



Australian Government

RIIERR204E Provide aided rescue to endangered personnel

Release: 1

RIIERR204E Provide aided rescue to endangered personnel

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to identify, plan and provide aided rescue to endangered personnel, where potential irrespirable atmospheres exist in an underground mining environment.

This unit applies to those working in site-based roles in underground coal mining and underground metalliferous mining environments.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Coal mining (underground)

Metalliferous mining (underground)

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 for aided rescue during incident	1.1 Interpret alarms and indicators to determine type, cause, location, and severity of hazard or situation 1.2 Access, interpret and apply aided rescue documentation 1.3 Obtain, interpret, clarify and confirm work requirements and confirm compliance 1.4 Identify hazards and environmental issues, assess the risks, and implement control measures 1.5 Identify, establish and maintain communication systems with other personnel during emergency 1.6 Locate, select and wear personal protective equipment required

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	for work activities, including breathing apparatus caches 1.7 Locate, obtain and test emergency equipment
2. Assess incident scene and plan rescue strategy	2.1 Confirm situation information and hazards involved in rescue operation 2.2 Determine locations of endangered mine personnel 2.3 Identify best route and method of travel to location of endangered mine personnel 2.4 Identify and determine best location for a fresh air base 2.5 Assess situation and select safest and most effective extrication method 2.6 Refer to mine plan and identify escape route and alternative escape route from incident scene to fresh air base 2.7 Test mine atmosphere to determine air quality 2.8 Assess threats and dangers to mine personnel and rescuers 2.9 Identify need for, and organise, additional rescue resources and equipment 2.10 Clarify and confirm aided rescue strategy
3. Extricate and evacuate endangered personnel to fresh air	3.1 Isolate mine services and secure incident site for safe entry with the use of barricades and reinforcements 3.2 Put on and test breathing apparatus 3.3 Locate endangered mine personnel as per rescue strategy 3.4 Assess and monitor physical and emotional condition of endangered personnel, provide support and administer emergency first aid where necessary 3.5 Extricate endangered mine personnel from entrapment in line with workplace procedures 3.6 Evacuate from incident scene by established or alternative escape route to fresh air base, according to aided rescue strategy and at optimum travel rate 3.7 Maintain communication with emergency control and fresh air base personnel 3.8 Monitor air and oxygen usage and adjust rate of travel accordingly

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	3.9 Change over or refill self-rescuer and breathing apparatus 3.10 Continuously monitor health, safety and environmental hazards, including mine atmosphere 3.11 Evaluate the need for, locate and retreat to, a place of safety outside incident scene for endangered and rescue personnel, including building barricades for protection if required
4. Perform post-incident procedures	4.1 Provide details of rescue to relevant personnel in line with workplace procedures 4.2 Conduct incident debrief and complete required documentation in line with workplace procedures 4.3 Evaluate the need for voluntary counselling, and refer self, mine personnel, and rescue personnel within scope of own role

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skill	Description
Reading	Identifies and interprets relevant information and ideas from workplace procedures, documentation, legislation, and regulations
Oral Communication	- Uses everyday language to provide information and maintain conversations in site-based contexts - Listens for relevant information in oral texts in site-based contexts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIERR204E Provide aided rescue to endangered personnel	RIIERR204D Provide aided rescue to endangered personnel	Minor updates to all sections.	Equivalent unit

(Release 1)	(Release 2)		
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Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for RIIERR204E Provide aided rescue to endangered personnel

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit.

The candidate must demonstrate completion of providing aided rescue to endangered personnel that safely, effectively and efficiently follows legislative requirements and workplace procedures to meet required outcomes on at least two occasions. This includes:

- selecting, locating and wearing personal protective equipment
- inspecting, putting on, and using breathing apparatus
- reading mine plans and navigating in mine
- accessing and using self-escape equipment
- accessing, interpreting, and applying data from monitoring systems
- operating hand-held monitoring equipment
- observing and reporting mine conditions
- identifying alternative escape routes
- isolating sources of danger and applying barricading methods for a temporary place of safety
- basic monitoring of atmosphere as appropriate to emergency scenario.

In the course of the above work, the candidate must also:

- obtain incident information and data
- read and interpret mine plans
- identify and assess nature, extent, and location of incident
- identify and manage hazards
- interpret and respond to hazardous environmental conditions
- identify alternative escape routes
- identify and report on mine conditions
- identify and comply with hygiene standards
- maintain written and verbal reporting requirements and procedures
- communicate clearly and concisely with others to receive and clarify work instructions, and coordinate work activities within a team.

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Knowledge Evidence

The candidate must demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit.

Key policies, procedures, and legislative and regulatory requirements for the aided rescue described in the performance evidence above, including those relating to:

- communication systems for rescue of endangered and emergency personnel
- basic teamwork
- initial response first aid
- evacuation resources, equipment and emergency plans.

Key features associated with aided rescue, including:

- types of barricades and methods for applying them
- guidance systems and markers for rescue and extrication
- basic ventilation systems
- atmospheric monitoring
- types and causes of incidents in underground mines
- alarms and indicators of mine incidents
- trigger points to initiate emergency response to alarms
- effects of hot and humid atmospheres in mining environments
- location and purpose of a temporary place of safety.

Key features of site information, including:

- geological and survey data
- escape routes and alternative escape routes, including travel speeds.
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Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below.

The assessment must:

- include access to:
 - site maps and information
 - equipment required to performed aided rescue
 - personal protective equipment required for the activities described in the performance evidence, including breathing apparatus
- be conducted in a safe environment
- be assessed in the context of this sector's work environment
- be assessed in compliance with relevant legislation and regulations; and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed

- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory competency standards as set out in the Standards for Registered Training Organisations (RTOs) current at the time of assessment. This includes:

- having knowledge of and/or experience using the latest techniques and processes
- possessing a high level of RII training product knowledge
- having understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- possessing formal industry and training qualifications to the level being assessed
- demonstrating the performance evidence and knowledge evidence outlined in this unit of competency, and through the minimum years of current* work experience specified below in an industry sector relevant to the outcomes of the unit.

Where the assessor does not meet experience requirements, a co-assessment or partnership arrangement must exist between the qualified assessor and an industry subject matter expert. The industry subject matter expert should hold the unit being assessed (or an equivalent unit), and must also demonstrate skills and knowledge from the minimum years of current work experience specified below, including time spent in roles related to the unit being assessed.

Industry sector	AQF** level	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this unit is being assessed outside of the resources and infrastructure	

Industry sector	AQF** level	Required assessor or industry subject matter expert experience
		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.

*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 frequent site assessments across various locations.

**Where a unit is being delivered outside of a qualification, the first numeric character in the unit code should be considered to indicate the AQF level.

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