



**Australian Government**

# **Assessment Requirements for RINHB328 Conduct rotary air drilling**

**Release: 1**

# Assessment Requirements for RIINHB328 Conduct rotary air drilling

## Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0.

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- conduct rotary air drilling on at least two occasions, including:
  - using the various rod handling equipment
  - adding and removing rod from the string
  - applying rotation speed and weight on the bit to maintain optimum performance
  - measuring line string components and calculate hole depth
  - collaring holes
  - monitoring hole for returns/cuttings/samples and quality
  - ensuring that all string components are correctly maintained
  - disassembling, describing the function of components, inspecting components, replacing unserviceable parts and reassembling a bottom hole assembly
  - ensuring that drill rod is inspected regularly, and wear rates monitored
  - ensuring that threads are inspected and maintained.

During the above, the candidate must:

- locate and apply required legislation, documentation, policies and procedures
- work with others to conduct rotary air drilling that meets required outcomes, including:
  - using a range of communication techniques and strategies to communicate and coordinate information and activity to others
  - communicating the hazards of cuttings in the return air stream to all crew members.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key policies, procedures and established requirements for conducting rotary air drilling, including those for:
  - limiting the contamination of samples/cuttings/returns
  - bit selection for different types of drilling and different ground conditions
  - identifying problems related to inaccurate measurement of bits and other related components
  - clearing down hole blockages in air drilled holes
- the hazards associated with clearing blockages
- drill site layout
- the critical need to match like threads with like threads on all tubular components and make up torque requirements
- the parameters relating to wear of drill rod and integrity of threads
- the function of hole collaring
- the importance of monitoring the hole for returns/cutting/sample quantity
- the role that blockages play in affecting sample quality
- the critical need for restraining devices to be fitted to all pressure delivery hoses and sample delivery hoses (if used), the devices available and their methods of attachment
- dangers of chips/sample/air return being returned to the surface at high velocity in air drilling operations and the parameters involved
- the importance of checking gauges and monitoring pressures, flow rates and temperatures.

## Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
  - personal protective equipment
  - equipment required to conduct rotary air drilling
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work 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.

## Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations 2015/Australian Quality Training Framework mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence outlined in this unit of competency, and
- the minimum years of current\*\* work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

<b>Industry sector</b>	<b>AQF indicator level***</b>	<b>Required assessor or industry subject matter expert experience</b>
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure	1	1 year
	2	2 years
Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure	3-6	3 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.	

\*Guidance on simulated environments has been stipulated in the RII implementation guide located on VETNet.

\*\*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 a minimum number of site assessments as determined by the relevant industry sector, across various locations.

\*\*\* While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

## **Links**

Companion Volume implementation guides is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>