



Australian Government

RIINHB301D Set up and prepare for drilling operations

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIINHB301A Set up and prepare for drilling operations
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 set up and prepare for drilling operations in Drilling.

This unit is appropriate for those working in operational roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Drilling

Elements and Performance Criteria

1. Plan and prepare for drilling operations	1.1 Access, interpret and apply drilling operations 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 appropriate personal protective equipment appropriate for work activities 1.5 Communicate and coordinate activities with others throughout the work activity 1.6 Identify and determine location and nature of any installed services near or crossing the proposed drill plan 1.7 Identify and obtain all necessary permits and consents
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	1.8 Develop contingency plans for changes in geological conditions 1.9 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Prepare to drill	2.1 Check all required personnel, equipment and supplies are available 2.2 Check equipment is in good operational condition, and address identified issues 2.3 Erect or place safety barriers where needed 2.4 Check all modes of communication 2.5 Select suitable lay down areas for separate storage of chemicals and fuels or other incompatible items 2.6 Select locations for ancillary equipment to provide maximum efficiency and minimal risk to personnel
3. Set up drill and equipment	3.1 Carry out pre-start and start up procedures 3.2 Ensure a solid foundation for the rig 3.3 Interpret plans and position equipment accurately 3.4 Stabilise drill 3.5 Align and secure mast at correct angle 3.6 Position ancillary equipment accurately
4. Diagnose problems	4.1 Recognise symptoms of problem 4.2 Identify and isolate causes and determine solution 4.3 Implement solution if within scope of authority and competence 4.4 Seek help if problem is too complex 4.5 Implement solution as directed

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

RIINHB301A Set up and prepare for drilling operations

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 RIINHB301D Set up and prepare for 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 completion of the setting up and preparing for drilling operations including:
 - operating ancillary equipment
 - interpreting graphical representation, including maps, diagrams
 - applying metric and imperial conversions
 - applying mathematical skills, including:
 - addition
 - subtraction
 - multiplication
 - division
 - using appropriate instruments to measure:
 - volume
 - quantities
 - mass
 - weight
 - length
 - using calculating tools
 - applying estimating skills, e.g. mental arithmetic, visualisation of size and quantity
 - applying basic geometry to interpret depth, direction and azimuth of a hole

- works effectively with others to undertake and complete the setting up and preparing for drilling operations that meets all of the required outcomes including:
 - complying with written and verbal reporting requirements and procedures
 - communicating clearly and concisely with others to receive and clarify work instructions
 - communicating clearly and concisely with others to resolve coordination requirements prior to commencing and during work activities
- demonstrates completion of setting up and preparing for drilling operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - coordinating drill team members and activities
 - determining location and nature of any installed services near or crossing the proposed drill plan
 - identifying and obtaining all necessary permits and consents
 - select locations for storage of chemicals/fuels/incompatible items /ancillary equipment
 - ensuring a solid foundation for the rig
 - interpreting plans and positioning equipment accurately
 - stabilising drill
 - aligning and securing mast at correct angle

Knowledge Evidence

The candidate must demonstrate knowledge in setting up and preparing for drilling operations through:

- accessing, interpreting and applying the organization and site requirements and procedures for;
 - work, health and safety
 - environmental issues
 - operating drill rig
 - housekeeping
- identifying equipment characteristics, technical capabilities and limitations
- complying with operational and maintenance procedures, including:
 - controlling flow off site
 - disposing of waste
 - no excess clearing
 - prevention of spread of contaminants
- using soil sampling and basic geological knowledge, including classification of rocks, drillability and stability
- applying safe work practices and identifying and reporting all potential hazards, risks and environmental issues
- being prepared for fire/accident/emergency
- applying fault finding and troubleshooting techniques

- using team work principals
- understanding communication systems, and complying with site radio procedures, e.g. 2-way radio

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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