



Australian Government

RIIBHD301D Conduct surface blast hole drilling operations

Release: 2

RIIBHD301D Conduct surface blast hole drilling operations

Modification History

Release	Comment
1	This unit replaces RIIBHD301A Conduct surface blast hole 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 conduct surface blast hole drilling operations in the Resources and Infrastructure Industries.

This unit is appropriate for those working in driller roles.

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

Elements and Performance Criteria

1 Plan and prepare for surface blast hole drilling operations	1.1 Access, interpret and apply surface blast hole drilling documentation and ensure the work activity is compliant 1.2 Obtain, interpret, clarify, confirm and apply work requirements and procedures 1.3 Access, interpret and apply geological and survey data 1.4 Inspect and prepare work area in coordination with others 1.5 Identify, manage and report potential hazards and risks 1.6 Resolve coordination requirements with others prior to and during work activities 1.7 Select and wear correct personal protective equipment
2 Mark out drill pattern	2.1 Adjust drill pattern within authorised tolerances and drilling plan 2.2 Obtain authorisation for changes to drill pattern plan 2.3 Place indicators on drill pattern in preparation for drilling 2.4 Mark out drill pattern ensuring it is visible and aids the

	drilling process
	2.5 Protect pre-existing drill holes according to characteristics of hole
3 Operate the drill system	3.1 Carry out pre-start, start-up, park-up and shutdown procedures 3.2 Locate and set up drill and equipment according to drilling plan 3.3 Select and modify the operating technique to appropriately meet changing work conditions 3.4 Conduct, control and monitor operations within the equipment limitations 3.5 Stabilise hole by collaring and by adjusting drilling techniques 3.6 Act on or report monitoring systems and alarms 3.7 Recognise and respond to hazardous and emergency situations 3.8 Complete work to requirements and within the operating capacity of the equipment 3.9 Adhere to emergency procedures to ensure safety of personnel, plant and equipment 3.10 Conduct quality checks at predetermined drill depths
4 Relocate drill	4.1 Receive route and location plan and confirm them by site inspection 4.2 Complete/follow work area preparation 4.3 Resolve coordination issues 4.4 Correctly relocate drill
5 Carry outpost-operational procedures	5.1 Inspect, fault find and report faults 5.2 Carry out routine operator servicing, maintenance and housekeeping tasks 5.3 Provide operator support during preparation for and conduct of major maintenance tasks 5.4 Maintain and process written records and reports

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

RIIBHD301A Conduct surface blast hole 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 RIIBHD301D Conduct surface blast hole 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 conducting of surface blast hole drilling operations including:
 - uses appropriate instruments to measure volume, mass and length
 - carries out relevant calculations, which may include; addition, subtraction, multiplication, division
- works effectively with others and uses a range of communication techniques and equipment to undertake and complete surface blast hole drilling operations that meets all of the required outcomes
- demonstrates completion of conducting surface blast hole drilling operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - mark out and adjust drill pattern
 - set up, operate and relocate the drill system to suit the conditions and meet the work requirements
 - inspect, maintain and report issues with equipment

Knowledge Evidence

The candidate must demonstrate knowledge of conducting surface blast hole drilling operations through:

- relevant legislative, organisation and site requirements and procedures
- identifying and using dust suppression techniques
- drill system characteristics, technical capability and limitations

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 is best assessed in the context of this sector's work environment;
- where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills; 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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