



Australian Government

Department of Education, Employment and Workplace Relations

RIIENV202A Suppress airborne contaminants

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers suppressing airborne contaminants in metalliferous mining operations. It includes: planning and preparing for operations; eliminating, suppressing, minimising airborne contaminants; and carrying out operator maintenance.

Application of the Unit

This unit applies in all contexts to the elimination, suppression or minimisation of airborne contaminants in an underground, open-cut or processing environment and is appropriate for those working in a 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. Plan and prepare for operations	1.1. Access, interpret and apply <i>compliance documentation</i> relevant to <i>airborne contaminant</i> suppression 1.2. Obtain, interpret and clarify/confirm the requirement for airborne contaminant suppression through shift briefings, handover details or site procedures before proceeding 1.3. Select appropriate <i>airborne contaminant suppression method</i> that best meets the requirements according to site conditions and <i>legislative requirements</i> 1.4. Identify, address and report environmental issues 1.5. Identify any areas that require communicating with other personnel using approved communication methods 1.6. Identify any emergency procedures to ensure safety of personnel, plant and equipment
2. Eliminate, suppress, minimise airborne contaminants	2.1. Select appropriate procedure and/or equipment to eliminate, suppress or minimise airborne contaminants 2.2. Operate appropriate airborne contaminant suppression equipment or monitor appropriate method according to site conditions and operating procedures 2.3. Adjust airborne contaminant suppression activities according to schedule, weather or site conditions 2.4. Act, or report on monitoring systems and alarms in accordance with manufacturer instructions and/or site procedures 2.5. Recognise and respond to hazardous and emergency situations in accordance to manufacturer instructions and/or site procedures 2.6. Maintain records in accordance with site requirements
3. Carry out operator maintenance	3.1. Carry out inspections and fault-finding according to manufacturer's instructions

	and/or site procedures 3.2. Carry out routine operational servicing, lubrication and housekeeping tasks to manufacturer's instructions and/or site procedures 3.3. Carry out minor maintenance to manufacturer instructions and/or site procedures 3.4. Provide operator support to maintenance personnel in preparing for or during minor and major maintenance tasks in accordance with site requirements 3.5. Process records in accordance with site requirements
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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 suppress airborne contaminants:

- apply legislative, organisation and site requirements and procedures
- make decisions
- apply directing and signalling procedures
- apply equipment cleaning requirements and procedures
- apply equipment maintenance requirements and procedures
- apply equipment operating techniques
- follow instructions
- apply hazard identification procedures
- interpret plans, reports, maps, specifications
- apply record maintenance procedures
- follow safe work practices
- apply fault-finding procedures
- wear protective equipment

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 suppress airborne contaminants:

- emergency procedures
- environmental aspects
- equipment processes, technical capability and limitations
- equipment safety requirements
- geological and technical data (rock formation)
- maintenance procedures
- mine operation system
- OHS procedures
- plant terminology
- site procedures (operational and maintenance)
- site safety requirements
- suppression methods relevant to the workplace

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 suppressing airborne contaminants • implementation of requirements, procedures and techniques for the safe, effective and efficient suppression of airborne contaminants • working with others to suppress airborne contaminants that meets all of the required outcomes • consistent timely suppression of airborne contaminants 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 undertake and complete the suppression of airborne contaminants
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
Airborne contaminants may include:	• dust • chemical particulates • gas e.g. blast gases, vehicle/equipment fumes etc
Airborne contaminant suppression methods may include:	• chemical • equipment operating techniques • manual spray units on conveyors, reclaimers, stackers, ship loaders, stockpiles etc • sprinklers/water cannons • belt washers • water trucks/road sweepers • exhaust fans • ventilation
Legislative requirements may include Acts and regulation dealing with:	• mining safety and health • mine inspection • OHS • explosives • environment • vehicle emissions • confined space

Unit Sector(s)

Environment

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.