

Australian Government

Department of Education, Employment and Workplace Relations

# RIIMPO311A Conduct haul truck operations

Release: 1



#### **RIIMPO311A** Conduct haul truck operations

#### **Modification History**

Not applicable.

# **Unit Descriptor**

This unit covers conducting haul truck operations in the resources and infrastructure industries. It includes: planning and preparing for operations; operating the haul truck; loading, hauling and dumping materials; and carrying out post-operational procedures.

# **Application of the Unit**

Haul trucks covered by this unit are off-highway trucks and may include: diesel-mechanical, diesel-electric, rigid body, articulated and belly dump. This unit is appropriate for those working in mobile plant operator roles, at worksites within:

- Civil construction
- Coal mining
- Extractive industries
- 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**

Elements describe the essential outcomes of a unit of competency.	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.
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EI	LEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for operations	1.1. Access, interpret and apply <i>compliance</i> <i>documentation</i> relevant to conducting haul truck operations	
		1.2. Obtain, interpret and clarify <i>work</i> <i>requirements and procedures</i> for the satisfactory completion of the allocated job
		1.3. Access, interpret and apply <i>geological</i> and <i>survey data</i> required to complete the allocated job
		1.4. <i>Inspect and prepare work area</i> in coordination with others
		1.5. Identify, manage and report <i>potential</i> <i>hazards and risks</i>
		1.6.Resolve <i>coordination requirements</i> with others at the site prior to commencing and during work activities
		1.7. Select personal protective equipment appropriate for work activities
2.	Operate haul truck	2.1. Carry out pre-start, start-up, park-up and shutdown procedures
		2.2. Select and modify the <i>operating technique</i> to appropriately meet <i>changing work</i> <i>conditions</i>
		2.3.Conduct, control and monitor operations within the equipment limitations
		2.4. Act on or report <i>monitoring systems and</i> <i>alarms</i>
		2.5. Recognise and respond to <i>hazardous and emergency situations</i>
3.	Load, haul and dump materials	3.1. Position truck under all types of <i>loading</i> equipment
		3.2. Carry out haulage operations
		3.3. Carry out <i>dumping operations</i>
		3.4. Complete work in accordance with the agreed plan and within the operating capacity of the allocated equipment
4.	Carry out post-operational	4.1. Inspect, fault find and report faults
	procedures	4.2. Carry out routine operator servicing, maintenance and housekeeping tasks

4.3. Maintain and process records and reports
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# **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 in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to conduct haul truck operations:

- apply legislative, organisation and site requirements and procedures
- apply operational safety requirements
- access, interpret and apply technical information
- apply equipment records maintenance procedures
- apply diagnostic techniques
- use hand tools
- apply procedures for disposal of environmentally sensitive fluids and materials
- apply chemical and fuel safety measures
- work wearing personal protective equipment

#### **Required knowledge**

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to conduct haul truck operations:

- emergency procedures
- environmental, cultural and heritage guidelines
- equipment processes, technical capability and limitations
- equipment safety requirements
- geological and technical data
- hauling procedures
- hazardous goods procedures and consequences of spills
- isolation procedures
- loading procedures
- night and day working procedures
- OHS requirements
- fatigue management
- operational procedures and checks
- site road rules
- shutdown procedures
- site safety requirements
- start-up procedures

# **Evidence Guide**

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.

Overview of assessment	
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 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:
	• knowledge of the requirements, procedures and instructions for conducting haul truck operations
	<ul> <li>implementation of requirements, procedures and techniques for the safe, effective and efficient completion of haul truck operations</li> <li>working with others to undertake and complete haul truck operations that meet all of the required outcomes</li> </ul>
	• consistent timely completion haul truck operations that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	<ul> <li>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.</li> <li>The assessment environment should not disadvantage the participant. For example,</li> </ul>
	language, literacy and numeracy demands of assessment should not be greater than those required on the job.
	• Customisation of assessment and delivery environment to sensitively accommodate cultural diversity.
	• Aboriginal people and other people from a non English speaking background may have second

	language issues.
	<ul> <li>Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances.</li> <li>Where applicable, physical resources should include equipment modified for people with disabilities.</li> <li>Access must be provided to appropriate learning and/or assessment support when required.</li> </ul>
Method of assessment	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:
	<ul> <li>written and/or oral assessment of the candidate's required knowledge</li> <li>observed, documented and/or first hand testimonial evidence of the candidate's: <ul> <li>implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>consistently achieving the required outcomes</li> </ul> </li> <li>first hand testimonial evidence of the candidate's: <ul> <li>working with others to undertake and complete haul truck operations</li> </ul> </li> </ul>
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

#### **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. 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.

Relevant compliance	• legislative, organisation and site requirements
documentation may include:	and procedures
documentation may merude.	• manufacturer's guidelines and specifications
	Australian standards
	codes of practice
	Employment and Workplace Relations     legislation
	<ul> <li>Equal Employment Opportunity and Disability</li> </ul>
	Discrimination legislation
Work requirements and	product identification
procedures may come from	<ul> <li>nature and scope of tasks</li> </ul>
briefings, handovers, and work	achievement targets
orders and may be written or	operational conditions
verbal, formal or informal,	<ul> <li>obtaining permits required</li> </ul>
depending on the complexity of the process and may include:	• site layout
	• out of bounds areas
	<ul> <li>worksite inspection requirements</li> </ul>
	lighting conditions
	<ul> <li>plant or equipment defects</li> </ul>
	<ul> <li>hazards and potential hazards</li> </ul>
	<ul> <li>coordination requirements or issues</li> </ul>
	<ul> <li>contamination control requirements</li> </ul>
	environmental control requirements
	barricade and signage requirements
Geological data may include	• rock and soil type and characteristics
relevant site-specific information	faults and joints
in relation to:	broken ground
	• water tables or other water sources
	• wet and dry areas
	degree of compaction
Survey data may include relevant	floor heights
site-specific information in	• bench heights and widths
relation to:	• ramp and floor grades
	• underground workings and voids

