



Australian Government

Assessment Requirements for UEGNSG309 Coordinate transmission pipeline construction operations

Release: 1

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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, performance criteria and range of conditions on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - ensuring emergency response procedures are in place
 - hazard identification and reporting
 - implementing risk control measures
 - working safely with hazardous materials and equipment
- completing gas transmission pipeline construction operations
- complying with regulations, industry standards, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements
- coordinating gas transmission pipeline construction operations, including:
 - backfill:
 - ensuring that bedding material meets specified requirements
 - ensuring the soil compaction meets specified requirements
 - correct placement of marker tape
 - clear and grade:
 - managing survey marker placement procedures
 - ensuring environmental and cultural compliance
 - ditching:
 - ensuring compliance with regulations and industry standards related to excavation
 - selecting and ensuring correct operation of required plant, tools and equipment for various ground conditions
 - hydro testing:
 - ensuring the suitability and/or availability of water source for testing and practicable disposal
 - ensuring effective safety controls are in place, particularly at public access points
 - industry standards requirements
 - ensuring relevant WHS/OHS procedures are applied, particularly in relation to

working out of normal hours

- joint coating:
 - ensuring applicators follow manufacturer guidelines
 - ensuring effective joint coating testing techniques are applied
- lower and lay:
 - ensuring crew correctly places pipe string
 - ensuring pipe coating integrity is maintained
 - communicating effectively to coordinate multi-point lift of the pipe string
 - effectively coordinating with as built survey
- mechanical (minor maintenance):
 - ensuring that pipeline construction plant, equipment and tools are effectively maintained to meet construction schedule
- welding:
 - ensuring welding joints are performed in accordance with welding procedures
 - ensuring welding plant, equipment and tools are suitable to produce welded joints that meet specified requirements
 - ensuring relevant WHS/OHS procedures are applied, particularly in relation to working with potentially dangerous tools and equipment in a high temperature environment
- dealing with unplanned events
- planning for gas transmission pipeline construction activities.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- communicate effectively in the gas industry
- gas transmission pipeline construction operations including backfill, clear and grade, ditching, hydro testing, joint coating, lower and lay, mechanical minor maintenance and welding
- methods of protecting the pipeline from third party interaction, including use of marker tape, bedding materials and marker post signage
- on-site pipeline construction communication strategies, including:
 - hand signals
 - satellite phones
 - radios
- operation of portable high-pressure equipment
- pipeline protective systems, including bedding and padding materials
- problem solving, decision making and conflict resolution techniques
- regulations, industry standards, legislative requirements, codes of practice, manufacturers' recommendations and specifications, and environmental requirements

- relevant industry standards including gas pipeline operations standards
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes, including:
 - basic first aid
 - confined spaces awareness
 - emergency response
 - high risk plant and equipment licenses and tickets
 - how to apply control measures
 - manual handling
 - risk assessment forms, such as work permits and job hazard analysis (JHA), job safety analysis (JSA), job safety and environment analysis (JSEA), SWMS
 - hazard identification
 - safety data sheets (SDS)
 - signage
 - working at heights
- relevant WHS/OHS and environmental legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures, including:
 - exclusion zone awareness
 - high pressure equipment hoses and whip checks
 - safe operation
 - specific signage requirements for using high pressure equipment
- right of way set out and ditch line
- string and bend:
 - capabilities of stringing plant, equipment and tools
 - limitations of the vacuum lift and consequences of incidents
 - appropriate motor vehicle license and skills training for row driving
 - accurate calculations for determining sequence of delivery of pipes
 - bending procedures
 - capabilities of bending plant, equipment and tools
 - consequence of shifting centres of gravity
 - trigonometric calculations for bending procedures
- translation of survey techniques into the right of way environment, including survey markers and off-set markers, their meaning and relevant work applications.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the

time of assessment.

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

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>