems are identified and actioned in accordance with requirements |
| | 2.8 | Inspecting and testing procedures are followed and quality and safety checks undertaken in accordance with job instructions and workplace procedures |
| 3 Re-establish transmission pipeline to operational conditions and complete relevant documentation | 3.1 | System is re-established to meet transmission pipeline requirements and work undertaken checked against work schedule for conformance and anomalies reported in accordance with workplace procedures |
| | 3.2 | Accidents and injuries are reported, as required, in accordance with workplace procedures |
| | 3.3 | Work site is rehabilitated, cleaned up and made safe in |

accordance with workplace procedures

- 3.4** Tools, equipment and any surplus resources and materials are cleaned, checked and returned to storage in accordance with workplace procedures
- 3.5** Relevant work permit/s are signed off and pipeline is returned to service in accordance with job requirements and workplace procedures
- 3.6** Records and drawings are updated to reflect repair/modifications and work completion records, reports as installed and relevant documentation completed, processed and appropriate person/s 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 unit replaces and is equivalent to UEGNSG305B 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 UEGNSG305 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.

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:
 - applying sustainable energy and environmental principles and practices
 - ensuring emergency response procedures are in place
 - hazard identification and reporting
 - implementing risk control measures
 - selecting and using correct personal protective equipment (PPE)
 - work safely with hazardous materials and equipment
- carrying out sign-off procedures
- communicating instructions/schedules
- communicating with other authorities and relevant stakeholders
- completing relevant reports, records and documentation
- completing work and relevant documentation, records, reports 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
- rehabilitating/reinstating work site
- testing of repairs is checked/completed
- 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 work site for repairs/modifications work
- problem-solving techniques
- record maintenance procedures
- 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 technical drawings, plans, material lists or specifications
- relevant WHS/OHS legislated requirements, including:
 - hazards, risk assessment and control measures
 - environmental and sustainable energy principles and practices
- 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.

Links

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