



Australian Government

UEGNSG038 Supervise the operation of plant and equipment for the construction of gas transmission pipelines

Release: 1

UEGNSG038 Supervise the operation of plant and equipment for the construction 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 supervise the operation of plant and equipment for the construction of gas transmission pipelines.

It includes undertaking functions for transmission pipeline construction, including interpreting instructions; knowing the limits of plant, equipment and tools; and effectively communicating and supervising personnel and contractors. It also includes supervising operations to ensure workplace safety environmental and cultural heritage issues are effectively addressed in the transmission pipeline construction process.

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 work schedule for the use of plant and equipment

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 **Supervise operations in accordance with the work schedule**
 - 2.1 Workplace safety and environmental risk control measures, schedule of work and workplace procedures for carrying out work are followed
 - 2.2 Work schedule is monitored to address any problems encountered with the operation of plant and equipment
 - 2.3 Instructions are provided for any remedial action associated with the operation of plant and equipment in accordance with workplace procedures
 - 2.4 Instructions are provided to operators to ensure the work area is made safe in accordance with workplace procedures
 - 2.5 Work is completed within agreed timeframe and to industry standards in accordance with job requirements and workplace procedures

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| | 2.6 | Hazardous activities are conducted safely in accordance with regulatory requirements and workplace procedures |
| | 2.7 | Unplanned events are referred to the relevant person/s for directions in accordance with workplace procedures |
| | 2.8 | Faults and operational conditions of the components are identified, repaired or replaced, and reported in accordance with organisational job requirements |
| 3 | Complete work and relevant documentation | |
| | 3.1 | Workplace safety risk control measures for work completion are followed |
| | 3.2 | Quality and safety checks of the work are conducted in accordance with job requirements, workplace procedures and community and industry standards |
| | 3.3 | Worksite is cleaned, reinstated and made safe in accordance with workplace procedures |
| | 3.4 | Tools, equipment and any surplus resources/materials are cleaned, checked and securely stored in accordance with workplace procedures |
| | 3.5 | Incidents are reported and followed up as required in accordance with workplace procedures |
| | 3.6 | Relevant person/s is notified of work completion in accordance with workplace procedures |
| | 3.7 | 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 replaces and is equivalent to UEGNSG348 Supervise the operation of plant and equipment for the construction 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 UEGNSG038 Supervise the operation of plant and equipment for the construction 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 organisational management systems and procedures for workplace safety, including:
 - identifying hazards
 - managing risk through the incorporation of effective control measures
- applying relevant industry standards, guidelines, codes of practice, legislation and regulations
- applying relevant workplace safety requirements, including:
 - correctly selecting and using personal protective equipment (PPE)
 - effectively using safety data sheets (SDS)
 - identifying and reporting hazards
 - implementing risk control measures
 - preparing job hazard analysis
 - using safe manual handling techniques
- communicating instructions to transmission pipeline construction workforce, contractors and stakeholders, including communication with ground crew during operations
- completing work and relevant documentation, data sheets, reports and records
- complying with flora and fauna management requirements
- complying with permits pertaining to transmission pipeline construction operations
- complying with relevant cultural heritage requirements
- coordinating an effective response to a transmission pipeline construction emergency
- dealing with an environmental incident
- dealing with unplanned events
- following workplace procedures
- preparing work schedule for the use of plant and equipment
- protecting the environment whilst constructing a transmission pipeline, including:
 - erosion prevention
 - weed spread mitigation
 - application of SDS information

- noise control techniques
- excavation restoration
- applying green tagging for flora and fauna habitat
- supervising operations in accordance with the work schedule
- supervising shutdown procedure
- supervising the use of small plant and equipment, including:
 - extra low voltage (ELV) lighting equipment
 - gas detectors
 - general concrete mixer
 - general trolley
 - handheld tools
 - hand wrapping machines
 - holiday detection equipment
 - non-pressurised pumps and hoses
 - power tools
 - pressurised pumps and hoses
 - traffic barriers
 - wheelbarrows
- verifying all required quality and safety checks are conducted
- verifying large plant and equipment has been properly maintained.

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:

- construction activity procedures
- construction materials: properties, characteristics and applications
- contingency planning and management
- cultural and heritage awareness requirements and procedures
- environmental requirements and procedures
- interpreting, applying and communicating information, including:
 - manufacturer manuals
 - requirements and procedures
 - technical information and drawings
 - site plans
 - basic geological and technical data
- on-site communication techniques, including:
 - hand signals
 - radios
- project and time management skills

- quality assurance procedures
- relevant legislation, regulations, codes, standards and policies
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety analysis (JSA) or risk mitigation processes
- relevant stakeholders
- 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, forms and reports
- relevant workplace policies and procedures
- supervisory and leadership techniques
- transmission pipeline construction activities, including:
 - backfill
 - clear and grade
 - ditching
 - hydro testing
 - joint coating
 - lower and lay
 - mechanical (minor maintenance)
 - string and bend
 - welding
- relevant transmission pipeline construction techniques, plant, equipment and tools.

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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