



Australian Government

RIIPRO601D Design processing plant

Release: 2

RIIPRO601D Design processing plant

Modification History

Release	Comment
1	This unit replaces RIIPRO601A Design processing plant.
2	Performance Criteria numbering amended. 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 develops a participant's skills and knowledge required to design processing plant in 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

Extractive

Elements and Performance Criteria

1. Determine processing plant design parameters	1.1 Access, interpret and apply processing plant 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 Identify, interpret and clarify relevant site geological, hydrological, and survey data and use it for design parameters 1.5 Identify, interpret and clarify relevant site marketing information and use it for design parameters.
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2. Prepare processing plant design	2.1 Involve internal and external stakeholders in the planning process and gain their support for the required outcomes 2.2 Prepare the flowchart/schematic of the plant 2.3 Identify and analyse options and select the primary items of plant and equipment 2.4 Arrange and supervise the drafting of the general arrangement of the processing plant 2.5 Arrange and supervise the drafting of the preliminary design of the processing plant 2.6 Arrange and supervise the design of the process control system for the processing plant 2.7 Determine and document resource implications of the implementation of the design 2.8 Prepare and present the processing plant business plan/budget, including contingency plans, in accordance with the organisation's requirements 2.9 Arrange and supervise the drafting of the detailed design of the processing plant 2.10 Identify and document the specifications for required plant and equipment
3. Issue and provide support in the implementation of the design	3.1 Issue and explain the processing plant design to team members and others involved, and facilitate the safe, effective and efficient implementation of the processing plant design 3.2 Provide timely ongoing support and advice to those implementing the processing plant design 3.3 Ensure records and reports are maintained and issued 3.4 Monitor the processing plant design performance against the processing plant design parameters, development plan and operational budgets 3.5 Resolve anomalies in consultation with relevant stakeholders 3.6 Issue instructions for adjustments to the design and/or 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

RIIPRO601A Design processing plant

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 RIIPRO601D Design processing plant

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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 procedures and techniques for the safe, effective and efficient completion of the design of processing plant including:
 - interpreting and applying geological, hydrological and survey data
 - interpreting plant design plans
 - interpreting and applying marketing data
 - providing team leadership
 - applying project and task management techniques
 - implementing audit performance system
 - accessing and using appropriate technologies
 - managing report preparation and presentation
- identifies and selects viable options for the design of processing plant that best meet the required outcomes including:
 - choosing development strategies
 - choosing plant and equipment
- works effectively with others to undertake and complete the design of processing plant including:

- managing people and processes
- coordinating human, financial and physical resources
- developing, initiating and administering work plans
- interpreting and applying operational performance data
- negotiating with internal and external stakeholders
- demonstrates completion of the design of processing plant that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying the relevant information and scope of the work
 - identifying, selecting and sourcing the required equipment
 - monitoring the outcomes against the plans, parameters, and budget
 - resolving anomalies and implementing improvements to the systems
 - preparing a flowchart/schematic for plant
 - coordinating drafting and design of processing plant
 - communicating processing plant design to team

Knowledge Evidence

The candidate must demonstrate knowledge in designing processing plant through:

- accessing, interpreting and applying legislative, organisation and site requirements and procedures for;
 - risk assessment and management
 - site risk, statutory compliance
 - work health and safety
 - environmental management
 - quality management
 - communication
 - site operations and administration
- implementing team management
- managing organisational objectives
- implementing resource monitoring
- implementing computer applications
- managing statistical data and reporting
- identifying characteristics of the site products and services
- applying processing plant design parameters
- assessing processing plant design options and procedures
- applying consultative and coaching techniques
- managing execution of the plan
- identifying characteristics of plant and equipment, limitations and capabilities
- implementing the recording and reporting systems

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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