



Australian Government

TLIC2075A Drive and monitor medium or heavy self-propelled on-track equipment

Release 1

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Modification History

Release 1 - New unit of competency

Unit Descriptor

This unit involves the skills and knowledge required to drive and monitor medium/heavy self-propelled on-track equipment in accordance with safeworking requirements, network owners and/or organisational policies and procedures.

Medium/heavy on-track equipment generally weighs more than 10 tonnes and is permanently railed.

Licensing, regulatory or certification requirements are applicable to this unit.

Application of the Unit

This unit does not cover the operation of the medium/heavy self-propelled on-track equipment to complete work activities. This must be covered by individual assessments for the equipment concerned.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1 Drive and monitor medium/heavy self-propelled on-track equipment

- 1.1 Authority is obtained from relevant personnel to travel vehicle in accordance with network owner procedures
- 1.2 Vehicle is driven in accordance with manufacturer instructions and organisational procedures
- 1.3 Vehicle handling techniques are applied to eliminate or minimise risk of injury to personnel or damage to equipment
- 1.4 Vehicle is monitored to maintain optimum running conditions and identify faults, defects and inefficiencies
- 1.5 Appropriate action is taken in response to identified faults, defects and deficiencies to ensure safe operation of vehicle

2 Control and monitor medium/heavy self-propelled on-track equipment

- 2.1 Events and circumstances affecting planned running schedule are communicated to relevant personnel in accordance with organisational procedures
- 2.2 Instructions received from relevant personnel are interpreted and applied to ensure safe and effective control of the vehicle
- 2.3 Communications are maintained with relevant personnel during train journey in accordance with relevant safeworking systems, network requirements and organisational procedures
- 2.4 Instructions concerning vehicle operation are given to relevant personnel to ensure safe and efficient running

3 Respond to changed operating factors

- 3.1 Temporary signs and/or signals, hand signals and verbal movement commands are interpreted and followed, in accordance with safeworking systems, network owner requirements and organisational procedures
- 3.2 Hazardous/emergency situations are recognised and actions are taken in accordance with safeworking systems, network owner requirements and organisational procedures

Required Skills and Knowledge

This section describes the knowledge and skills required for this unit.

Required knowledge:

- Completing required documentation
- Procedures to be followed in emergencies
- Relevant occupational health and safety (OH&S) and environmental procedures and regulations
- Relevant sections of legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
- Use of communications equipment

Required skills:

- Communicate effectively with others when assisting with train operations
- Interpret and follow operational instructions and prioritise work
- Modify activities depending on operational contingencies, risk situations and environments
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Read and interpret instructions, procedures and information relevant to vehicle operations
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Work collaboratively with others when assisting with train operations
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the required knowledge and skills
 - relevant legislation and organisational procedures
 - other relevant aspects of the range statement
- Assessment must include exercises which demonstrate competent performance of the following in a range of situations:
 - demonstrating correct management techniques
 - identifying typical faults or defects that may occur
 - using correct communication protocols when driving and monitoring on-track equipment
 - correctly responding to trackside signs and signals

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the organisational
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including organisational procedures, regulations, codes of practice and operation manuals

Method of assessment

- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur on a medium/heavy self-propelled on-track vehicle:
 - through activities in an appropriately simulated environment, and/or
 - in an appropriate range of situations in the workplace

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Vehicles may include:	• single medium/heavy self-propelled on-track equipment • vehicles coupled together • attached rolling stock
Medium/heavy self-propelled track vehicles may include:	• rail crane • spot tamper • ballast regulator • inserter/remover (TR10) • track recorder • tamper • dynamic stabiliser • rail grinder • ballast cleaner • track layer
Track and road characteristics may include:	• track and bridge limitations • speed limitations • gauge limitation • curves and gradients • curfews • location of signals and crossings • emergency cross-overs
Vehicle handling techniques may include:	• brake operation • use of tractive effort • brake application and release
Relevant personnel can include:	• network control officer • train controller • maintenance personnel • train crews • yard and other operational personnel • traffic officer • station staff • track protection officer • signaller • hand signaller
Temporary signs and/or signals may include:	• speed restrictions • perway signs • flashing lights • strobe lights

- Hazardous/emergency situations may include but are not limited to:
- railway track signals
 - crossing protection
 - flags
 - warning signs
 - obstruction on track
 - track defects
 - unauthorised people on track
 - animals on track
 - crossings
 - signal failures
 - adverse weather conditions
 - chemical spill
 - fire beside track
 - derailments
- Depending on the type of organisation concerned organisational procedures may be called:
- standard operating procedures
 - company procedures
 - enterprise procedures
 - workplace procedures
 - established procedures
 - site procedures
- Safety and personal protective equipment may include:
- gloves
 - sunscreen and sunglasses
 - safety eye wear
 - safety headwear
 - safety footwear
 - flags
 - audible indicators
 - fire extinguishers
 - high visibility clothing
 - hearing protection
- Applicable legislation, regulations and codes may include:
- legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
 - relevant Australian Standards and related requirements
 - relevant state/territory OH&S legislation
 - relevant state/territory environmental legislation

Unit Sector(s)

Not applicable.

Competency Field

C – Vehicle Operation