



Australian Government

Department of Education, Employment and Workplace Relations

RIIMPO210A Conduct underground truck operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers conducting truck operations in underground metalliferous mines. It includes: planning and preparing for operations; loading hauling and discharging material; and carrying out operator maintenance and housekeeping activities.

Application of the Unit

This unit is appropriate for those working in a mobile plant operator roles, in underground mines, within:

- 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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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for operations	1.1. Access, interpret and apply compliance documentation relevant to conducting truck operations in underground metalliferous mines 1.2. Receive, interpret and clarify shift changeover details 1.3. Select appropriate personal protective equipment 1.4. Select appropriate type of auxiliary equipment for work activities 1.5. Perform equipment pre-start checks to ensure equipment is ready for operation 1.6. Carry out start-up procedures 1.7. Inspect and assess site conditions to determine if scaling is required and take action according to site requirements 1.8. Identify, address and report potential hazards and risks 1.9. Identify, address and report environmental issues 1.10. Adhere to emergency procedures to ensure safety of personnel, equipment and site 1.11. Use approved dust suppression and extraction methods 1.12. Ensure area is well ventilated before entry into work area 1.13. Erect safety provisions where appropriate 1.14. Pass on end of shift information to oncoming shift
2. Load material	2.1. Position truck for loading clear of services in accordance with site requirements 2.2. Remain in truck when loading or at safe distance from loading operation 2.3. Ensure truck is loaded to capacity without spillage
3. Haul material	3.1. Operate truck safely within working environment limitations and road conditions, observing safe driving

	conventions 3.2. Confirm type of material and haul to designated location 3.3. Communicate with other personnel using approved communication methods 3.4. Maintain hauling efficiency by managing working environment 3.5. Monitor and manage equipment performance using appropriate indicators to aid efficient operations 3.6. Identify, remove, and dispose of contaminants 3.7. Identify and manage spillages on hauling surface 3.8. Ensure tray is in the correct position before equipment is in motion
4. Discharge material	4.1. Check safety provisions are in place before entering and leaving tipping site 4.2. Position truck in safe area 4.3. Discharge load 4.4. Lower or retract tray fully before driving off the tipping area
5. Carry out operator maintenance	5.1. Carry out shutdown procedures 5.2. Service and make minor adjustments to equipment
6. Conduct housekeeping activities	6.1. Clean equipment to maintain condition of equipment and ensure safe and efficient operations 6.2. Clean and store auxiliary service equipment 6.3. Manage and/or report hazards to maintain a safe working environment

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 underground truck operations:

- apply legislative, organisation and site requirements and procedures
- interpret ground conditions
- apply procedures for directing operations
- apply equipment operating, maintenance and cleaning requirements and procedures
- use hand and power tools
- apply tipping procedures
- apply vehicle refuelling procedures

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 underground truck operations:

- mine operational system
- underground procedures
- geological and technical data
- equipment parking
- primary and secondary ventilation
- environmental procedures
- equipment safety requirements
- start-up and shutdown procedures
- operational procedures and checks
- equipment processes, technical capability and limitations
- road rules
- hauling procedures
- loading procedures
- manufacturer's specifications
- towing methods
- refuelling vehicle

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 underground truck operations • implementation of requirements, procedures and techniques for the safe, effective and efficient conducting of underground truck operations • working with others to undertake and complete underground truck operations that meet all of the required outcomes • consistent timely completion underground truck operations that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	• 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. • 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 environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second

	language issues. • 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. • 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	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: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the underground truck operations
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 documentation

may include:

- legislative, organisation and site requirements and procedures
- manufacturer's guidelines and specifications
- Australian standards
- codes of practice
- Employment and workplace relations legislation
- Equal Employment Opportunity and Disability Discrimination legislation

Equipment pre-start checks may include:

- air filter restriction indicator
- cab (horn, lights, air conditioner)
- cab condition (no rags in air conditioner vent, dirt around brake and accelerator pedals, seat condition, all gear secured)
- cab mounts
- computer systems
- correct location of equipment
- damage to equipment
- danger tags
- display instrumentation and gauges (e.g. indicators, gauges, laser levels)
- emergency brake checks
- emergency steering
- engine and stop engine lights (orange and red)
- fire suppression unit (pins in position in triggers)
- fluid leaks (e.g. oil/fuel/water - engine, hydraulic hoses, on ground, radiator, hoses, transmission)
- fluid levels (windscreen washer tank, hydraulic oil, coolant, grease, water, engine oil, fuel, transmission)
- light positioning and cleanliness
- no combustible material around exhaust
- personal proximity
- portable fire extinguisher (bracket, gauge,

	- hose, ease of access) • radiator top up tank • safety mechanisms operational (e.g. horn, operating lights)
Start-up, park and shutdown procedures may include:	• tyres and rim condition • vehicle is left secured • vehicle number • visual and audio warning devices and lights • wheel nuts and studs • windows (clean, emergency exit tag in place)
Potential hazards and risks may include:	• adjoining pit walls • vertical opening • brake failure • break and steering failure • bund and/or wall collapse • clean floor • communication failure • decline traffic • fatigue • fire • fire on equipment • hydraulic line failure • level surface • mount dismount injuries • pot holes • road conditions • rocks • spillage • stable ground • surface free of obstructions • unauthorised personnel • undercut brow • unsafe ground • visibility • loading from chutes
Environmental issues may include:	• dust • fumes • noise • water
Emergency procedures may include:	• clean up • equipment shut down procedures

	• evacuation procedures/First Aid • notification of authorities • safety equipment • use of personal protective equipment
Dust suppression and extraction methods may include:	• mobile/fixed sprays • screens (vent doors, vent blinds) • use of water trucks • ventilation bags operational • watering down site
Safety provisions may include:	• barricades erected where necessary • signage visible • stop blocks in approved condition and made to approved dimensions • lights
Trucks may include:	• 4 wheel drive (diesel, electric) • 6 wheel drive • articulated • rigid • tipping or ejector tray
Working environment limitations may include:	• broken ground • dry • location of water table • noise • slope of working surface • stability of ground • stable ground (compaction) amount of scale • ventilation characteristics (fumes, dust) • visibility • wet
Safe driving conventions may include:	• speed limits • mine lighting • site vehicle identification lights • right of way • parking in stockpiles • parking on incline/decline • refuelling procedures • rules at intersections • driving regulations, rules and conventions • towing methods • shute operations

Materials may include:	• gravel/ore • overburden • oxidised waste • rejects • road base • rubbish • sand • sulphide rock fill • tailings
Indicators may include:	• brake air pressure • brake oil temperature • computer indicators • engine oil pressure • fuel filter • parking brake • retarder • service meter • speedometer/odometer • steering filters • tachometer • torque converter oil temperature • transmission filter • voltmeter • water temperature
Contaminants may include:	• cigarette butts • consumables • ear plugs • explosives • metal bucket teeth • metal or steel rods • old piping • old workings • plastic • timber • wet fill
Servicing may include:	• checking fluid levels • filter changing • greasing • keeping cab clean • tightening loose fittings
Equipment cleaning methods	• degreasing

may include:	• forced air • steam cleaning • vacuum • water
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Unit Sector(s)

Mobile Plant Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.