



Australian Government

RIIOGD404D Coordinate air drilling operations

Release: 3

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Modification History

Release	Comment
1	This unit replaces RIIOGD404A Coordinate air drilling operations. Performance Criteria amended to include Housekeeping element and improve Plan and Prepare element.
2	Editorial corrections.
3	Performance Criteria numbering corrected. 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 apply coordinate air drilling operations in Drilling.

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.

Unit Sector

Drilling

Elements and Performance Criteria

1. Plan and prepare for coordination of air drilling operations	1.1 Access, interpret and apply coordinate air drilling operations documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify, address and report potential hazards, risks and environmental issues and implement control measures 1.4 Select and wear personal protective equipment appropriate to the work activities
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	1.5 Resolve coordination requirements with others at the site prior to commencing, during, and on completion of work activities 1.6 Apply air drilling and conventional mud drilling techniques 1.7 Apply work health and safety and emergency procedures
2. Examine correct air drilling procedures	2.1 Obtain, interpret, confirm and apply pre-tour and pre-drilling checklists 2.2 Identify components that make up an air drilling package and explain their use to crew members 2.3 Identify and apply parameters to watch during work activity 2.4 Identify and secure crew numbers and expertise 2.5 Identify and confirm conditions required to initialise the drilling of new holes 2.6 Identify, explain and carry out test procedures with crew 2.7 Identify and explain tripping procedures to crew and apply 2.8 Determine and implement correct communications and record keeping procedures
3. Conduct housekeeping activities	3.1 Clean, check, maintain and store plant, tools and equipment 3.2 Report issues identified with plant, tools and equipment

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

No equivalent Unit

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 RIIOGD404D Coordinate air drilling operations

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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 documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient coordination of air drilling operations through:
 - identifying, addressing and reporting potential hazards and risks
 - controlling identified hazards
 - implementing emergency response plan and procedures
 - identifying, addressing and reporting environmental issues
 - rectifying and/or reporting faults and malfunctions
- works effectively with others to plan, prepare, undertake and coordinate air drilling operations to meet all required outcomes including:
 - preparing for and organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication techniques and aids to advise others of work activity and exclusion zones

- demonstrates completion of coordinating air drilling operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - applying air drilling and conventional mud drilling techniques
 - watching parameters during operations
 - performing calculations including:
 - annular velocity
 - sinking/slipping velocity
 - pressure
 - flow test procedure
 - volume
 - conversion between metric and imperial
 - use of a calculator

Knowledge Evidence

- The candidate must demonstrate knowledge in applying coordination to air drilling operations through:
- accessing, interpreting and applying legislative, organization and site requirements and procedures for:
 - identifying and managing risks
 - site isolation, signage and erecting barriers
 - work health and safety
 - selecting and checking for faults, all plant, tools and equipment to carry out tasks
 - carrying out work to specifications
 - explaining tripping procedures to crew
 - applying effective techniques for air drilling operations
 - standard working practices and procedures for air drilling operations
 - determining pressure volume requirements
 - maintaining air requirements

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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