



Australian Government

RIIMEX601D Plan pit development

Release: 2

RIIMEX601D Plan pit development

Modification History

Release	Comment
1	This unit replaces RIIMEX601A Plan pit development
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 plan pit development in Coal and Metalliferous mining and Extractive.

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

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

1. Plan and prepare pit design parameters and strategies	1.1 Access, interpret and apply planning of pit development documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address potential risks, hazards and environmental issues and implement control measures 1.4 Select and wear personal protective equipment appropriate for work activities 1.5 Identify, interpret and clarify relevant site geological, geotechnical, hydrogeological, hydrological, and survey data and use it to development and document the pit design and development parameters and strategies
--	--

	1.6 Identify, interpret and clarify relevant site marketing information and use it to develop and document pit design and development parameters and strategies 1.7 Identify training needs of individuals and work groups, and prepare training plans
2. Design the pit development strategic plan	2.1 Liaise with internal and external stakeholders in the design process, ensure their effective contribution, and gain their support for the outcomes 2.2 Design the final pit profile based on the production requirements, costs, geological and survey data and relevant compliance documentation 2.3 Design staged development of the pit based taking into account all the relevant pit design and development parameters and strategies 2.4 Prepare contingency plans that provide optional strategies in the event changed circumstances 2.5 Select, confirm and document the extracting method or methods to be applied based on the resource characteristics, pit development parameters, marketing opportunities and economic considerations 2.6 Determine, confirm and document resource requirements/implications of the plan and strategies for their acquisition and use 2.7 Implement training plans 2.8 Develop and document, record and reporting requirements and procedures for the monitoring of the pit development and operations 2.9 Prepare and present the pit development business plan/budget, including contingency plans
3. Initiate, monitor and adjust the implementation of the pit development	3.1 Issue, explain and clarify the pit strategic plan to team members and others involved, for the safe, effective and efficient implementation of the pit development 3.2 Provide timely ongoing support and advice to those implementing the pit development 3.3 Ensure written records and reports are maintained and issued in accordance with the parameters and strategy requirements and other relevant requirements 3.4 Monitor the pit development performance against the strategic plan's parameters, strategies and budget 3.5 Resolve variances in consultation with relevant stakeholders; make adjustments to the design and issue appropriate instructions for

	adjustments to its implementation
--	-----------------------------------

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

RIIMEX601A Plan pit development

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 RIIMEX601D Plan pit development

Modification History

Release	Comment
1	This unit replaces RIIMEX601A Plan pit development
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.

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:

- establishes the organisation's legislative, site requirements, and procedures for **pit** development
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of pit development plans including:
 - coordinating and communicating technical information, rules, procedures, regulations
 - establishing procedures for the review and maintenance of the pit development plan
 - identifying the relevant information and scope of the work necessary to meet the required outcomes
 - identifying viable options and selecting options that best meet the required outcomes
 - interpreting and applying geological, geotechnical, hydrological, hydrogeological and survey data
 - accessing and interpreting marketing data
 - identifying and interpreting approvals licence conditions
 - establishing processes to set development targets
 - developing procedures for incorporating extraction methods, material transportation and storage systems into pit plan
- works effectively with others to undertake and complete pit development plans that meets all of the required outcomes including:
 - consulting with pit development team and provides team leadership
 - sharing and marketing data instructions for adjustments and limitations information and communicating effectively in the workplace
 - establishing training, coaching and mentoring support for supervisors and managers

- preparing written reports communicating the pit development status and outcomes
- applying active listening, identifies barriers to communication and provides clarification to make meaning
- actively encouraging the free exchange of information through consultation, using technology mediums and policies
- demonstrates completion of planning pit developments that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - establishing and documenting, in consultation with stakeholders, procedures for implementing the pit development plans
 - designing procedures for, and monitoring operational performance data
 - preparing contingency plans
 - selecting extraction methods
 - determining resource requirements
 - monitoring pit performance

Knowledge Evidence

The candidate must demonstrate knowledge of planning pit development through:

- relevant licensing, legislative, regulatory and certification requirements
- the pit plan processes and procedures
- communicating verbally and in writing the roles and responsibilities requirements of stakeholders
- the hazard identification, risk assessment and risk treatment processes
- analysing and using critical data including:
 - geological, geotechnical, hydrogeological data
 - hydrological data
 - survey data
 - marketing data
 - economic environment
- analysing and selecting:
 - mining and transportation methods
 - pit development parameters
 - pit development options and procedures
- consultative, coaching and leadership techniques
- operational techniques in execution of the plan
- knowledge of plant and equipment capabilities and limitations
- 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
- establishing in consultation, emergency response and evacuation planning processes and 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 is best assessed in the context of this sector's 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 this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills; 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

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>