



Australian Government

RIIWBP601D Establish and maintain waste and by-product management system

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIIWBP601A Establish and maintain waste and by-product management system
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 establish and maintain a waste and by-product management system in the Coal and Metalliferous mining and Extractive.

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

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

Unit Sector

Coal mining

Extractive

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare to establish and maintain a waste and by-product management system	1.1 Access, interpret and apply waste and by-product management system documentation and ensure the work activity is compliant 1.2 Identify and analyse organisation goals, objectives and strategies 1.3 Identify the requirements for and purpose of waste and by-product managements system 1.4 Develop and implement strategies, which translate the objective into the planning process
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2. Facilitate site environmental investigations	2.1 Establish information requirements and ensure information sources are identified and accessed 2.2 Establish strategies and systems to support analysis of the worksite environments 2.3 Ensure worksite environments are investigated to identify and assess the factors that impact on waste and by-product development 2.4 Ensure market opportunities are identified and explored to assist the organisation to forecast trends and options 2.5 Ensure threats and opportunities are identified, analysed and used to optimise project outcomes 2.6 Ensure titles searches are undertaken 2.7 Ensure legal obligations are identified and documented
3. Establishing of water recycling procedures	3.1 Ensure a detailed scoping of the work requirement and key selection criteria is conducted, including hazard identification and risk analysis 3.2 Ensure procedures for need, quantity, quality, source and means of treatment of water for production needs are developed and implemented 3.3 Ensure procedures for water quality and watercourse groundwater contamination are develop and implemented 3.4 Ensure site treatment works are designed and located for contaminated drainage or development/processing waters, to meet requirements 3.5 Ensure procedures with appropriate inlet/outlet works and means of improving the natural settlement process are developed and implemented 3.6 Ensure work schedules for operational best practice associated and water quality specifications are developed and implemented
4. Establish tailing disposal and water recycling operation procedures	4.1 Ensure a procedure for treated site water reuse is developed and implemented 4.2 Ensure a program for regular inspections of the water recycling system is developed and implemented 4.3 Ensure procedures for tailings reuse are developed and implemented
5. Facilitate the design of dam systems	5.1 Ensure the requirements for and purpose of dam management systems are identified 5.2 Ensure a specification for the dam management system is developed from a comprehensive analysis of site requirements

	5.3 Ensure dam de-commissioning procedures are developed
6. Facilitate the selection of equipment for waste and by-product management systems	6.1 Ensure the requirements for and purpose of waste and by-product equipment is identified against system requirements 6.2 Ensure a detailed scoping of the work requirement and key selection criteria, including hazard identification and risk analysis, is conducted and developed 6.3 Develop specifications for the required waste and by-product equipment 6.4 Ensure equipment is selected on the basis of performance against specification requirements
7. Establish installation and commissioning procedures	7.1 Establish a procedure for hazard identification and risk evaluation 7.2 Ensure the integration of new and existing systems and process is planned and implemented to achieve optimum performance 7.3 Ensure safe operating procedures and rules are developed from a detailed analysis of requirements 7.4 Ensure procedures for installing and commissioning waste and by-product systems and equipment are developed and implemented 7.5 Ensure a program, including systems and procedures, to satisfy identified training requirements is implemented 7.6 Ensure emergency response and evacuation systems, plans and procedures are implemented
8. Establish systems for the operation and maintenance of waste and by-product management systems and equipment	8.1 Ensure operational procedures for systems and equipment are developed, implemented and incorporated into site documentation. 8.2 Ensure maintenance procedures for systems and equipment are developed, implemented and incorporated into site documentation. 8.3 Ensure procedures for reviewing and modifying work processes are develop and implemented
9. Establish systems for audit and review of waste and by-product systems and equipment	9.1 Establish and ensure implementation of procedures to evaluate and confirm system/equipment compliance 9.2 Ensure that future waste and by-product systems and equipment requirements are identified, assessed and incorporated into planning processes 9.3 Establish and ensure the implementation of procedures to confirm the currency and compliance of waste and by-product maintenance and safety standards 9.4 Establish and ensure implementation of the system for recording and reporting of waste and by-product and equipment

	information
	9.5 Audit the waste and by-product training program for currency and relevance
	9.6 Establish and ensure implementation of procedures for incorporating feedback into the audit/review system
	9.7 Audit emergency response and evacuation systems plans and procedures for compliance
	9.8 Establish and ensure implementation of procedures for response to instances of non-compliance or other discrepancies/deficiencies

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

RIIWBP601A Establish and maintain waste and by-product management system

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 RIIWBP601D Establish and maintain waste and by-product management system

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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
- implements the requirements, procedures and techniques for the safe, effective and efficient establishing and maintenance of waste and by-product management systems including:
 - facilitating the site environmental investigation
 - facilitating the design of dam systems
 - developing, implementing, communicating and maintaining system procedures
 - selecting the required plant and equipment
 - information management
 - accessing, analysing and reviewing waste management systems
 - auditing waste management performance
 - coordinating human, financial and physical resources
 - evaluating new and used equipment
 - identifying and applying people and process management techniques
 - using conflict resolution
 - negotiation with internal/external stakeholders
 - providing team leadership

- demonstrates completion of the establishment and maintenance of waste and by-product management systems that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying, assessing and selecting program components
 - identifying required information and scope of work
 - identifying, assessing and selecting system options, including;
 - design of dams
 - selection of equipment
 - installation and commissioning procedures
 - accessing, interpreting and analysing research, information and requirements
 - identifying and applying strategies and systems to investigate the worksite
 - ensuring worksite environmental investigations are completed
 - developing contingency and site plans and procedures for the system
 - developing and implementing information and training systems
 - monitoring, recording and reporting on system performance

Knowledge Evidence

The candidate must demonstrate knowledge in establishing and maintaining a waste and by-product management system through:

- accessing, interpreting and applying dam design and construction techniques
- accessing, interpreting and applying site plans
- identifying site products and services
- identifying and applying operations techniques
- identifying and applying training and assessment systems
- accessing, interpreting and applying water recycling techniques

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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