



Australian Government

Department of Education, Employment and Workplace Relations

RIIWBP203B Monitor tailings dam environment

Release: 1

RIIWBP203B Monitor tailings dam environment

Modification History

Not applicable.

Unit Descriptor

This unit covers the monitoring of the tailings dam environment in coal and metalliferous mining and extractive industries. It includes: monitoring the impact on flora and fauna; and monitoring the integrity of the dam.

Application of the Unit

This unit applies in all contexts to the monitoring of the environment as a part of the tailings management process. This unit is appropriate for those working in a operational roles, at worksites within:

- Coal mining
- Extractive industries
- 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.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Monitor impact on flora and fauna	1.1. Access, interpret and apply compliance documentation relevant to monitoring of the tailings dam environment 1.2. Record presence/status of flora and fauna 1.3. Check and maintain condition of mine site parameters 1.4. Rescue wildlife to sustain life where safe and practical 1.5. Identify, address and report environmental issues 1.6. Adhere to emergency procedures 1.7. Identify, address and report potential risks and hazards 1.8. Communicate with other personnel using approved communication methods
2. Monitor integrity of the dam	2.1. Check and monitor dam wall characteristics and any sign of seepage 2.2. Maintain access to decant tower 2.3. Control quantity of water in dam to avoid weakening dam structure 2.4. Monitor water table depth and water quality to determine source of water and integrity of dam 2.5. Visually check for depositing of unauthorised materials

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 monitor tailings dam environment:

- apply legislative, organisation and site requirements and procedures
- apply equipment operation, minor maintenance and cleaning requirements and procedures
- apply hazard identification procedures
- apply hazardous goods handling techniques
- apply techniques for interpreting survey maps and data to locate key features of tailings dam
- apply lifting techniques (manual, cranes and loads)
- apply safe work practices
- use hand and power tools
- apply procedures for working in restricted access areas

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 monitor tailings dam environment:

- catchment/dam procedures
- emergency procedures
- environmental procedures
- safety requirements
- hazardous goods procedures and consequences of spills
- identifying repair requirements
- isolation procedures
- metallurgical and technical data
- occupational health and safety procedures
- operational procedures and checks
- pumping systems
- site procedures
- site safety requirements

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 the monitoring of the tailings dam environment • implementation of requirements, procedures and techniques for the safe, effective and efficient monitoring of the tailings dam environment • working with others to undertake and complete the monitoring of the tailings dam environment that meets all of the required outcomes • consistent timely completion of the monitoring of the tailings dam environment 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 monitoring of the tailings dam environment
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

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
Flora and fauna may include:	• bird life • mammals • native trees and vegetation
Environmental issues may include:	• drainage • dust • emissions • flora and fauna • hazardous chemicals • heritage legislation • noise • recycling • run-off • spills • waste management and disposal • water quality
Monitor will be:	• visual inspection
Water quality indicators may be:	• contaminants • colour change • settlings • other changes to usual characteristics
Control may be	• Report and action in accordance with site procedures

Unit Sector(s)

Waste and By-products

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.