



Australian Government

Department of Education, Employment and Workplace Relations

RIIVEH301A Conduct rail haulage operations

Release: 1

RIIVEH301A Conduct rail haulage operations

Modification History

Not applicable.

Unit Descriptor

This unit covers the conduct of rail haulage operations in the resources and infrastructure industries. It includes planning and preparing for rail haulage operations, hauling material, loading and unloading rake of trucks, and carrying out operator maintenance. Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

Application of the Unit

This unit is appropriate for those working in an operational role at worksites within:

- Coal mining
- Metalliferous mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

<p>Elements describe the essential outcomes of a unit of competency.</p>	<p>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.</p>
--	---

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for rail haulage operations	1.1. Access, interpret and apply <i>compliance documentation</i> relevant to the work activity 1.2. Obtain, interpret and clarify/confirm <i>work requirements</i> 1.3. Access, interpret and apply mine environmental <i>data</i> required to complete the allocated work 1.4. Carry out <i>pre-start vehicle and equipment checks</i>
2. Haul material	2.1. Coordinate activities with others at the site prior to commencement of, and during, the work activity 2.2. Carry out pre-start, start-up, park-up, shutdown procedures 2.3. Use vehicle controls and systems to ensure smooth and effective operations 2.4. Operate <i>rail vehicle</i> within equipment limitations, and monitor and respond to gauges and systems 2.5. Safely load/unload personnel or materials 2.6. Safely carry out towing and pushing of equipment and plant in accordance with the manufacturer's specifications and/or site procedures and <i>safety requirements</i> 2.7. Recognise and respond to <i>hazards</i> and emergency situations 2.8. Perform work in accordance with the agreed plan and outcomes and within the operating capacities of the equipment
3. Load and unload rake of trucks	3.1. Accurately position rake underneath material loading chute/loading point 3.2. Load and unload rake using approved equipment minimising spillage and/or damage to equipment
4. Carry out operator maintenance	4.1. Carry out rail vehicle and rolling stock inspections and fault-finding 4.2. Carry out routine operational servicing, lubrication and housekeeping tasks using appropriate <i>cleaning methods</i> 4.3. Carry out minor <i>operational maintenance</i>

	<p>4.4. Provide operator support during preparation for, and conduct of, major maintenance tasks</p> <p>4.5. Process records</p>
--	--

Required Skills and Knowledge

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

Required skills

Specific skills are required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following as required to conduct rail haulage operations:

- apply legislative, organisation and site requirements and procedures for the conduct of rail haulage operations
- access, interpret and apply technical and environmental information
- start, operate and shutdown haulage equipment
- apply diagnostic techniques to identify problems arising in rail haulage operations
- conduct relevant maintenance on locomotives and related equipment
- conduct emergency shutdowns
- maintain appropriate records
- apply environmental constraints and procedures
- dispose of environmentally sensitive oils, fluids and materials
- interpret ground conditions
- operate, maintain and clean rail haulage equipment
- apply safe work practices
- use hand and power tools

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following as required to conduct rail haulage operations:

- site and operational safety requirements
- rail vehicle equipment characteristics, technical capabilities and limitations
- rail vehicle operational procedures and checks
- location of equipment relative to working environment
- ventilation system and conditions
- rail vehicle maintenance requirements and procedures
- recording, reporting and handover procedures
- site environmental requirements and constraints related to rail vehicles
- bucket loading procedures
- environmental management procedures
- basic geological and technical data
- isolation procedures
- locomotive parking techniques

- operational procedures and checks
- primary and secondary ventilation sources
- types of rail operations
- rail signalling system characteristics
- reporting procedures
- start up and shutdown procedures

Evidence Guide

<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p>Overview of assessment</p>	
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:</p> <ul style="list-style-type: none"> • knowledge of the requirements, procedures and instructions for the conduct of rail haulage operations • implementation of requirements, procedures and techniques for the safe, effective and efficient conduct of rail haulage operations • working with others to undertake and complete rail haulage operations that meet all of the required outcomes • consistent timely completion of rail haulage operations that safely, effectively and efficiently meet the required outcomes
<p>Context of and specific resources for assessment</p>	<ul style="list-style-type: none"> • This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. • Customisation of assessment and delivery

	<p>environment should sensitively accommodate cultural diversity.</p> <ul style="list-style-type: none"> • Aboriginal people and other people from a non English speaking background may have second language issues. • Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	<p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • implementation of appropriate requirements, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • working with others to undertake and complete rail haulage operations
Guidance information for assessment	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>

Range Statement

<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p>Compliance documentation may include:</p>	<ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • relevant Australian standards • site requirements • management plans • relevant OHS policy • relevant code of practice • manufacturer's instructions • safe working instructions • recognised standards • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
<p>Work requirements may include:</p>	<ul style="list-style-type: none"> • shift briefings including: <ul style="list-style-type: none"> • nature and scope of work • working conditions • achievement targets • equipment defects • hazards and potential hazards • coordination requirements/issues • handover details • work orders
<p>Data may include:</p>	<ul style="list-style-type: none"> • ventilation/gas data • deputy reports
<p>Pre-start vehicle and equipment checks may include:</p>	<ul style="list-style-type: none"> • break indicators (x-rays) • chains • cleanliness of rail loading station • computer systems • danger tags • display instrumentation and gauges (e.g. indicators, gauges, laser levels) • door pins

	<ul style="list-style-type: none"> • draw gear • idle positioned and running • light positioning and cleanliness • loading chute • locomotive and components • personal proximity • shackles • visual and audio warning devices and lights (e.g. tail light) • weigh machines • wheels
Rail vehicle may include:	<ul style="list-style-type: none"> • electric drive vehicles • mechanical drive vehicles • single or multiple drive vehicles • rolling stock
Safety requirements may include:	<ul style="list-style-type: none"> • personnel safety and control • load security and safety • transport rules • emergency braking • operational signals procedures
Hazards may include:	<ul style="list-style-type: none"> • collisions • communication failure • derailment • dirty tracks • faults (e.g. switches, unsecured trucks, run away trucks) • mud rushes • oversized material • spillage • visibility • water in pass
Cleaning methods may include:	<ul style="list-style-type: none"> • degreasing • forced air • steam cleaning • vacuum • water
Operator maintenance may include:	<ul style="list-style-type: none"> • charging system • greasing • remove and refitting of batteries • specific gravity meter • tightening loose fittings

Unit Sector(s)

Vehicle Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.