



Australian Government

RIISRM502D Design stockpile formations and reclaiming systems

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIISRM502A Design stockpile formations and reclaiming systems
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to design stockpile formations and reclaiming systems in Metalliferous mining.

This unit is appropriate for those working in management or technical specialist roles.

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

Unit Sector

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare stockpile formations and reclaiming systems	1.1 Access, interpret and apply stockpiling and reclaiming systems documentation and ensure the work activity is compliant 1.2 Analyse and document organisation goals, objectives and strategies for stockpile management 1.3 Investigate and analyse worksite environments, and develop options, strategies and anticipated outcomes 1.4 Evaluate economics and efficiency of the stock piling system options and configurations 1.5 Identify and implement statutory requirements for locating of plant and stockpile
2. Design stockpile configuration	2.1 Design stockpile configuration with appropriate drainage system 2.2 Design reclaim systems to match stockpile configuration

	2.3 Match load mechanisms to stockpile requirements 2.4 Design and install dust control measures to ensure correct operations 2.5 Plan and organise, supervision and safety requirements associated with the operation and machine movements 2.6 Ensure a program to satisfy identified stockpiling training requirements is implemented
3. Monitor stockpile operations	3.1 Instruct operators on the outcomes required including Work Health & Safety issues and safe work procedures 3.2 Monitor stockpiling operation including surveying, forming, order, dumping or ramp 3.3 Monitor material removal from stockpile in accordance to Quality Assurance specifications 3.4 Assess and reconcile stock quantities
4. Establish audit and review of systems	4.1 Establish procedures to evaluate and confirm system/equipment compliance with statutory and site requirements 4.2 Ensure future stockpile systems and equipment requirements are identified and assessed and incorporate into planning processes 4.3 Establish procedures to confirm the currency and compliance of stockpile formations and reclaiming systems 4.4 Ensure the system for recording and reporting of stockpile and equipment information is developed and implemented 4.5 Audit the stockpile training program for currency and relevance 4.6 Ensure procedures for incorporating feedback into the audit/review system are developed and implemented 4.7 Audit emergency response and evacuation systems, plans and procedures for compliance with site requirements 4.8 Ensure procedures for response to instances of non-compliance or other discrepancies/deficiencies revealed by audit are developed and implemented

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIISRM502A Design stockpile formations and reclaiming systems

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 RIISRM502D Design stockpile formations and reclaiming systems

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant legislation, documentation, policies and procedures
- works effectively with others to undertake and effective design of stockpile formations and reclaiming systems to meet all required outcomes including:
 - preparing for and organising work activities to meet all task requirements
 - communicating clearly and concisely with others to issue and clarify work instructions
 - using a range of communication techniques and aids to advise others of work activity and exclusion zones
- demonstrates completion of the design of stockpile formations and reclaiming systems that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - analysing and documenting goals, objectives and strategies
 - investigating and analysing work environment
 - developing systems to achieve indicated goals and objectives
 - designing stockpile configuration and drainage systems
 - designing reclaim systems
 - establishing and implementing dust control measures
 - monitoring stockpile operations
 - establishing systems for audit, review and documentation of stockpile systems, emergency procedures, training programs and non-compliance

Knowledge Evidence

The candidate must demonstrate knowledge of designing stockpile formations and reclaiming systems through:

- hazard identification, risk assessment and risk treatment processes
- application of consultative, coaching and leadership techniques
- plant and equipment capabilities and limitations
- strategic planning techniques for designing stockpile formations and reclaiming systems
- auditing, monitoring, recording and reporting systems, in consultation with stakeholders
- training systems, identification of training needs for individuals and work groups, and implementation of training plans
- consultation, emergency response and evacuation planning processes and techniques
- risk management processes and techniques
- organisational change and development process
- action plans
- environmental monitoring requirements
- procedures for managing personnel, processes projects and tasks
- coordinating of resources – human, financial and physical
- procedures for managing surface mining traffic, equipment and maintenance systems
- contract negotiation and finalisation techniques and requirements

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as 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; or,

- 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/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

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 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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