



Australian Government

Assessment Requirements for UEGNSG411 Maintain cathodic protection systems

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEG Industry Gas 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:
 - working safely with hazardous materials and equipment
 - hazard identification and reporting
 - implementing risk control measures
 - selecting and using correct personal protective equipment (PPE)
- applying environmental principles and practices
- applying problem-solving techniques
- applying relevant industry standards, guidelines, codes of practice and regulations
- communicating effectively with others
- conducting quality and safety checks
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- determining types of faults
- following work schedule, safety plan and job requirements
- following workplace procedures
- inspecting, maintaining and adjusting cathodic protection system and equipment
- interpreting readings and collecting data from equipment and anode beds
- interpreting technical drawings, plans and maps
- locating and repairing faults
- obtaining relevant resources, tools, equipment and materials to conduct the work
- positioning road signs, barriers and warning devices
- preparing and planning to maintain cathodic protection systems
- re-establishing cathodic protection system and completing relevant documentation
- rehabilitating and maintaining a clean work site
- reporting anomalies and proposed solutions
- working in accordance with relevant work permit/notifications.

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:

- anode beds
- cathodic protection system design, components, operation, types and applications
- cathodic protection systems maintenance and monitoring requirements
- corrosion process and cathodic protection on a gas industry pipeline
- effective communication techniques
- electrical fundamentals, equipment, risks and licensing requirements relevant to the gas industry
- fault finding and repair/replacement requirements
- fault-finding and troubleshooting techniques
- hazardous activities, including lifting, climbing, working in confined spaces and aloft, and use of power tools
- quality and safety checks
- relevant cathodic protection monitoring equipment
- relevant documentation, records and reports
- relevant gas industry documentation
- relevant gas systems design, planning and operations
- relevant industry standards, guidelines, codes of practice and regulations
- relevant manufacturer specifications
- relevant technical drawings, diagrams, plans and maps
- relevant WHS/OHS legislated requirements, including:
 - hazards, risk assessment and control measures
 - environmental and sustainable energy principles and practices
 - hazard warnings and safety signs
 - hazardous materials
 - PPE
- relevant work permits and/or notifications
- relevant workplace policies and procedures
- requirements and procedures for referring low voltage electrical work to relevant licensed persons
- requirements and procedures for referring major repairs to supervisor
- site preparation, safety plans, job requirements and work schedules
- techniques to identify system faults and operational conditions
- third-party issues.

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

Companion Volume Implementation Guides are found in VETNet -

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