



Australian Government

RIIOGD504D Manage drilling operations

Release: 3

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Modification History

Release	Comment
1	This unit replaces RIIOGD504A Manage drilling operations
2	Performance Criteria amended to make requirements more explicit.
3	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 drilling operations in Drilling .

This unit is appropriate for those working in management 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 managing drilling operations	1.1 Access, interpret and apply documentation for managing drilling operations and ensure the work activity is compliant
	1.2 Obtain, read, interpret, clarify and confirm work requirements
	1.3 Identify and address potential hazards, risks and environmental issues and implement control measures
	1.4 Select and wear personal protective equipment appropriate to the work activities
	1.5 Resolve coordination requirements with others at the site prior to commencing, during and on completion of work activities
2. Implement drill	2.1 Obtain and check copies of contract and well program, design

management strategies	implementation strategies and communicate to relevant personnel 2.2 Prepare daily drilling written reports and tour sheets 2.3 Undertake inspections of operating site and camp, record and report 2.4 Establish communication strategies and confirm with operator's representative 2.5 Review, interpret and confirm company requirements 2.6 Implement and communicate reporting procedures 2.7 Establish and communicate rig maintenance arrangements
3. Manage work health and safety obligations	3.1 Implement and conduct crew meetings, record minutes and communicate to relevant personnel 3.2 Establish, implement, monitor, record and report safety inspection strategies 3.3 Induct new employees into site operations and establish monitoring strategies 3.4 Establish, implement, monitor and document permit-to-work procedures 3.5 Identify and implement emergency response arrangements 3.6 Identify, implement, monitor and document environmental and company requirements 3.7 Identify, rectify and report variances to relevant personnel
4. Oversee drilling operations	4.1 Obtain, confirm and clarify drill program 4.2 Select and access drilling plant, tools and equipment, ensure fit-for-service and report/repair any faults 4.3 Establish and monitor reporting mechanisms 4.4 Implement, maintain and monitor well control and blowout prevention strategies and report 4.5 Identify and investigate non-conformances, report and implement corrective strategies 4.6 Carry out and monitor appropriate tests and report
5. Oversee housekeeping activities	5.1 Clean, check, maintain and store plant, tools and equipment 5.2 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 RIIOGD504D Manage 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 applicable documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient management of drilling operations including:
 - identifying, addressing and reporting potential hazards and risks
 - controlling identified hazards
 - carrying out emergency response
 - identifying, addressing and reporting environmental issues
 - preparing written records and reports
 - rectifying and/or reporting faults and malfunctions
- works effectively with others to undertake and complete the managing of drilling operations to meet all required outcomes including:
 - communicating clearly and concisely with others to receive, give and clarify work instructions
 - preparing for and organising work activities to meet all task requirements
 - establishing and maintaining coordination with others relating to the work activity
- demonstrates completion of the management of drilling operation that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - undertaking routine inspections

- identifying, rectifying and reporting non-conformances
- inducting new employees into site operations
- assessing safe work practices and adherence to drilling instructions
- monitoring and reporting all drilling operations activity
- carry out numerical calculations including:
 - addition, subtraction, multiplication, division
 - relate normal pressure to temperature
 - using calculator if required
 - using estimated skills (e.g. mental arithmetic, visualisation of size and quantity)
 - basic geometry (e.g. interpreting depth, direction)
 - use of metric and imperials and conversion between the two
 - interpreting of gauges, graphs etc
- calculations relating to pressure (hydrostatic, surface, downhole, circulating), density, volume (fluid, air, gas), height, velocity, length, weight
- measurements (penetration rate, rotary torque, rpm, pump pressure)
- budget and monitor operating costs

Knowledge Evidence

The candidate must demonstrate knowledge in the management of drilling operations through:

- accessing, interpreting and applying legislative, organisation and site requirements and procedures for:
 - identifying and managing risks
 - identifying, addressing and reporting environmental issues
 - setting up work activity
 - 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
 - standard working practices and procedures
 - applying correct methods to control identified hazards
 - applying technical solutions to drilling operations
 - well control
 - downhole problems and solutions

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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