



Australian Government

TLIF5023 Undertake a derailment investigation

Release: 1

TLIF5023 Undertake a derailment investigation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to undertake a derailment investigation in accordance with legislative and regulatory requirements.

It includes preparing for a derailment investigation, determining potential contributory factors, planning for derailment investigation report requirements, and investigating a derailment.

This unit applies to people with the responsibility for rail operations management.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

F – Safety Management

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

1 Prepare for derailment investigation

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1 Derailment investigation definitions are identified and explained
- 1.2 Principles of systematic investigation to be employed in derailment investigation are identified and followed

- 1.3 Purpose and objectives of derailment investigation are identified and documented in accordance with organisational and regulatory requirements
 - 1.4 Types of data to be collected to conduct derailment investigation are identified and documented
 - 1.5 Types of evidence to be collected during derailment investigation are identified and documented
- 2 Determine potential contributory components of the rail system to the derailment**
 - 2.1 Track structure and track components that may have contributed to derailment are identified in accordance with organisational and regulatory requirements
 - 2.2 Rolling stock involved in derailment is identified in accordance with organisational and regulatory requirements
 - 2.3 Normal operation of rolling stock at derailment site is outlined in accordance with organisational and regulatory requirements
 - 2.4 Safeworking systems in operation at derailment site are explained
- 3 Plan for derailment investigation report requirements**
 - 3.1 Methods by which evidence will be gathered are outlined
 - 3.2 Appropriate report structure is determined
 - 3.3 Timelines for conducting investigation and producing report are established
 - 3.4 Equipment required to conduct derailment investigation is identified and accessed
- 4 Investigate derailment**
 - 4.1 Resources required to undertaken rail derailment investigation are acquired
 - 4.2 Hazards are identified, risks are assessed and control measures are implemented
 - 4.3 Evidence is gathered in accordance with identified methods and required timelines
 - 4.4 Rail derailment investigation report is drafted, reviewed and finalised in accordance with organisational and regulatory requirements

- 4.5 Rail derailment investigation report is completed and submitted in accordance with organisational and regulatory requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIF5023A Undertake a derailment investigation.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIF5023 Undertake a derailment investigation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant workplace procedures
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- planning a derailment investigation in accordance with organisational and regulatory requirements
- producing a derailment investigation report
- reading and interpreting documentation and the organisation's rail safety compliance system, and applying these to a derailment investigation
- recognising non-conformance with rail safety requirements and taking appropriate action in accordance with organisational policies and procedures
- recording and preserving evidence when undertaking a derailment investigation in accordance with workplace procedures
- working collaboratively with employees and other management staff when undertaking a derailment investigation.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- evidence collection and analysis techniques
- evidence preservation techniques
- notifiable occurrence reporting requirements in accordance with operational procedures
- rail safeworking systems
- relevant investigating and reporting legislation and regulations
- rolling stock operations including traction systems, braking systems, inspection regimes
- signalling systems
- terminology as defined by the applicable Rail Infrastructure Manager safeworking system

- including workplace procedures, regulations, rules and codes of practice
- track components and dynamics
- wheel-track interface management.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in rail workplace operational situations or, where this is not available, in simulated workplace operational situations that replicate rail corridor workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, rail industry standards, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>