



Australian Government

UEERS0035 Maintain wayside asset protection equipment

Release: 1

UEERS0035 Maintain wayside asset protection equipment

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to maintain wayside asset protection equipment.

It includes safe working, regulatory requirements and following work procedures, installing, maintaining, fault finding and testing asset protection equipment.

Persons achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice, rules and/or guidelines.

No other licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

UEERS0020 Apply rail signalling principles

Competency Field

Rail Signalling

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to maintain asset protection equipment

PERFORMANCE CRITERIA

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

1.1 Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified and applied

- 1.2 Hazards are identified, WHS/OHS risks are assessed, and control measures and workplace procedures implemented in preparation for work
 - 1.3 Scope of maintenance is determined from maintenance schedules, job specifications, drawings and regulatory requirements
 - 1.4 Appropriate rail safe working person/s is consulted to confirm access times and methods, and ensure work is coordinated effectively with others to minimise rail traffic disruption
 - 1.5 Scope of the work and location of asset protection equipment is determined by site inspection and from job instructions, specifications and /or diagrams
 - 1.6 Materials needed for the maintenance work are obtained in accordance with workplace procedures and checked against job specifications
 - 1.7 Tools, equipment and testing devices needed for maintenance work are obtained in accordance with workplace procedures and checked for correct operation and safety
 - 1.8 Authorisation to take temporarily out of service or disable systems is obtained in accordance with workplace procedures
- 2 Maintain asset protection equipment**
- 2.1 WHS/OHS risk control measures and workplace procedures for carrying out work are followed
 - 2.2 On-track safe working requirements are identified and applied in accordance with workplace procedures and safety management system
 - 2.3 Asset protection equipment is maintained to comply with technical standards, job specifications and requirements
 - 2.4 Wiring and cabling is inspected to comply with technical standards, job specifications and requirements
 - 2.5 Tests are conducted to ensure equipment complies with specification and functions as intended
 - 2.6 Work is carried out efficiently, without waste of materials, damage to apparatus, the surrounding environment or services using sustainable energy

		practices
	2.7	Methods for dealing with unplanned situations are determined on the basis of safety and specified work outcomes
	2.8	Faulty, worn, damaged or insecure components are replaced, repaired or secured in accordance with manufacturer specifications and workplace requirements
3 Complete wayside asset protection equipment maintenance	3.1	WHS/OHS work completion risk control measures and workplace procedures are followed
	3.2	Confirmation that system is functional and that no alarms are present or indicated
	3.3	On-track safe working requirements are removed in accordance with workplace procedures and safety management system
	3.4	Equipment is taken out of service/brought back into use, as required, and documentation is completed in accordance with workplace procedures
	3.5	Work records and documentation are completed to ensure accurate maintenance records are maintained
	3.6	Worksite/equipment is reinstated in accordance with organisation requirements and faulty components are tagged, recorded and dispatched for repair/replacement

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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEERS0035 Maintain wayside asset protection equipment

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:

- performing maintenance of asset protection equipment and including:
 - resourcing appropriate equipment to maintain asset protection equipment
 - interpreting circuit diagrams and site requirements
 - maintaining and repairing asset protection equipment effectively
 - using testing devices and tools correctly and safely
 - organising work to minimise traffic disruptions
 - locating and rectifying causes of failures and non conformances
 - completing relevant records and documentation
 - effectively dealing with unplanned events.

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:

- types, operation and purpose of maintain wayside asset protection equipment
- technical standards and regulations that apply to rail networks
- typical format, and how to read and apply information from technical manuals and catalogues
- environmental and heritage awareness and regulation
- essentials of safe movement of trains
- rail wayside equipment, drawings and diagrams including:
 - drawing types and applications
 - drawing layouts and conventions
 - drawing symbols
 - cable and equipment schedules
 - circuit diagrams
- relevant rail wayside equipment, regulations and codes including:
 - codes philosophy and format

- how to read and apply a code
- codes that apply to rail signalling
- rail wayside asset protection equipment including:
 - rolling stock conformance monitoring equipment
 - environmental condition monitors
 - automatic car identification equipment
 - safety monitoring devices
- relevant manufacturer specifications and manuals.

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 suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable 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, facilities, equipment and personal protective equipment (PPE) currently used in industry
- resources that reflect current industry practices in relation to maintaining asset protection
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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