



Australian Government

Department of Education, Employment and Workplace Relations

RIIMPO502A Manage the interaction of heavy and light vehicles and mining equipment

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the management of the interaction of heavy and light vehicles and mining equipment in the coal and metalliferous mining and extractive industries. It includes: planning and preparing; managing the interaction; and monitoring and reviewing operations.

Application of the Unit

This unit is appropriate for those working in management or as a technical specialist roles, within:

- 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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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare	1.1. Access, interpret and apply compliance documentation relevant to the management and interaction of vehicles and mining equipment 1.2. Review the Traffic Management Plan, policies, plans and standard operating procedures or other site arrangements defined by site management for the interaction of vehicles and equipment within the site, on haul roads or on roads with public access 1.3. Identify and record site requirements for the interaction of transport systems and equipment 1.4. Identify contingencies and define other issues on the job, that will affect the interaction of the transport systems and equipment 1.5. Access and determine the appropriateness of standard operating procedures and revise if necessary
2. Manage the interaction	2.1. Monitor the implementation and effectiveness of workplace practices and procedures against the Traffic Management Plan, traffic interaction policies, plans and standard operating procedures 2.2. Identify, clarify and communicate requirements in the operation of vehicles and equipment to meet the Traffic Plan, Standard Operating Procedures, or special arrangements to meet any identified hazards 2.3. Ensure adequate records are collected of the operation of vehicles and equipment to allow assessment of safety and efficiency and to record any safety concerns raised by operations personnel 2.4. Ensure all appropriate signs, barriers, bunds, traffic control devices, road edge clearance markers are in place as defined in the Traffic Plan or Standard Operating Procedures 2.5. Identify hazards associated with interaction of transport and equipment and evaluate

	and respond to risks in accordance with established procedures 2.6. Manage interaction of vehicles and mining equipment to ensure safety and optimum efficiency
3. Monitor and review operations	3.1. Monitor and review the effectiveness of strategies put in place to safely control identified hazards and contingencies 3.2. Monitor the interaction of vehicles and equipment to ensure safety and optimum efficiency 3.3. Review recorded information to assist hazard identification or efficiency losses 3.4. Obtain specialist advice or assistance where required and seek approval for major changes to the Traffic Management Plan or Standard Operating Procedures from stakeholders 3.5. Implement rectification requirements

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 manage the interaction of heavy and light vehicles and mining equipment:

- apply legislative, organisation and site requirements and procedures
- apply interpersonal skills
- coordinate of others
- manage information
- apply problem solving techniques
- apply analysis techniques
- use measuring equipment
- write clear reports
- apply communication skills
- apply planning skills

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 manage the interaction of heavy and light vehicles and mining equipment:

- capabilities and limitations of transport, mobile plant and equipment systems
- functions of vehicles and site equipment
- risk management principles
- work role definitions
- reporting methods and alternatives
- relevant regulations, licenses and permits
- emergency procedures and obligations
- community expectations
- consultative strategies

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 the management of the interaction of heavy and light vehicles and mining equipment • implementation of procedures and techniques for the safe, effective and efficient management of the interaction of heavy and light vehicles and mining equipment • the identification of the relevant information and scope of the work required to meet the required outcomes • the identification of viable options and the selection of options that best meet the required outcomes • working with others to undertake and complete the management of the interaction of heavy and light vehicles and mining equipment • consistent successful management of the interaction of heavy and light vehicles and mining equipment
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 work sites 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.
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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 to apply in undertaking of the management of the interaction of heavy and light vehicles and mining equipment • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate procedures and techniques for the safe, effective and efficient achievement of the required outcomes • identification of the relevant information and scope of the work required to meet the required outcomes • identification of viable options and the selection of options that best meet the required outcomes • consistently achieving the required outcomes • first hand testimonial and documentary evidence of the candidate's: • working with others to undertake and complete the management of the interaction of heavy and light vehicles and mining equipment • provision of clear and timely required support and advice on the interaction of heavy and light vehicles and mining equipment
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.

Interpret is defined as:	the understanding needed by the person within their job role
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
Vehicles may include all machines involved in production or those that have access to the operational and trafficable areas at the site, such as:	- haul trucks - scrapers - maintenance trucks and service vehicles - cranes - water trucks or service vehicles - graders and road construction equipment 4 wheel drive passenger vehicles - buses and personnel carriers - bull dozers and tractors, trailers and floats - excavators or mining machinery travelling from site to site
Equipment may include:	- excavators - shovels - bucket wheel excavators - mobile crushers and loaders - other mobile plant or heavy earth moving equipment - water and service machines
Traffic management plan, policies, plans and standard operating procedures may include:	- organisational commitment - road layout, permanent and temporary roads - road design principals and standards for bends, ramps loading, dumping - separation, overtaking, stopping, speed limits - signage, barriers, lights, edge marking

	• bends, ramps, loading and unloading point • access to the haul way • give way rules • types of vehicles permitted on different roads, haul trucks, mining equipment, personnel carriers, 4 wheel drives, busses • communication between vehicles • travelling on or crossing public roads • public access to site roads • community consultation and involvement • objectives and targets • surveying program • documentation and records • operational and emergency procedures • responsibility and reporting structure • work environmental impact, regulatory and legal compliance • reviews/audits • significant incident alerts
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Contingencies may include:	• vehicle and equipment failure • road design • road condition • road works whilst road under operation • normal and special speed controls • uneven or overloading of vehicles • road side repairs or refuelling • different sized vehicles using the roadway • vehicles with different ability to accelerate, brake, turn and negotiate route • visibility differences in vehicles as well as impact of weather or light • change to lighting adequacy, inadequacy • signage for normal and abnormal operation • how to change traffic plan for operational or contingency reasons • observation errors • operator error • movement of plant or ground • weather, sun, rain, fog, light and dark • accident • injury and • obstructions • changing environment • parking • overhead power
Hazard is defined as:	• a source of potential harm or a situation with a potential to cause loss
Stakeholders may include:	• site operator • site workers • site management • site supervisors • mines inspector • government authorities • community groups • engineers • contractors

Unit Sector(s)

Mobile Plant Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.