



Australian Government

RIIWBP203E Monitor tailings dam environments

Release: 1

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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 monitor tailings dam environments in coal mining, metalliferous mining and extractive industries. It involves monitoring dam wall characteristics and signs of seepage and adjusting the quantity of water in a tailings dam.

It applies to those working in operational roles. They generally work under supervision to undertake a prescribed range of functions involving known routines and procedures and take some responsibility for the quality of work outcomes.

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

Unit Sector

Coal mining

Extractive

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 monitor tailings dam environment	1.1 Obtain, interpret, clarify and confirm work instructions 1.2 Access, interpret and apply documentation required to monitor tailings dam environments and confirm work activity is compliant 1.3 Coordinate and communicate activities with others according to site requirements within scope of own role 1.4 Select and wear personal protective equipment according to site requirements 1.5 Identify potential risks, hazards and environmental issues,

ELEMENT	PERFORMANCE CRITERIA
	implement control measures within scope of own role, and escalate where required 1.6 Record presence and status of any flora and fauna 1.7 Check and maintain condition of mine site parameters 1.8 Rescue wildlife to sustain life where safe and practical
2. Monitor tailings dam environment and complete records and reports	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 within scope of own role, and escalate where required according to site requirements 2.4 Monitor water table depth and water quality, and determine source of water and integrity of dam 2.5 Check visually for depositing of unauthorised materials 2.6 Complete written records and reports according to site requirements

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
Numeracy	Calculates basic measurements including mass and dimensions
Oral communication	Conveys information and requirements clearly and listens actively
Reading	Identifies and interprets specific information from workplace documentation
Self-management	Monitors and minimises own exposure to worksite risks and hazards during activities
Writing	Completes records and reports using sector specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIWBP203D Monitor tailings dam environment.

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 RIIWBP203E Monitor tailings dam environments

Modification History

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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. This includes evidence of the ability to:

- monitor the tailings dam environment on at least two occasions, including:
 - visually checking and maintaining written records of flora and fauna
 - identifying, assessing, addressing and reporting environmental issues, risks and hazards
 - identifying, checking and monitoring dam wall characteristics and signs of seepage
 - checking and recording quantity of water in dam, water table depth and quality.

During the above, the candidate must:

- locate and apply relevant documentation, policies and procedures
- implement the requirements, procedures and techniques for the safe, effective and efficient monitoring of the tailings dam environment, including:
 - selecting and using the required tools and equipment
 - identifying and following safety and emergency procedures
 - identifying, assessing, recording and reporting environmental issues
 - identifying and applying lifting techniques, including manual, crane and load lifting techniques
 - isolating plant and equipment
- work effectively with others to monitor tailings dam environments that meets the required outcomes, including:
 - using a range of communication techniques to convey information to others
 - maintaining written and verbal reporting requirements and procedures.

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 monitoring tailings dam environments
- policies, procedures and documentation required to monitor tailings dam environments, including those relating to:
 - catchment and dam procedures
 - environmental protection
 - disposal and recycling of material
 - hazard, incident and emergency response
 - metallurgical, geotechnical and basic technical data
 - personal protective equipment
 - rescuing wildlife and sustaining life
 - security, site and spillage procedures
 - site operational, quality and communication requirements
 - site product characteristics
 - site requirements
 - work health and safety
 - work instructions
 - workplace recording and reporting requirements
- principles and techniques required to monitor tailings dam environments, including:
 - assessing the integrity of the dam wall
 - assessing the status of flora and fauna
 - handling hazardous goods
 - interpreting surveys maps and data
 - pumping systems techniques
- types and characteristics of plant and equipment required to monitor tailings dam environments, including:
 - emergency procedures
 - isolation and shutdown procedures
 - operational procedures
 - manufacturer specifications
 - pre-start, start-up and operating procedures
 - repair and maintenance procedures
 - technical capabilities and limitations.

Assessment Conditions

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

- include access to:
 - personal protective equipment
 - equipment required to treat and dispose of rejects and tailings
- 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

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