



Australian Government

TLIC4072A Operate and monitor a motive power unit on a main line

Release 1

TLIC4072A Operate and monitor a motive power unit on a main line

Modification History

Release 1. This is the first release of this unit.

Unit Descriptor

This unit involves the skills and knowledge required to operate and monitor a motive power unit on a main line in accordance with safeworking requirements, network owner and/or organisational policies and procedures.

Licensing or certification requirements are not applicable to this unit.

Application of the Unit

This unit can be applied to single motive power units or multiple consist freight, heavy haul or passenger trains.

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Nil

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 train | <ul style="list-style-type: none">1.1 Motive power unit is operated in accordance with manufacturer instructions and organisational policies and procedures1.2 Motive power unit is operated safely with consideration of train consist and loading to minimise wear and fuel use, and to avoid damage1.3 Motive power unit handling techniques, and track and road knowledge are applied to eliminate or minimise risk of injury to personnel or damage to equipment, rolling stock and load1.4 Equipment and rolling stock are monitored to maintain optimum running conditions and identify faults, defects and inefficiencies1.5 Appropriate action is taken in response to identified faults, defects and deficiencies to ensure safe operation of motive power unit |
| 2 Control and monitor train running | <ul style="list-style-type: none">2.1 Events and circumstances affecting planned running schedule are communicated to relevant personnel in accordance with organisational policies and procedures2.2 Instructions received from network control officer, are interpreted and applied to ensure safe and effective control of train2.3 Communications are maintained with relevant personnel during train journey in accordance with the relevant safeworking systems, network requirements and organisational policies and procedures2.4 Instructions concerning train operation are given to relevant personnel to ensure safe and efficient running |
| 3 Respond to changed operating factors | <ul style="list-style-type: none">3.1 Instructions regarding changed operating factors are confirmed, interpreted and followed, in accordance with safeworking systems, network owner requirements and organisational policies and procedures3.2 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 policies and procedures3.3 Hazardous situations are recognised and appropriate action is taken to minimise risk to passengers/freight and equipment3.4 Emergency situations are recognised and actions are taken in accordance with safeworking systems, network owner requirements and organisational policies and procedures |

4 Stable or hand over train

- 4.1 Train is stabled in accordance with safeworking system requirements, operational instructions and organisational policies and procedures
- 4.2 Safety devices are activated or put in position in accordance with organisational policies and procedures
- 4.3 Prior to stabling/handover, documentation relevant to train and activities undertaken en route is updated and provided to relief crew or completed and forwarded to appropriate personnel in accordance with organisational policies and procedures
- 4.4 Relevant housekeeping activities are completed prior to stabling/handover in accordance with organisational policies and procedures
- 4.5 Relevant personnel are advised of condition and location of train in accordance with organisational policies and procedures
- 4.6 Incidents or unusual occurrences are recorded and reported to relevant personnel in accordance with organisational policies and procedures

Required Skills and Knowledge

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

Required knowledge:

- Appropriate motive power unit and rolling stock systems
- Completing required documentation
- Emergency procedures
- Problems that can occur when assisting with train operations and action that should be taken
- Procedures for fixed and hand signalling, and voice communication
- Relevant information and documents such as:
 - emergency procedure manuals
 - equipment operation manuals and maintenance specifications
 - maintenance notices, records and requests
 - motive power unit logbook
 - train running sheets
 - two-way radio operation procedures
- Relevant Australian Standards and related requirements
- Relevant legislated rail safety requirements including state and territory Acts and regulations, and nationally approved compliance codes and/or guidelines
- Relevant work health and safety (WHS)/occupational health and safety (OHS) legislation, regulations and procedures
- Relevant environmental protection legislation, regulations and procedures
- Safeworking systems and requirements
- Use of electronic communications equipment

Required skills:

- Communicate effectively with others when assisting with train operations
- Complete documentation related to train operations
- Identify and assess motive power unit defects and deficiencies and take appropriate action to report, isolate, repair or replace any identified defective equipment in accordance with organisational procedures
- 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 train operations
- Select and use relevant equipment and materials when assisting in train operations
- Select and use required personal protective equipment conforming to industry and WHS/OHS

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:

- required knowledge and skills
- relevant legislation and organisational procedures
- other relevant aspects of the range statement.

Context of and specific resources for assessment

Performance is demonstrated consistently over time and in a suitable range of contexts.

Resources for assessment include access to:

- a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
- an appropriate range of relevant operational situations in the organisation.

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 in an appropriate range of situations on a main line railway.

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.

Motive power units may include all motive power units in service within Australian rail systems and may include:

- diesel motive power units
- electric motive power units
- multiple units
- railcars

Track and road characteristics may include:

- curfews
- curves and gradients
- emergency crossovers
- gauge limitation
- location of signals and crossings
- speed limitations
- track and bridge limitations

Motive power unit handling techniques may include:

- automatic brake application and release
- dynamic brake operation
- independent brake application and release
- use of tractive effort

Relevant personnel may include:

- maintenance personnel
- network control officer
- passengers
- station staff
- train crews
- yard and other operational personnel

Network control officer may include:

- hand signaller
- network controller
- operational supervisor
- signaller
- train controller
- yard supervisor

Temporary signs and/or signals may include:

- audible warning devices
- crossing protection
- flags
- flashing lights
- perway signs
- speed restrictions
- strobe lights
- warning signs

Hazardous situations may include:

- adverse weather conditions
- animals on track
- crossings
- fire beside track
- obstructions beside track
- rubbish/refuse on track
- signal failures
- track defects
- unauthorised people on track

Organisational procedures may include:

- company procedures
- enterprise procedures
- established procedures
- site procedures
- standard operating procedures
- workplace procedures

Safety and personal protective equipment may include:

- audible indicators
- breathing equipment
- fire extinguishers
- flags
- gloves
- hearing protection
- high visibility clothing
- insect repellent
- safety:
 - devices
 - footwear
 - glasses
 - headwear
- sunscreen and sunglasses
- two-way radios/mobile phones/satellite phone hand lamps

Unit Sector(s)

Not applicable.

Competency Field

C – Vehicle Operation