



Australian Government

Department of Education, Employment and Workplace Relations

RIIEGS304A Mobilise equipment and materials

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the mobilisation of materials and equipment in the metalliferous mining industry. It includes preparing for mobilisation to site, carrying out pre-start and routine checks, proceeding to the exploration site, and carrying out basic 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:

- 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. Prepare for mobilisation to site	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Observe safety rules and regulations including site rules safety plans and site specific instructions 1.3. Check operational safety by carrying out pre-start inspection procedures according to manufacturer's specifications, company and/or site requirements 1.4. Receive, interpret and clarify briefing details in accordance with requirements 1.5. Prepare vehicle , vehicle kit, camping equipment, First Aid kit, survival kit and personal equipment for remote assignment
2. Carry out pre-start and routine checks	2.1. Carry out pre-start, daily engine, fuel and fluid level checks according to manufacturer/supplier instructions 2.2. Observe safety procedures while checking hydraulic systems, high-pressure air, electrical circuits and batteries
3. Proceed to exploration site	3.1. Drive vehicle in accordance with policies and procedures and State regulation 3.2. Apply safe driving techniques to all vehicles 3.3. Position/arrange loads so they will be carried in a safe manner to prevent loss/damage to vehicle or cargo 3.4. Use a range of load restraints/lashings to secure various loads to a vehicle. 3.5. Identify and assess ground conditions before driving vehicle across country 3.6. Drive vehicle off road in a range of terrains 3.7. Demonstrate stall recovery 3.8. Use maps, communication and navigation aids/equipment 3.9. Identify and avoid potential/actual hazards on the route 3.10. Carry out emergency procedures in accordance with manufacturer's and/or

	company requirements 3.11. Recognise and demonstrate basic survival techniques for a range of situations 3.12. Communicate information to base or other vehicles 3.13. Complete move to site and all required documentation
4. Carry out basic operator maintenance	4.1. Identify hazards, and methods of minimising hazards, in conducting maintenance, particularly in the field 4.2. Carry out minor repairs/replacements as required in accordance with manufacturer's specifications 4.3. Overcome minor breakdowns/bogging using recovery techniques 4.4. Carry out vehicle washing and housekeeping regularly according to site 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 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 mobilise equipment and materials:

- apply legislative, organisation and site requirements and procedures for the mobilisation of equipment and materials
- apply communication and recording skills
- perform manual and mechanical handling
- drive laden vehicles (on and off road)
- perform basic maintenance skills
- apply knots, load securing devices and attachment points for loaded vehicles
- apply recovery techniques for bogged plant/vehicles
- acquire required licences and permits
- apply diagnostic and troubleshooting procedures
- use hand tools
- solve problems

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 mobilise equipment and materials:

- provisions of the Workplace Health and Safety Acts, their regulations and code of practice
- particular state or territory regulations relating to operations
- reasons loads shift and methods of preventing shifting
- number and types of lashings to apply, fixing points and basic knots
- safe carrying of loads
- a range of acquired safety and survival skills
- driving with the minimum of damage to vehicles, equipment and structures
- relevant OHS requirements for transport and storage of materials and equipment
- operational and maintenance procedures
- a basic knowledge of hydraulic systems, components and cleanliness requirements
- a basic knowledge of internal combustion motors and the major components
- a basic knowledge of electricity and in particular, the associated hazards
- use, transport and storage of LPG and LPG appliances
- recording and reporting

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 mobilising equipment and materials • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of equipment and materials mobilisation • working with others to undertake and complete the mobilisation of materials and equipment that meets all of the required outcomes • consistent timely completion of equipment and materials mobilisation 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. • 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 environment to sensitively accommodate cultural diversity. • 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	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 • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the mobilisation of equipment and materials
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, organisational and site requirements and procedures - manufacturer's guidelines and specifications - Australian standards - Employment and workplace relations legislation - Equal Employment Opportunity and Disability Discrimination legislation
Rules and regulations may be found in:	- industrial safety regulations and legislation/organisation policy/procedures covering same - driving manuals - safety code of practice, signs and hazard codes - materials safety data sheets (MSDS), container labels - manufacturer's specifications - employer's procedure manual/work instruction/safety analysis/directive - company instructions - maps and plans - vehicle log books - accident investigation forms
Vehicles may include:	- any two-wheel drive passenger vehicle - all-wheel drive sedan/utility/station wagon - light trucks (usually table tops) - heavy support vehicles - heavy vehicles (such as drill rigs) - towed vehicle/trailer Note: State legislative requirements on road transport are adhered to
Loads may include:	- materials for exploration operations - spares for all equipment

	• fuels for all equipment, including oils and other lubricants • other hazardous substances and equipment • water tanks • ancillary equipment (e.g. pumps, generators, lighting plant) • compressors, caravans and/or vehicles • pallets • fluids • bulk materials • decontamination (cleaning) chemicals • safety equipment including personal protective equipment • towed loads Note: Some of the materials to be transported are inherently hazardous
Terrain over which vehicles can be driven may include:	• state and federal roads, sealed and unsealed • tracks or trails (e.g. mining and forestry access roads, fire trails) • off-road, where surface may vary in type, condition, gradient • barriers such as streams, gullies, sand dunes, banks
Hazards (other than those relating to terrain) may include:	• power lines • fences, gates • natural disasters (e.g. floods) • LPG appliances/canisters • other transported gas cylinders • portable and fixed winches • road transport hazards (e.g. braking with loads, camber, hills, rough surfaces) • serviceability of slings, tow ropes, shackles, snatch blocks lashings, vehicle restraining structures, decks, steps and jacks
Range of load restraint/lashings may include:	• direct lashings • indirect lashings • combination of direct and indirect lashings • knots (securing loads on vehicles)
Driving a vehicle off-road may include:	• driving on rocky trails • steep gradients • driving in mud, snow and ice

	• crossing sand dunes/crossing rivers • stall recovery - ascent and descent
Maps, communications and navigation aids may include:	• compass • global positioning system (GPS) • range of maps and diagrams • topographical information
Basic survival techniques may include:	• coping with breakdowns in the bush or isolated areas • physical and emotional requirements in an emergency and in isolated areas • methods of self protection to enhance survival • sources of water • making fire/protecting the environment • signalling search parties/aircraft • search party assistance • determining directions/locations • remaining in control/assisting other team members • coping with accidents and illness/First Aid within limits of competency • reading and interpreting maps
Information communicated may include:	• use of two way radio, CB radio • SAT phones, mobile phones • reporting defects, necessary detours, work hazards, changes in environmental patterns (e.g. storm, flood) • phonetic alphabet • call signs and radio protocols
Documentation may include:	• log books/service records • pre-drive checks
Minor repairs/replacements may include:	• wheel changing/rotation • using jumper leads • charging/servicing batteries • bleeding brakes • bleeding hydraulic system • adjusting clutch • bleeding fuel system • servicing air cleaners • changing oil and oil filters • greasing/lubrication • basic pre-drive operational checks of a vehicle

Recovery techniques may include:	• jacking • winching • rigging • towing
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Unit Sector(s)

Exploration and Field Work

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.