



Australian Government

RIIOGD209E Operate and maintain ancillary equipment

Release: 1

RIIOGD209E Operate and maintain ancillary equipment

Modification History

Release	Comment
1	This unit replaces RIIOGD209D Operate and maintain ancillary equipment. Performance criteria amended.

Application

This unit describes a participant's skills and knowledge required to apply operate and maintain ancillary equipment in drilling.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Drilling

Elements and Performance Criteria

1. Plan and prepare for operating and maintaining ancillary equipment	1.1 Access, interpret and apply operations and maintenance for ancillary equipment 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 the personal protective equipment appropriate for the work activity 1.5 Resolve coordination requirements with others at the site prior to commencing, during and on completion of work activities and ensure briefings/handover details are read/passed on 1.6 Confirm availability and status of necessary permits to work 1.7 Confirm availability of necessary third party utilities
2. Maintain pumps	2.1 Inspect pumps for leaks or abnormal operation

	2.2 Lubricate pumps
3. Operate, maintain and repair gate valves associated with mud system	3.1 Identify, locate and wear correct personal protective equipment 3.2 Align, open and close valves 3.3 Lubricate valve stems as required 3.4 Identify defective parts in valves and replace
4. Operate and maintain chemical mixing pumps and equipment	4.1 Identify faults or potential faults and report immediately 4.2 Identify, record in writing and/or report requirement for repair or maintenance 4.3 Perform equipment checks regularly and efficiently 4.4 Line up valves properly 4.5 Engage mixing and transfer pumps 4.6 Lubricate valves, mixing pumps and transfer pumps 4.7 Replace defective or malfunctioning parts and valves on pumps 4.8 Clean and inspect mixing hopper and mixing area 4.9 Isolate equipment as required

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

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIOGD209E Operate and maintain ancillary equipment	RIIOGD209D Operate and maintain ancillary equipment	Performance criteria amended. Performance evidence amended	Equivalent

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 RIIOGD209E Operate and maintain ancillary 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 legislation, documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of ancillary equipment operation and maintenance including:
 - maintaining pumps
 - recognising and reporting equipment malfunction or failure
 - aligning, opening and closing valves as appropriate
 - using safety equipment, including fire protection, and First Aid equipment
- works effectively with others to undertake and complete the operation and maintenance of ancillary equipment that meets all of the required outcomes including:
 - supervising and training subordinates to provided standards
 - working as directed by driller in timely and efficient manner
- demonstrates completion of ancillary equipment operation and maintenance that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - isolating and locking out equipment as required
 - performing equipment checks on five (5) separate pieces of equipment from the following list:
 - mixing pumps
 - change pumps
 - desander
 - desilter
 - centrifuges
 - degaser
 - piping

- valves
- agitators
- caustic mixing system
- mud guns
- mixing hoppers
- shearing devices
- pit volume totaliser (PVT) system
- pit volume totaliser
- lubrication pumps
- bolt material system
- chemical handling system
- dust/fuel extraction system
- lubricating valve stems
- replacing defective parts in valves
- operating and maintaining chemical mixing pumps and equipment
- cleaning and inspecting mixing hopper and mixing area

Knowledge Evidence

The candidate must demonstrate knowledge of the following when operating and maintaining ancillary equipment:

- mud system ancillary equipment
- company and statutory safety guidelines, procedures and practices
- safe operating procedures when operating equipment
- rig maintenance
- normal drilling operations
- use of communication methods, including:
 - 2-way radio
 - intercom
 - telephone
 - oral instruction
 - written instruction
 - hand signals
 - telephone
 - public address system
- operations to suit weather conditions, including:
 - day/night
 - storm/lightning
 - hot/cold
 - wet/dry

- non-routine drilling operations
- discharge types and characteristics, including liquids, gases and solids
- material characteristics, including flammable, toxic, corrosive and explosive
- man management/rig management
- permit to work system
- equipment isolation procedures
- using specialised hand tools

Assessment Conditions

- Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors; 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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