



Australian Government

Department of Education, Employment and Workplace Relations

RIIWBP501A Implement site waste and by-product management plan

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the implementation of site waste and by-product management plan in the mining and extractive industries. It includes: researching the waste and by-product requirements; maintaining tailings, waste and by-products disposal and water recycling operations; and constructing and maintaining dam systems.

Application of the Unit

This unit is appropriate for those working in a management and technical specialist roles, 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. Research waste and by-product requirements	1.1. Access, interpret and apply compliance documentation relevant to the implementation of site waste and by-product management plans 1.2. Identify and document needs, quantity, quality, source and means of treatment of waste and by-product for production needs of the site 1.3. Obtain and maintain all appropriate licences for site waste and by-product management 1.4. Ensure the water quality and water-course and ground water contamination are monitored and recorded to meet legislative, site and organisation's requirements, community objectives and safe responsible work practices 1.5. Ensure site treatment works for contaminated drainage or development/processing waters are designed and located to satisfy relevant requirements 1.6. Establish management systems with appropriate inlet/outlet works and means of improving the natural settlement process 1.7. Plan and organise work schedules for operational best practice associated with managements systems and water quality specifications
2. Maintain tailing, waste and by-products disposal and water recycling operations	2.1. Ensure site water is treated for reuse in operations to meet environmental and quality standards efficiently 2.2. Undertake and record regular inspections of the water recycling system 2.3. Arrange audits of the water recycling system by internal/external auditors 2.4. Plan, organise and supervise the reuse or management of tailings, waste and by-products in a manner that satisfies relevant requirements
3. Construct and maintain dam	3.1. Plan and incorporate short and long term

systems	dam requirements into the site management plan 3.2.Ensure the design and construction of dam systems meets relevant site conditions, standards and other relevant requirements 3.3.Undertake and document regular inspections of dams 3.4.Ensure techniques to minimise and/or recycle tailings are incorporated into dam construction 3.5.Encourage safe work practices in line with occupational health and safety requirements 3.6.Ensure best practice techniques in the design and construction of all dams are considered and incorporated and ensure dams meet all relevant requirements 3.7.Ensure the de-commissioning of dams is undertaken in accordance with safe working practices and other relevant requirements and that necessary approvals are attained
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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 implement site waste and by-product management plans:

- apply legislative, organisation and site requirements and procedures
- apply people and processes management techniques
- apply capital equipment proposal preparation requirements and procedures
- apply operating budget preparation requirements and procedures
- apply techniques to analyse and review systems
- apply projects and tasks management techniques
- apply procedures for coordinating resources - human, financial and physical
- apply equipment and maintenance systems management requirements and procedures
- apply techniques for evaluating new and used equipment
- apply operating cost control requirements and procedures
- apply performance audit procedures
- apply requirements and procedures for gaining statutory/legal approvals
- apply tender specifications preparation requirements and procedures
- apply negotiation techniques and contract finalisation requirements and procedures
- apply techniques for implementing change
- access and use appropriate technologies
- apply management report preparation and presentation requirements and procedures
- 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 implement site waste and by-product management plans:

- occupational health and safety requirements and management
- environmental requirements and management
- statutory requirements and control
- quality system requirements
- legislative and organisation waste and by-product management requirements
- mine site operations
- mine site products and services

- mine site plant and equipment
- team management
- resource monitoring
- negotiation 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 implementation of site waste and by-product management plans • implementation of procedures and techniques for the safe, effective and efficient implementation of site waste and by-product management plans • 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 undertake and complete the implementation of site waste and by-product management plans • consistent successful implementation of site waste and by-product management plans
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 to apply in undertaking of the implementation of site waste and by-product management plan • 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 to meet the required outcomes • 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 undertake and

	complete the implementation of site waste and by-product management plans • provision of clear and timely required support and advice on the implementation of site waste and by-product management plans
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
Legislative, site and organisation requirements and procedures may include:	• risk management • statutory compliance • development approval, mining licences (or equivalent), which may include: • occupational health and safety • environmental • quality • purchasing • contract management • administration, including records and reports
Legislative regulatory bodies may include:	• Mineral Resources or equivalent body • safety and health authority • environmental authority • federal/state and local government • harbours and marine authority • port authority • road authority

Unit Sector(s)

Waste and By-products

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.