



Australian Government

RIINHB317D Install underground in-seam directional drilling standpipes

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIINHB317A Install underground in-seam directional drilling standpipes
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 install underground in-seam directional drilling standpipes in Coal mining and Drilling.

This unit is appropriate for those working in driller roles.

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

Unit Sector

Coal mining

Drilling

Elements and Performance Criteria

1. Plan and prepare for installing underground in-seam directional drilling standpipe	1.1 Access, interpret and apply install underground in-seam directional drilling standpipes documentation and 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 personal protective equipment appropriate for work activities 1.5 Communicate and coordinate activities with others throughout the work activity
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	1.6 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Perform rib consolidation	2.1 Carry out pre-start and start up procedures 2.2 Identify, select and apply rig operational controls 2.3 Prepare for rib consolidation drilling 2.4 Carry out rib consolidation drilling 2.5 Monitor and adjust drilling technique according to conditions 2.6 Identify and remedy operational problems 2.7 Insert and seal grouting tubes into rib consolidation holes 2.8 Inject grout through the grouting tubes until visible evidence that grout has migrated into any coal rib fractures or cracks 2.9 Carryout individual grouting completion procedure
3. Drill and ream hole and install standpipe	3.1 Prepare for drilling and reaming 3.2 Choose drill bit and reamer appropriate to the geology 3.3 Carry out pilot hole drilling and ream standpipe hole 3.4 Monitor and adjust drilling technique according to conditions 3.5 Prepare and install standpipe 3.6 Grout in standpipe 3.7 Continually monitor hazards and risks , and ensure safety of self, other personnel, plant and equipment
4. Complete equipment maintenance and housekeeping	4.1 Carry out shutdown procedures and secure equipment 4.2 Monitor the drill rods for wear and damage and dress and grease threads 4.3 Monitor all drill equipment and hoses and ancillary equipment and carryout remedial action 4.4 Clean and maintain all grouting equipment 4.5 Ensure housekeeping activities are completed 4.6 Process records

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

RIINHB317A Install underground in-seam directional drilling standpipes

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 RIINHB317D Install underground in-seam directional drilling standpipes

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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 installation of underground in-seam directional drilling standpipe including:
 - applying safe manual handling practices
 - identifying, selecting and applying rig operational controls
 - operating hand borers
 - operating grouting equipment
 - conducting inspection and monitoring
 - conducting equipment maintenance
 - reading, interpreting and applying drill plans
- works effectively with others to undertake and complete the installation of underground in-seam directional drilling standpipe 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 installation of underground in-seam directional drilling standpipes that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - carrying out rib consolidation drilling
 - inserting and sealing grouting tubes into rib consolidation holes
 - choosing drill bit and reamer appropriate to the geology
 - carrying out pilot hole drilling and ream standpipe hole
 - monitoring and adjusting drilling technique according to conditions
 - grouting in standpipe

Knowledge Evidence

The candidate must demonstrate knowledge in installing underground in-seam directional drilling standpipes through:

- accessing, interpreting and applying the organisation and site requirements and procedures for:
 - work, health and safety
 - environmental issues
 - operating drill rig
 - housekeeping
- potential underground directional drilling hazards
- the manufacturer's requirements and procedures
- the specific handling requirements for underground drilling equipment
- basic geology types and their impact on underground in-seam directional drilling operations
- drill bits for different geology types
- reamers for different geology types
- importance and functions of the standpipe
- being prepared for fire/accident/emergency

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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