



Australian Government

Department of Education, Employment and Workplace Relations

TLIC3017A Shunt rolling stock

Release: 1

TLIC3017A Shunt rolling stock

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to safely shunt rolling stock in accordance with safeworking and regulatory requirements and workplace procedures, including controlling and directing the physical movement of rolling stock and operating relevant equipment to carry out a developed shunting strategy. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

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

Work is performed under some supervision, generally within a team environment.

It involves the application of routine operational principles and procedures to carry out shunting activities 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 Plan and prepare for shunting operation	<p>1.1 Shunting requirements are interpreted and clarified and vehicles and equipment are obtained and prepared in accordance with shunting strategy</p> <p>1.2 Rolling stock movements, availability and locations are established in order to determine appropriate siding and/or track locations for vehicle placement</p> <p>1.3 Relevant OH&S legislation, codes of practice, organisational policies and procedures and safeworking systems and requirements related to shunting are identified</p>
2 Carry out shunting control procedures	<p>2.1 Points, levers, switches, signals and line of sight communications are used to assist the control of rolling stock movement</p> <p>2.2 Hand, light and radio shunting commands used are uniform and conform with operational and statutory requirements</p> <p>2.3 Relevant OH&S requirements are followed to prevent injury and damage</p> <p>2.4 Wagon cards are checked and wagons are obtained and sorted to comply with shunting requirements</p> <p>2.5 Shunting control techniques are applied to prevent damage of rolling stock and loads/contents</p>
3 Shunt rolling stock	<p>3.1 Workplace procedures for shunting are identified and applied</p> <p>3.2 Rolling stock is positioned to meet shunting requirements</p> <p>3.3 Coupling systems are identified and applied to attach and detach rolling stock</p> <p>3.4 Connecting brake hoses, electrical couplings and hand brakes are connected/disconnected and applied/released in accordance with operational and OH&S requirements</p> <p>3.5 Shunting occurs with the minimum of necessary moves within governing safety requirements and limitations</p>
4 Finalise train consist	<p>4.1 Train consists are made up according to operational procedures within timetabling requirements</p> <p>4.2 Irregularities and defects with equipment rolling stock are reported in accordance with operational requirements</p>

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

REQUIRED KNOWLEDGE AND SKILLS

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

Required knowledge:

- Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- Relevant OH&S and environmental procedures and regulations including codes of practice for manual handling
- Dangerous Goods Codes and regulations
- Shunting plan and instructions
- Procedures for prioritising work
- Loading and unloading procedures
- Procedures for getting on and off rolling stock in an appropriate manner
- Procedures for coupling and uncoupling rolling stock
- Procedures for operating points and signals
- Procedures for solving problems associated with shunting operations
- Procedures for identifying and reporting hazards
- Radio communication protocol
- Procedures for completing relevant documentation
- Wagon mechanisms
- Yard features
- Characteristics and features of wagons and other rolling stock
- Principles of operation of protective devices, air brakes, handbrakes, derailleurs
- Location and operation of signals and points
- Local track and signal layouts
- Draw gear capacities and related operating procedures
- Safeworking systems and requirements
- Shunting signals and commands and line of sight communication systems
- Procedures to be followed in the event of an emergency
- Defects that can occur on a shunting gear and equipment and related action that should be taken
- Procedures for identifying equipment defects and assessing for appropriate action
- Local procedures and operating requirements
- Procedures for operating mechanical, electronic and other line of sight communications equipment with required protocols

Required skills:

Required skills:

- Communicate effectively with others when shunting rolling stock
- Read and interpret instructions, procedures, information and signs relevant to the shunting of rolling stock
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the shunting of rolling stock
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when shunting rolling stock
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions when shunting rolling stock in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events when shunting rolling stock
- 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
- Apply fatigue management knowledge and techniques
- 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
- Monitor condition and performance of equipment and take appropriate action if required
- Check gear and equipment in terms of service schedule and standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards

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

- 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:

EVIDENCE GUIDE

unit

- the underpinning knowledge and skills
- relevant legislation and workplace procedures
- other relevant aspects of the range statement

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
 - 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 at the registered training organisation, 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.

Rolling stock may include:

- all rolling stock in service within Australian rail systems

Operations may be conducted:

- by day or night
- in all relevant weather conditions

Equipment may include:

- draw gear

RANGE STATEMENT

- air brake system components and handbrakes
 - rail tractors
 - rolling stock
 - communication equipment
 - switching equipment
 - turntables
 - motor vehicles
 - fixed signals
- OH&S requirements are those necessary to meet applicable workplace, state/territory and national policies and procedures and may include the use of:
- gloves
 - sunscreen, sunglasses and safety glasses
 - hearing protection
 - insect repellent
 - safety headwear and footwear
 - portable radios
 - hand lamps
 - flags
 - safety devices
 - audible indicators
 - breathing equipment
 - fire extinguishers
 - high visibility clothing
 - breakdown equipment
 - emergency containers
 - end-of-train unit or marker
 - equipment for handling electrical cables
 - emergency warning devices
 - portable signs and markers
- Contingencies may include:
- derailments
 - collisions
 - breakdowns
 - injuries and fatalities
 - hazardous materials spills
 - fires and leaks
 - track damage
 - powerline damage
- Contingency plans and contingencies may involve:
- emergency procedures manuals
 - ADG Code and other relevant dangerous goods regulations
 - safeworking systems and requirements
- Depending on the type of
- company procedures

RANGE STATEMENT

organisation concerned and the local terminology used, workplace procedures may include:

Information/documents may include:

- enterprise procedures
- organisational procedures
- established procedures
- applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- the Code of Practice for the Defined Interstate Rail Network in situations where shunting operations are carried out on that network
- order books
- cards/deck sheets
- noticeboards
- special train notices
- yard orders
- periodical circulars
- transport authority rules and operating procedures
- computer-based data systems
- timetables
- train consist
- incident reports
- drivers advice
- train register book
- safeworking forms
- dangerous goods manifest
- marshalling plan and shunting lists
- emergency procedures manual
- conditions of service, legislation and industrial agreements including workplace agreements and awards
- relevant state/territory codes of practice and safeworking system requirements
- the Code of Practice for the Defined Interstate Rail Network in situations where shunting operations are carried out on that network
- relevant state/territory OH&S legislation
- relevant state/territory fatigue management regulations
- relevant state/territory environmental protection legislation
- relevant Australian Standards
- Railways of Australia Code of Practice and Conditions for the Carriage of Dangerous Goods

Applicable procedures and codes may include:

Unit Sector(s)

Not Applicable

Competency Field

Competency Field C - Vehicle Operation