

# TLIB2122A Apply awareness of fundamentals of rail operations in yards or sidings

Release 1



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#### **Modification History**

Release 1 - New unit of competency

## **Unit Descriptor**

This unit involves applying an awareness of the fundamentals of rail operations in yards or sidings.

It includes fixed structures, rail vehicles and rolling stock, signals, safety devices, primary activities and safety systems.

Licensing or certification requirements are not applicable to this unit.

## **Application of the Unit**

This unit is intended as an introduction to rail yards or sidings for people entering the rail industry who will be working on or around them.

## **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.

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#### **Elements and Performance Criteria**

- 1 Identify basic yard/siding structures, layout and terminology
- 1.1 Basic terminology for track, trackside equipment and fixed structures is identified
- 1.2 Features of track, including geography and geometry are identified
- 1.3 Infrastructure categories and their purpose are identified
- 1.4 Other principal structure types and their purpose are identified
- 1.5 Relevant stakeholders for reporting structural faults or anomalies to are identified
- 2 Identify above and 2.1 below ground services pur
  - 2.1 Principal overhead and/or electrical components and their purpose are identified and explained
  - 2.2 Power supply voltages are identified
  - 2.3 Methods of isolation are identified and their purpose is explained
- 3 Identify rail track vehicles and rolling stock
- 3.1 Types of trains and rolling stock are identified
- 3.2 Types of rail track vehicles are identified
- 3.3 Relevant stakeholders for reporting rolling stock faults or anomalies to are identified
- 4 Identify signals and safety devices
- 4.1 Types, location and purpose of signals are identified
- 4.2 Types, location and purpose of safety devices are identified
- 4.3 Relevant stakeholders for reporting signal or safety device faults or anomalies to are identified
- 5 Identify primary rail activities and safety systems
- 5.1 Primary rail activities and, where applicable, other operators are identified
- 5.2 Types and purpose of safety systems are identified
- 5.3 Relevant stakeholders for reporting safety events to are identified

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# Required Skills and Knowledge

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

#### Required knowledge:

Relevant communication systems and procedures

#### Required skills:

- Communicate effectively with others
- Interpret and follow operational instructions

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#### **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 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:
  - identifying layout, main features and equipment in a rail yard or siding
  - identifying all activities carried out in the rail yard or siding
  - identifying possible safety events and appropriate responses

# Context of and specific resources for assessment

- Resources for assessment may include:
  - a range of relevant exercises, case studies and/or other 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
  - applicable documentation including workplace 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
- Assessment may occur:
  - through activities in an appropriately simulated environment, and/or
  - in an appropriate range of situations in the workplace

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#### **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.

Track components may include:

- rails, rail fastenings and welds
- sleepers and sleeper fastenings
- ballast
- formation and earthworks
- drainage pits
- cess

Track layout may include:

- plain track
- gauge
- turnouts
- special track including catchpoints/derails, expansion switches, diamond crossings and slips

Yard layouts may include

- road identification
- walkways
- road crossings
- mainline/network connections
- orientation
- through roads

Overhead and/or electrical components may include:

- catenary
- stanchions
- · drop wire
- contact
- steady arm
- feeder
- spark gaps
- earth straps
- tension weights
- pantographs
- high voltage cables
- power supplies
- isolation points

Rail track vehicles may include:

- road/rail vehicles
- maintenance vehicles
- track machines
- trolleys
- elevated platforms
- cherry pickers

Safety events may include:

- incidents
- accidents

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#### near misses

# **Unit Sector(s)**

Not applicable.

# **Competency Field**

B - Equipment Checking and Maintenance

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