



Australian Government

Department of Education, Employment and Workplace Relations

RIISAM301A Test operational functions of vehicles and equipment

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the testing of operational functions for vehicles and equipment in the coal and metalliferous mining industries. It includes: planning and preparing for testing, testing vehicles and equipment; and completing the testing sequence

Application of the Unit

This unit is appropriate for those working in operational or maintenance roles, 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

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| 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 |
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| 1. Plan and prepare for testing | 1.1. Access, interpret and apply compliance documentation relevant to testing of operational functions for vehicles and equipment 1.2. Obtain, interpret and clarify work requirements before proceeding 1.3. Access, interpret and apply geological and survey data required to complete the allocated work 1.4. Identify and confirm testing requirements 1.5. Identify and obtain resources required for the work 1.6. Prepare vehicle to be worked on for the test 1.7. Coordinate activities with others at the site prior to commencement of, and during, the work activity |
| 2. Test vehicles and equipment | 2.1. Carry out pre-start, start-up, shut-down and isolation procedures 2.2. Test operational functions of the vehicle 2.3. Move/relocate vehicle for testing purposes 2.4. Identify and rectify faults where possible, or arrange for corrective action 2.5. Act on or report monitoring systems warnings and alarms 2.6. Recognise and respond to hazardous and emergency situations |
| 3. Complete the testing sequence | 3.1. Clean, maintain and store equipment and tools 3.2. Restore worksite 3.3. Complete records and documents |

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 test operational functions of vehicles and equipment:

- apply legislative, organisation and site requirements and procedures
- access, interpret and apply technical information and drawings
- apply site safety procedures
- use hand and power tools
- carry out precision measurement
- access and use site inventory system
- identify and diagnose faults
- operate vehicles/equipment for test purposes
- interpret test results

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 test operational functions of vehicles and equipment:

- occupational health and safety requirements
- mine operational rules and procedures
- operations, characteristics, capabilities and limitations of mine vehicles and equipment
- diagnosis and fault finding techniques
- site equipment and maintenance documentation and procedures
- site inventory (parts) systems
- testing procedures

Evidence Guide

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| <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 testing the operational functions of vehicles and equipment • implementation of requirements, procedures and techniques for the safe, effective and efficient testing of the operational functions of vehicles and equipment • working with others to test the operational functions of vehicles and equipment that meets all of the required outcomes • consistent timely completion of testing of operational functions of vehicles and equipment that safely, effectively and efficiently meets 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. • 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 |

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| | <p>English speaking background may have second language issues.</p> <ul style="list-style-type: none"> • 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. |
| <p>Method of assessment</p> | <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 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: <ul style="list-style-type: none"> • working with others to test the operational functions of vehicles and equipment |
| <p>Guidance information for assessment</p> | <p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p> |

Range Statement

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| <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>Relevant compliance documentation may include:</p> | <ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation |
| <p>Testing requirements may be identified through:</p> | <ul style="list-style-type: none"> • work orders or requests • condition statements • maintenance schedules • initial diagnosis • manufacturer specifications |
| <p>Resources may include:</p> | <ul style="list-style-type: none"> • appropriate technical manuals • information materials • tools |
| <p>Preparing vehicles may include:</p> | <ul style="list-style-type: none"> • locating • positioning • isolating • cleaning • checking for and removing hazardous materials/explosives |
| <p>Vehicles may include</p> | <ul style="list-style-type: none"> • all machines involved in production/support roles at the mine site |
| <p>Testing operational functions may include:</p> | <ul style="list-style-type: none"> • steering • brakes • lights • exhaust emissions • pneumatics • hydraulics • raw gas sampling • production functionality in production mode • movement |

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| | <ul style="list-style-type: none">• warning devices• gas monitoring devices |
| Equipment may include, but is not limited to: | <ul style="list-style-type: none">• gas sampling equipment• hydraulic and pneumatic testing equipment |

Unit Sector(s)

Service and Maintenance

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.