



Australian Government

Department of Education, Employment and Workplace Relations

RIISRM601A Establish and maintain the stockpile management system

Release: 1

RIISRM601A Establish and maintain the stockpile management system

Modification History

Not applicable.

Unit Descriptor

This unit covers the establishing and maintaining of stockpile management systems in the coal and metalliferous mining and extractive industries. It includes: identifying and researching the requirements; facilitating the designing of systems, selection of equipment, installation and commissioning procedures, systems for the operation and maintenance; and establishing systems for audit and review of the systems.

Application of the Unit

This unit is appropriate for those working in management or technical specialist role, 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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify and research requirements	1.1. Access, interpret and apply compliance documentation relevant to stockpile management systems 1.2. Analyse and document organisation goals, objectives and strategies in relation to the establishment of the management system 1.3. Investigate and analyse worksite environments to develop options, strategies and anticipated outcomes 1.4. Develop and implement strategies that translate the objective into the planning process
2. Facilitate the design of system	2.1. Ensure the requirements for and the purpose of stockpile management systems are identified in accordance with legislative requirements 2.2. Ensure specifications for stockpile systems are developed from a comprehensive analysis of site requirements 2.3. Ensure system options are identified from an analysis of all relevant technical, operational and financial information 2.4. Ensure the economics and efficiency of the stockpiling system and configuration to be used is evaluated
3. Facilitate the selection of equipment for the management systems	3.1. Ensure the requirements for and the purpose of stockpile equipment is identified against systems requirements 3.2. Ensure a detailed scoping of the work requirement is conducted, and that key selection criterion, including hazard identification and risk analysis, is developed 3.3. Ensure a specification for the required stockpile equipment is developed 3.4. Ensure the preferred equipment solutions are selected on the basis of performance against specification requirements
4. Facilitate installation and commissioning procedures	4.1. Ensure a procedure to identify hazards and analyse and evaluate risks associated with the installation of stockpiling systems and

	equipment is developed and implemented 4.2.Ensure the integration of new and existing systems and processes is planned and prepared to achieve optimum performance 4.3.Ensure safe operating procedures and rules are developed from a detailed analysis of site requirements 4.4.Ensure procedures for installing and commissioning stockpile systems and equipment are developed and implemented 4.5.Ensure a program to satisfy identified stockpiling training requirements is implemented 4.6.Ensure emergency response and evacuation systems, plans and procedures are implemented
5. Facilitate the implementation of plans for the operation and maintenance of the systems	5.1.Ensure operational procedures for stockpile systems and equipment are developed from legislative and organisation's requirements and are incorporated into site documentation 5.2.Ensure maintenance procedures for stockpile systems and equipment are developed from legislative and organisation's requirements and are incorporated into site documentation 5.3.Ensure procedures for reviewing and modifying work processes are developed and implemented
6. Establish systems for audit and review of systems	6.1.Establish procedures to evaluate and confirm system/equipment compliance with statutory and site requirements 6.2.Ensure future stockpile systems and equipment requirements identified and assessed and incorporate into planning processes 6.3.Ensure procedures to confirm the currency and compliance of stockpile maintenance and safety standards are developed and implemented 6.4.Ensure the system for recording and reporting of stockpile and equipment information is developed and implemented 6.5.Audit the stockpile training program for

	currency and relevance 6.6.Ensure procedures for incorporating feedback into the audit/review system are developed and implemented 6.7.Audit emergency response and evacuation systems, plans and procedures for compliance with site requirements 6.8.Ensure procedures for response to instances of non- compliance or other discrepancies/deficiencies revealed by audit are developed and implemented
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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 establish and maintain the stockpile management system:

- apply legislative, organisation and site requirements and procedures
- apply procedures for designing and implementing stockpile configurations
- apply procedures for monitoring and maintaining stockpile operations
- apply techniques for managing people and processes
- apply requirements for preparing capital equipment proposals
- apply procedures for analysing and reviewing stockpile operations and costs
- apply procedures for managing projects and tasks
- apply procedures for coordinating resources, human, financial and physical
- apply procedures for delivering and maintaining services to required specifications
- apply worksite traffic management requirements and procedures
- apply procedures for managing equipment and maintenance systems
- apply techniques for evaluating new and used equipment
- apply operating cost control requirements and procedures
- interpret and comply with statutory requirements
- apply procedures for planning operations
- apply requirements for preparing tender specifications
- apply techniques for negotiating and finalising contracts
- access and use technologies
- apply requirements for preparing and presenting management reports
- apply techniques for negotiating with internal/external customers, community and statutory/legal authorities
- apply conflict resolution techniques

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 establish and maintain the stockpile management system:

- risk management, principle, strategies and applications
- statutory control requirement
- safety and health requirements
- environmental management requirements
- quality system requirements

- organisational objectives
- worksite plans and operations
- worksite products
- characteristics, uses and limitations of stockpile equipment
- stockpile configuration
- stockpile design
- training systems
- emergency response and evacuation planning processes and techniques

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 establishing and maintaining of stockpile management systems • implementation of procedures and techniques for the safe, effective and efficient establishing and maintaining of stockpile management systems • the identification of the relevant information and scope of the work required to meet the required outcomes • the identification of viable options and the selection of options that best meet the required outcomes • working with others to establish and maintain stockpile management systems • consistent and timely establishing and maintaining of the stockpile management systems
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 a civil works 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 procedures and techniques for the safe, effective and efficient achievement of the required outcomes • identification of the relevant information and scope of the work required • identification of viable options and the selection of options that best meet the required outcomes • consistently achieving the required outcomes • first hand testimonial and documentary evidence of the candidate's: • working with others to establish and maintain stockpile management systems • consistent and timely gaining of approval of

	stockpile management systems • provision of clear, timely required support and advice on the implementation of stockpile management systems
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
Hazard is:	• a source or a situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment or a combination of these
Risk is:	• the combination of the frequency, or probability of occurrence and consequence of a specified hazardous event
Stockpile system and configurations may include:	• access to and from stockpile • amount to be stored • edge control • material, size, shape • method of loading/unloading • method of storing • reconciliation of stocks transfers • delivery to stockpile • withdrawal methods • blending requirements • operating method • level or volume monitoring • spontaneous combustion • automation • segregation • site safety requirements • reporting • safety of area • segregation

	• site modification • sprinkler systems to keep stockpiles damp to control dust • stockpile floor • stockpile identification
Audit is:	• a systematic examination against defined criteria to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the organisation's policy and objectives

Unit Sector(s)

Stockpile and Reclaim Material

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.