Inspect and prepare work area may include:	<ul> <li>identification of hazards</li> <li>selection and implementation of control measures for the hazards identified</li> <li>safeguarding site and non-site personnel by: <ul> <li>erection of barricades and posting of signs</li> <li>selection of appropriate equipment to ensure personnel safety and protection</li> </ul> </li> <li>determination of appropriate path of movement for loads and equipment/vehicles</li> <li>floor clean up to specified levels and grade requirements</li> <li>selection and implementation of environmental control measures</li> </ul>
Potential hazards and risks may include:	<ul> <li>installed services</li> <li>damaged or defective pressurised hoses and fastenings</li> <li>abandoned equipment</li> <li>adjoining pit walls or structures</li> <li>adverse weather conditions (electrical storms, floods, fires)</li> <li>chemicals</li> <li>contaminants</li> <li>ancillary equipment</li> <li>fences</li> <li>holes and pot holes</li> <li>over-hanging rocks</li> <li>personnel</li> <li>unsafe ground</li> <li>unstable faces</li> <li>other vehicles</li> <li>powerlines</li> <li>dust and noise</li> <li>conveyors and other fixed plant</li> <li>overhead structures and services</li> <li>stored energy which may include: <ul> <li>engine components</li> <li>radiators and cooling systems</li> <li>hydraulic tanks and reservoirs</li> <li>air hoses</li> <li>tyres</li> </ul> </li> </ul>

	air conditioning components
	electrical components
	braking systems
	centrifugal forces
<b>Coordination requirements</b> may	other mobile plant operators
include with:	processing plant operators
	maintenance personnel
	• water truck operators
	service vehicle operators
	• crane and float operators
	contractors
	<ul> <li>inspectors</li> </ul>
	<ul> <li>supervisors</li> </ul>
	<ul> <li>visitors</li> </ul>
Pre-start and start-up	• external check of the machine
procedure may include:	inspection of attachments to ensure security     and identify defects
	• selection, removing and fitting of attachments
	• checking of fluid levels (windscreen washer
	tank, hydraulic oil, coolant, grease, water,
	engine oil, fuel)
	carry out lubrication
	• checking of display instrumentation and gauges (indicators, gauges, laser levels), computer systems
	• inspection of air filter restriction indicator
	• inspection and checking of cab (horn, lights, air conditioner)
	• testing of engine and stop engine lights
	<ul> <li>testing visual and audio warning devices and lights</li> </ul>
	<ul> <li>checking instruments and control lever</li> </ul>
	<ul> <li>reporting of defects and damage</li> </ul>
Park-up and shutdown	<ul> <li>secure equipment as required by site procedures</li> </ul>
procedure may include:	<ul> <li>render attachments safe</li> </ul>
	<ul> <li>clear access ways</li> </ul>
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<b>Operating techniques</b> may	• manoeuvring
include:	• braking
	bucket loading
	single sided loading
	double sided loading

	duine has to a time
	drive by loading
	load carrying
	haulage vehicle positioning
	load discharge
	<ul> <li>building and maintaining stockpiles</li> </ul>
	blending materials
	<ul> <li>attaching, securing, lifting, carrying and placing materials</li> </ul>
	driving machines on to floats
	• towing
	observing site speed limits
	working safely around:
	overhead powerlines
	<ul> <li>other machines and personnel</li> </ul>
	live stockpiles
Changing work conditions may	bulk material grades
include variations in:	height of stockpiles
	• materials
	contamination
	haulage units
	• materials handling facilities
	• weather conditions
	• light conditions (including day and night)
Monitoring systems and alarms	brake air pressure
may include:	brake oil temperature
	computer indicators
	engine oil pressure
	• fuel filter
	• parking brake
	• retarder
	service meter
	• speedometer/odometer
	• steering filters
	• tachometer
	torque converter
	<ul> <li>oil temperature</li> </ul>
	<ul> <li>transmission filter</li> </ul>
	• voltmeter
	water temperature
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Hazardous and emergency	<ul><li> powerlines and other overhead services</li><li> dust and noise</li></ul>
situations may include:	

Loading equipment may include:	<ul> <li>face overhangs</li> <li>lighting strikes (potential tyre explosion)</li> <li>tyre fires (isolation procedures)</li> <li>shovels</li> <li>wheel loaders</li> <li>excavators</li> <li>bins</li> <li>conveyor belts</li> <li>draglines</li> </ul>
<b>Dumping operations</b> may be into:	<ul> <li>burden dumps</li> <li>reject dumps</li> <li>rehabilitation dumps</li> <li>stockpiles</li> <li>hoppers</li> <li>bunkers</li> <li>feeders</li> <li>crushers</li> </ul>
<b>Operator servicing</b> , <b>maintenance and housekeeping</b> tasks are those established and authorised for the site and may include:	<ul> <li>cleaning</li> <li>authorised servicing and the monitoring</li> <li>recording and reporting of faults</li> <li>conduct of authorised minor replacements</li> <li>provision of assistance to maintenance personnel during maintenance and repair activities</li> </ul>
<b>Records and reports</b> may include:	<ul> <li>fuel usage</li> <li>computer readings</li> <li>end of shift documentation</li> <li>supplies logs</li> <li>work logs stockpile information</li> <li>quality information</li> <li>despatch details</li> </ul>

#### **Unit Sector(s)**

Mobile Plant Operations

### **Competency field**

Refer to Unit Sector(s).

# **Co-requisite units**

Not applicable.