



Australian Government

Department of Education, Employment and Workplace Relations

TLIC2041A Operate self-propelled equipment on track

Release: 1

TLIC2041A Operate self-propelled equipment on track

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to operate self-propelled equipment on track in accordance with safeworking and regulatory requirements and workplace procedures. It includes performing pre-operational and post-operational checks, operation of the equipment, and the completion of required documentation. It encompasses the operation of all self-propelled equipment, on track including road/rail equipment operated in rail mode. Licensing or certification requirements may be applicable to this unit.

Application of the Unit

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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 with some supervision, generally within a team environment. It involves the application of routine operational principles and procedures to operate self-propelled equipment on track as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of self-propelled equipment on track may need to have fulfilled licence or certification requirements for the type of equipment being used.

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 Perform pre-operational equipment checks

- 1.1 Basic pre-operational equipment checks are conducted as per manufacturers specifications or local maintenance schedules
- 1.2 Service books are checked and completed accurately as required
- 1.3 Deficiencies with equipment are identified and rectified in accordance with workplace procedures
- 1.4 Relevant persons are notified of problems and/or documentation completed

2 Operate equipment

- 2.1 Equipment is placed on track and removed from track where applicable
- 2.2 Equipment is driven on track
- 2.3 Equipment is set up for work and prepared for travel after work
- 2.4 Equipment is operated in a safe and efficient manner in accordance with manufacturers instructions and workplace procedures
- 2.5 Equipment is operated with due regard for prevailing operating conditions to ensure safe working conditions and minimise potential accidents
- 2.6 Equipment is operated to achieve the outcome and quality of work in accordance with the workplace standards and procedures
- 2.7 Warning systems are monitored and responded to appropriately during operation to maintain correct functionality of equipment
- 2.8 Equipment is left stored in appropriate manner and location to ensure security and protection of equipment

3 Perform post-operational equipment procedures

- 3.1 Post-operational equipment checks are conducted as per manufacturers specifications or local maintenance schedules to identify defects and maintenance requirements
- 3.2 Deficiencies with equipment are identified and rectified in an appropriate manner to maintain correct functionality of equipment
- 3.3 Relevant persons are notified of problems and/or documentation is completed in accordance with instructions and the relevant codes of practice

4 Complete documentation

- 4.1 Service books are checked and completed accurately
- 4.2 Required documentation is completed in a timely, accurate and complete manner in accordance with workplace procedures

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 safety, OH&S and environmental procedures and regulations
- Servicing schedules and procedures for pre- and post-operational checks of self-propelled equipment
- Equipment and materials for use when conducting pre- and post-operational checks of self-propelled equipment
- Components of self-propelled equipment and their applications
- Workplace procedures for the operation of self-propelled equipment
- Problems that may occur during the operation of self-propelled equipment, and action that can be taken to report or resolve the problems
- Setting up requirements in preparation for work
- Hazards that may exist when setting up and operating self-propelled equipment on track, and ways of controlling the risks involved
- Types of self-propelled equipment and their applications
- Technical specifications and manuals
- Impact of machine operation on track condition and geometry
- Defects that can occur in self-propelled equipment, and related action that should be taken
- Emergency procedures
- Local authority procedures

Required skills:

- Communicate effectively with others when operating self-propelled equipment on track
- Read and interpret instructions, procedures, information and signs relevant to the operation of self-propelled equipment on track
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to work activities
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when operating self-propelled equipment on track
- Promptly report and/or rectify any identified problems, faults or malfunctions when operating self-propelled equipment on track in accordance with regulatory requirements and workplace procedures
- Plan and organise work
- Implement contingency plans for unexpected events when operating self-propelled equipment on track
- Apply precautions and required action to minimise, control or eliminate hazards that may exist

Required skills:

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
- Select and use required personal protective equipment
- Identify, select and use tools and equipment
- Drive self-propelled equipment on track (for which certificated and/or licensed)

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:
 - performing pre- and post-operational equipment checks
 - operating self-propelled equipment on track in travel and work mode

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

EVIDENCE GUIDE

- 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.

- Operations may be conducted:
- by day or night
 - in all weather conditions
- Work may be conducted in:
- exposed conditions
 - controlled or open environments
- Work may involve:
- exposure to chemicals, and dangerous or hazardous substances
 - movements of equipment, materials and vehicles
- Equipment may include:
- basic mechanical/hydraulic self-propelled equipment, including:
 - jacks
 - borers
 - pullers
 - (rail-mounted) lubricators
 - winches

RANGE STATEMENT

- tampers
- rail adjusters
- ballast scarifiers
- equipment with multiple functions, including: ballast regulators, cranes, sleeper renewer, gantry, sleeper laying frame, disposal and distribution wagons
- complex self-propelled equipment, including:
 - tamper liners
 - track laying machines
 - rail-mounted lubrication vehicles
 - rail planers
 - rail grinders
 - undercutters
 - ballast cleaning machines
 - ballast screening and collection units
 - track geometry recording and detection cars
- Liaison may include:
 - internal or external personnel from other work areas
- Communication equipment/systems may include:
 - two-way radios
 - radio headsets
 - telephones/mobile phones
 - agreed audible or hand signal
- Information may be provided:
 - electronically
 - in writing, via forms/documents
 - orally, via face-to-face communications
- Safety and personal protective equipment may include:
 - high visibility clothing
 - hearing protection
 - gloves
 - sunscreen
 - sunglasses
 - safety glasses
 - insect repellent
 - safety headwear
 - safety footwear
 - portable radios/mobile phones
 - hand lamps
 - flags
 - safety devices
- Depending on the type of organisation concerned and the
 - company procedures
 - enterprise procedures

RANGE STATEMENT

local terminology used, workplace procedures may include:

- organisational procedures
- established procedures

Information/documents may include:

- operational instructions, policies and workplace procedures
- relevant log or record book
- maintenance notices, records and requests
- local authority regulations and procedures
- technical instructions
- manufacturers or workplace equipment operation manuals
- emergency procedure manuals
- two-way radio/mobile phone operation procedures
- information provided by other workplace personnel
- work orders
- QA plans, data and document control
- conditions of service, legislation and industrial agreements including workplace agreements and awards

Applicable procedures 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 protection legislation

Unit Sector(s)

Not Applicable

Competency Field

Competency Field

C - Vehicle Operation