



Australian Government

RIIRAI508E Implement mine services systems

Release: 1

RIIRAI508E Implement mine services systems

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 7.0.

Application

This unit describes the skills and knowledge required to implement mine services systems in coal and metalliferous mining. It includes planning and implementing procedures for the installation, commissioning, operation, maintenance and auditing of mine services systems and equipment.

It applies to those working in management or technical specialist roles. They generally perform complex, non-routine tasks involving strategic and planning activities and are responsible for establishing and maintaining operational systems and plans.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories and industry sectors. Users must check requirements with relevant body before applying the unit.

Unit Sector

Coal mining

Metalliferous mining

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare to implement mine services systems and equipment	1.1 Obtain, interpret, clarify and confirm work instructions 1.2 Access, interpret and apply documentation required to implement mine services systems and equipment and confirm work activity is compliant 1.3 Select and wear personal protective equipment according to site requirements 1.4 Identify potential risks, hazards and environmental issues, implement control measures within scope of

ELEMENT	PERFORMANCE CRITERIA
	own role, and escalate where required 1.5 Identify and select mine service systems and equipment according to job and site requirements 1.6 Identify and record site requirements for mine services system implementation 1.7 Identify, coordinate and communicate roles and responsibilities of individuals and work-teams according to job requirements 1.8 Identify training needs and develop training plans
2. Install and commission mine services systems and equipment	2.1 Integrate new and existing work systems and processes to achieve optimum performance 2.2 Implement standard operating procedures 2.3 Install equipment according to manufacturer specifications and site requirements 2.4 Commission and test equipment and systems according to manufacturer specifications and site requirements 2.5 Modify equipment and systems to satisfy required changes arising from the commissioning process 2.6 Implement emergency response and evacuation plans and procedures according to manufacturer specifications, job, scope of role, and site requirements 2.7 Implement protection systems according to manufacturer specifications, job, scope of role, and site requirements
3. Implement systems for operating and maintaining mine services systems and equipment	3.1 Implement operational procedures for mine services systems and equipment according to manufacturer specifications and site requirements 3.2 Implement systems for conducting maintenance procedures for mine services systems and equipment according to manufacturer specifications and site requirements 3.3 Implement and apply procedures for reviewing and modifying work processes according to manufacturer specifications and site requirements
4. Audit and review mine services systems and equipment	4.1 Audit mine services system standards for compliance with legislative and site requirements 4.2 Audit mine services and equipment maintenance standards for currency and compliance with legislative and site requirements 4.3 Audit mine services and equipment for compliance with legislative and site requirements 4.4 Audit reporting and recording systems for compliance

ELEMENT	PERFORMANCE CRITERIA
	with legislative and site requirements 4.5 Audit emergency response and evacuation plans and procedures for compliance with site requirements 4.6 Audit the training program for currency, relevance and compliance with site requirements 4.7 Report audit findings and recommendations

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Oral communication	Conveys information and requirements clearly and listens actively
Reading	Identifies and interprets detailed and often complex information from workplace procedures, documentation and legislation
Writing	Prepares specific information that complies with requirements, using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIRAI508D Implement mine services systems.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIIRAI508E Implement mine services systems

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- implement mine services systems on at least two occasions, including:
 - identifying the relevant information and scope of the work
 - identifying the full range of specification requirements
 - identifying all aspects of the mine services systems
 - implementing installation and commissioning procedures
 - implementing procedures for the operation and maintenance of mine services systems and equipment
 - auditing and reviewing processes.

During the above, the candidate must:

- locate and apply applicable legislation, documentation, policies and procedures and confirm work activity is compliant, including:
 - technical information
 - briefings and handover details
 - site and legislative requirements
 - records and reports
 - maintenance survey procedures
- implement procedures and techniques to implement mine services systems, including:
 - identifying and addressing training needs
 - implementing hazard identification and risks assessment processes
 - managing work planning and coordination activities
 - accessing, interpreting and applying manufacturer specifications
 - accessing, interpreting and applying safety design features of the systems
 - accessing, interpreting and applying maintenance and modification systems implementation requirements and procedures

- work effectively with others to implement mine services systems, including:
 - managing people and processes, and providing team leadership
 - resolving conflict
 - coordinating human, financial and physical resources
 - developing, initiating and administering work plans
 - interpreting and applying operational performance data
 - engaging internal and external stakeholders.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- legislative requirements relating to implementing mine service systems
- policies, procedures and documentation required to implement mine services systems, including those relating to:
 - audit review
 - emergency response and disaster planning
 - firefighting systems and precaution rules
 - maintenance surveys
 - personal protective equipment
 - risk management
 - site document control
 - site environmental monitoring
 - site requirements
 - systems and equipment, including:
 - installation procedures
 - commissioning and testing procedures
 - standard operating procedures
 - maintenance procedures
 - work process review and modification procedures
 - emergency response and evacuation plans
 - workplace recording and reporting requirement
- key energy sources, including:
 - electrical
 - hydraulic
 - pneumatic
 - diesel
- safety design features for maintenance of mine services systems
- key features of site designs
- key computer-based systems

- mine operating procedures
- storage systems
- emergency response and evacuation plan development.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to personal protective equipment; and,
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations 2015/Australian Quality Training Framework mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence outlined in this unit of competency, and
- the minimum years of current** work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

Industry sector	AQF indicator level***	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure	1	1 year
	2	2 years
Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure	3-6	3 years
Other sectors	Where this unit is being assessed outside of the resources and infrastructure sectors assessor and/or industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no industry standard is specified should comply with any relevant regulation.	

*Guidance on simulated environments has been stipulated in the RII Companion Volume Implementation Guide located on VETNet.

**Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting a minimum number of site assessments as determined by the relevant industry sector, across various locations.

***While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

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