



Australian Government

RIINHB319D Install de-watering conduit and gas drainage equipment

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIINHB319A Install de-watering conduit and gas drainage equipment
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 de-watering conduit and gas drainage equipment 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 installation of de-watering conduit and gas drainage equipment	1.1 Access, interpret and apply de-watering conduit and gas drainage equipment 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 1.6 Obtain and interpret emergency procedures, and be prepared
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	for fire/accident/emergency 1.7 Prepare the de-watering conduit installation plan in consultation with the site gas drainage official and in accordance with appropriate site management plans
2. Install de-watering conduit and monitor water drainage	2.1 Carry out any pre-start and start up procedures 2.2 Identify, select and apply rig operational controls 2.3 Insert hollow rods into the hole 2.4 Attach non-return valve and anchor onto the de-watering conduit 2.5 Perforate the conduit at the appropriate locations to allow ingress of water 2.6 Install the de-watering conduit into hollow rod to the required distance 2.7 Identify and remedy operational problems 2.8 Remove hollow rods leaving conduit in place 2.9 Connect conduit to de-watering system and commence removing water via the water trap 2.10 Empty water trap 2.11 Disconnect de-watering equipment from the de-watering conduit when all water has been removed 2.12 Monitor, record and interpret all pressure and flow readings 2.13 Continually monitor hazards and risks , and ensure safety of self, other personnel, plant and equipment
3. Connect gas drainage equipment and monitor gas drainage	3.1 Select and install appropriate gas drainage equipment 3.2 Select and use appropriate measuring equipment to monitor gas drainage 3.3 Correctly identify and tag gas drainage and monitoring units identifying the number, length and diameter of the hole
4. Complete equipment maintenance and housekeeping	4.1 Carry out any shutdown and securing of equipment 4.2 Ensure that the drill rods are inspected for wear and damage, threads dressed and greased, and rods are replace as required 4.3 Monitor all drill equipment and hoses and ancillary equipment and carryout remedial action 4.4 Ensure all drilling equipment is cleaned and maintained 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

RIINHB319A Install de-watering conduit and gas drainage equipment

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 RIINHB319D Install de-watering conduit and gas drainage equipment

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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 de-watering conduit and gas drainage equipment including:
 - applying planning skills
 - complying with safe manual handling practices
 - conducting site inspection and monitoring
 - conducting equipment maintenance
 - reading, interpreting and applying drill plans
 - operating ancillary equipment
- works effectively with others to undertake and complete the installation of de-watering conduit and gas drainage equipment 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 the installation of de-watering conduit and gas drainage equipment that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:

- installing the de-watering conduit into hollow rod to the required distance
- removing hollow rods leaving conduit in place
- connecting and disconnecting conduit to de-watering system and removing water via the water trap
- monitoring, recording and interpreting all pressure and flow readings
- selecting and installing appropriate gas drainage equipment
- measuring and monitoring gas drainage
- identifying and tagging gas drainage and monitoring units

Knowledge Evidence

The candidate must demonstrate knowledge installing de-watering conduit and gas drainage equipment 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 potential de-watering and gas drainage operations hazards
- principles of de-watering drill holes and gas drainage
- the manufacturer's requirements and procedures
- the specific handling requirements for dewatering and gas drainage equipment
- 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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