



Australian Government

Department of Education, Employment and Workplace Relations

TLIC3044A Operate motive power unit by radio remote control

Release: 1

TLIC3044A Operate motive power unit by radio remote control

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to operate a motive power system by radio remote control unit in accordance with safeworking and regulatory requirements and workplace procedures. It includes preparing motive power units before setting up radio remote control equipment, operating the system after the set-up is complete and shutting it down after operation. Licensing or certification requirements are applicable to this unit.

Application of the Unit

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Persons achieving competence in this unit will need to fulfil the legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines.

Work is performed without supervision, generally within a team environment. It involves the application of routine operational principles and procedures to the operation of the motive power unit by the use of a radio remote control system as part of workplace activities across a variety of operational contexts within the Australian rail system.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills 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

ELEMENT	PERFORMANCE CRITERIA
1 Set up motive power unit for radio remote operation	1.1 Motive power unit is prepared for operation according to organisational procedures 1.2 Ensure motive power unit is set up for manual operation and all other cabin operations are set in the normal or manual manner 1.3 Motive power unit is started as per standard procedure 1.4 If necessary, the radio remote control equipment is installed according to operational requirements and manufactures instructions 1.5 Check that the remote control box and motive power unit controls are set up according to operational requirements 1.6 Relevant OH&S requirements are followed to prevent injury and damage
2 Operate motive power unit using radio remote control equipment	2.1 Motive power unit and radio remote control system set-up is checked to ensure safe operational status 2.2 Radio remote control equipment is operated and monitored in accordance with operational requirements during train movements to provide safe train handling and control 2.3 Any operational difficulties encountered are addressed by re-establishing control of the motive power unit with minimum risk to personnel and equipment
3 Shut down radio remote control equipment	3.1 Motive power unit is secured against accidental movement 3.2 Shut-down procedures of radio remote control equipment are followed to ensure train security and correct deactivation of the system 3.3 If required, radio remote control equipment is removed from the locomotive

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Relevant rail safety, OH&S and environmental procedures and regulations
- Radio remote control equipment controls, instruments and indicators and their purpose, location and use
- Positioning procedures

REQUIRED KNOWLEDGE AND SKILLS

- Shut-down procedures
- Braking and safety system procedures
- Procedures for the control of motive power units
- Procedures for the operation of radio remote control units
- Motive power operating techniques
- Procedures for managing hazardous situations involving radio remote control systems
- Procedures for conducting full function testing of the remote control unit, and actions to be taken in the event of a failure of one or more features
- Awareness that not all people in the vicinity of the work area may know that the locomotive is being operated remotely
- Operational instructions
- Shunting and marshalling procedures
- Procedures for identifying defects in radio remote control units, and assessing appropriate action to be taken
- Procedures for operating electronic communications equipment with required protocol

Required skills:

- Communicate effectively with others when operating radio remote control system
- Read and interpret instructions, procedures, and information relevant to the operation of radio remote control system
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the operation of radio remote control system
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when operating radio remote control system
- Promptly report and/or rectify any identified problems, faults or malfunctions when operating radio remote control system in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events when operating radio remote control system
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures

Required skills:

- Select and use required personal protective equipment conforming to industry and OH&S standards
- Judge train speeds and movements
- Monitor performance of equipment and take appropriate action if required

Evidence Guide

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 underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement
- Assessment must include exercises which demonstrate competent performance of the following in a range of situations:
 - setting up the radio remote control equipment correctly
 - operating the motive power unit using the remote control equipment
 - shutting down the remote control equipment

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 workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and

EVIDENCE GUIDE

	• applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
Method of assessment	• Assessment of this unit must be undertaken by a registered training organisation • As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests • Practical assessment must occur: • through activities in an appropriately simulated environment, and/or • in an appropriate range of situations in the workplace

Range Statement

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.

Operations may be conducted:	• by day or night • in all weather conditions
Radio remote control equipment may be:	• Vectran • Cattron QC
Motive power units may include:	• diesel locomotives • electric locomotives
Radio remote control operation may be used:	• within yard limits for: • marshalling or shunting • crossing trains on Driver Only Operations (DOO) • on mainlines to pilot a train over broken rails
Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:	• company procedures • enterprise procedures • organisational procedures • established procedures
Information/documents may include:	• relevant log or record book • maintenance notices, records and requests • local instructions • equipment operation manuals • operational instructions, policies and procedures

RANGE STATEMENT

- Applicable regulations, legislation and codes may include:
- emergency procedure manuals
 - two-way radio operation procedures
 - conditions of service, legislation and industrial agreements including workplace agreements and awards
 - 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 state/territory codes of practice and safeworking system requirements
 - relevant Australian Standards and related requirements
 - relevant state/territory OH&S legislation
 - relevant state/territory environmental protection legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field C - Vehicle Operation