



Australian Government

RIIBEF401D Manage non-routine, complex technical situations

Release: 2

RIIBEF401D Manage non-routine, complex technical situations

Modification History

Release	Comments
1	Replaces RIIBEF401A Manage non-routine, complex technical situations.
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 manage non-routine and complex technical situations in the Resources and Infrastructure Industries.

This unit is appropriate for those working in supervisory roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Elements and Performance Criteria

1. Collect and analyse information	1.1 Access, interpret and apply site documentation and ensure the work activity is compliant 1.2 Anticipate problems through constantly monitoring and analysing all available information 1.3 Identify operational problems promptly and consider from both operational and client perspective 1.4 Assess information for relevance and applicability 1.5 Access other sources of information to assist in problem solving
2. Diagnose and solve complex problems	2.1 Diagnose the problem using all available information 2.2 Determine a range of possible solutions from knowledge and experience 2.3 Communicate verbally and in writing diagnostic parameters to management 2.4 Analyse problems for any long term impact and assess

	potential solutions 2.5 Explore options and decide most appropriate action 2.6 Carry out calculations necessary to implement action 2.7 Implement action to resolve the immediate problem 2.8 Monitor effectiveness of action 2.9 Feed results of action taken through to supervisors and management
3. Manage non-routine/complex technical operations	3.1 Apply knowledge and experience to all operations 3.2 Recognise and anticipate potential problems in both routine and non-routine and complex technical operations, and implement contingency planning 3.3 Adapt to client paperwork and record keeping forms and document unusual requests 3.4 Work independently of management to maintain non-routine / complex technical operations 3.5 Take responsibility for decision-making processes 3.6 Prepare detailed written reports for a range of relevant topics on activity, requirements and outcomes
4. Use technology effectively	4.1 Use physical and sensory skills to operate equipment to fullest capacity and anticipate potential problems 4.2 Apply scientific and technological principles to evaluate and reshape operational procedures

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

RIIBEF401A Manage non-routine, complex technical situations

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 RIIBEF401D Manage non-routine, complex technical situations

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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
- demonstrates completion of managing non-routine, complex technical situations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - assessing and identifying potential problems and its impact through monitoring and analysis of available information
 - carrying out diagnostic activities, considering options and implementing action to solve complex problems
 - reviewing outcomes of activity and remedy issues prior to recommencing the same work activity
 - preparing detailed written report on operational outcomes identifying current and/or potential problems and possible contingencies or solutions in both routine and non-routine complex operations

Knowledge Evidence

The candidate must demonstrate knowledge of managing non-routine and complex technical situations through:

- communications systems, processes and procedures
- relevant mathematical applications
- problem solving techniques and decision making

- extensive operational knowledge
- relevant scientific and technological principles

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.
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*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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