



Australian Government

Department of Education, Employment and Workplace Relations

RIIERR301A Respond to mine incident

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers responding to incidents in the metalliferous mines. It includes: evaluating readiness for incident response; responding to incidents; and preparing for mine entry.

Application of the Unit

This unit is appropriate for those working in operational roles, 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. Evaluate readiness for incident response	1.1. Access, interpret and apply compliance documentation relevant to responding to incident in metalliferous mines 1.2. Identify, obtain and test emergency equipment 1.3. Evaluate personal fitness for operation 1.4. Maintain individual competencies, medical standards and fitness levels in accordance with mine and statutory medical standards and fitness standards
2. Respond to incident	2.1. Assemble at designated assembly point in accordance with standard operating procedures and guidelines 2.2. Report to appropriate official or Incident Control and receive briefing on incident and mine conditions 2.3. Confirm the location, nature and personnel involved in the incident and record on mine plan 2.4. Identify and access standard rescue operation equipment 2.5. Access any identified necessary additional equipment required for the rescue operation
3. Prepare for mine entry	3.1. Establish safest route to be taken from current mine plans and verify with Team Leader 3.2. Evaluate mine atmosphere to determine location and establish incident control point(s) 3.3. Establish communications systems and brief team members on communication protocols 3.4. Constitute team with numbers between the maximum and minimum specified in rescue guidelines, and allocate team roles 3.5. Ensure that any required stand-by team is available 3.6. Receive and verify pre-operational briefing from Team Leader 3.7. Identify recommended routes from the

	mine plan 3.8. Select appropriate gas measurement instruments and equipment and make pre-operational tests and inspections 3.9. Identify, check and test minimum and additional mines rescue equipment for the tasks 3.10. Commence operations from established incident control point(s)
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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 respond to incident in metalliferous mines:

- apply legislative, organisation and site requirements and procedures
- operate gas testing and monitoring instruments
- interpret mine gas testing instruments
- wear and use escape apparatus
- operate in breathing apparatus
- select extrication methods and operate extrication equipment
- take and analyse gas samples
- use communications and signals
- read and interpret mine plan symbols
- work as a team member
- assess a situation and make effective, safe decisions
- plan and apply contingency plans
- read mine plans and orientate in the mine
- carry out risk assessments
- select and use appropriate PPE
- take air measurement and ventilation readings
- take temperature and relative humidity measurements

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 respond to incident in metalliferous mines:

- rescue guidelines
- call-out procedures
- rescue team structure, roles and responsibilities
- mining environment
- types and effects of mine gases
- entrapment procedures
- gas testing and monitoring instruments - types, limitations, function and operation
- operation and limitations of breathing apparatus
- air measurement and ventilation systems
- effects on people working in hot and humid atmospheres

- minimum equipment requirements for rescue operations
- requirements for personal readiness
- rescue team call-out procedures and equipment
- specialised rescue equipment
- standby/emergency procedures for incident control
- ground support types and construction

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 responding to incident in metalliferous mines • implementation of requirements, procedures and techniques for the safe, effective and efficient response to incident in metalliferous mines • working with others to respond to incident in metalliferous mines that meets all of the required outcomes • consistent timely response to incident in metalliferous mines 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. • 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 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.
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 • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to respond to incident in metalliferous mines
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, 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
Incident Control:	• has overall planning, approval and control of an incident and may include <i>fresh air base</i> which may be defined as a continuously monitored station for dispatch or return of rescue teams in close proximity to irrespirable zones in known fresh air
Records are permanent records which may be in the following formats:	• written • photographic • electronic
Mines rescue procedures may include:	• active team procedures • exploration • search and rescue • fire fighting • life support • transport • recovery • restoration • ventilation • re-opening
Atmospheric testing may include:	• hand-held instruments • tube detectors • telemetric remote sampling • chromatography
Communications may include:	• telephones • radios

	• runners • 2- way radio • computer
Teams can comprise two or more members, depending on such factors as:	• respiratory protection • distance • communications
Team roles may include:	• rescue team leader • deputy leader • rescue team members
Stand-by team can be defined as:	• a fully equipped team in readiness to assist the active team
Medical fitness is that determined by a medical practitioner, on behalf of the mine manager, to certify fitness for rescue operations	

Unit Sector(s)

Emergency Response and Rescue

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.