



Australian Government

RIIOGF301D Monitor, operate and maintain mud pits and equipment

Release: 2

RIIOGF301D Monitor, operate and maintain mud pits and equipment

Modification History

Release	Comment
1	This unit replaces RIIOGF301A Monitor, operate and maintain mud pits and 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 apply monitor, operate and maintain mud pits and 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 operations	1.1. Access, interpret and apply monitor, operate and maintain mud pits documentation and ensure the work activity is compliant 1.2. Obtain, read, interpret, clarify and confirm work requirements 1.3. Identify, address and report potential hazards, risks and environmental issues and implement control measures 1.4. Select and wear personal protective equipment appropriate to the work activities 1.5. Resolve coordination requirements with others at the site prior to, during and on completion of work activities and ensure briefings/handover details are communicated
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	1.6. Confirm availability of necessary third party utilities 1.7. Conform to safe working practices and current legislative and operational requirements
2. Monitor operation of mud pump	2.1. Visually inspect and listen to mud pumps for abnormal sounds and leaks 2.2. Check lubricating system, identify, record and report faults 2.3. Check pressure relief valve (PRV) setting 2.4. Check flow path 2.5. Charge discharge dampener with nitrogen, to correct pressure 2.6. Charge suction dampener to correct pressure
3. Maintain and repair mud pumps	3.1. Check all clamps when pump is turned off 3.2. Lubricate gear end of pump and check oil levels in gear end of pump 3.3. Replace defective consumables 3.4. Check liners and swabs for size 3.5. Identify faults or potential faults, record and report to relevant personnel

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

RIIOGF301A Monitor, operate and maintain mud pits and 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 RIIOGF301D Monitor, operate and maintain mud pits and 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 applicable documentation, policies and procedures
- implements the of requirements, procedures and techniques for the safe, effective and efficient completion of monitoring, operating and maintaining mud pits and equipment including:
 - identifying, addressing and reporting potential hazards and risks
 - controlling identified hazards
 - carrying out emergency response
 - identifying, addressing and reporting environmental issues
 - preparing written records and reports
 - rectifying and/or reporting faults and malfunctions
- works effectively with others to undertake and complete monitoring, operating and maintaining mud pits and 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 monitoring, operating and maintaining mud pits and equipment that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:

- checking pressure relief valve (PRV) setting
- checking flow path
- charge discharge dampener with nitrogen, to correct pressure
- identifying faults or potential faults and report immediately
- checking all clamps when pump is turned off
- lubricating gear end of pump and check oil levels in gear end of pump
- identifying faults or potential faults and report immediately

Knowledge Evidence

The candidate must demonstrate knowledge of the following in applying the monitor, operate and maintain mud pits and equipment through:

- accessing, interpreting and applying legislative, organization and site requirements and procedures for:
 - identifying and managing risks
 - identifying, addressing and reporting environmental issues
 - setting up work activity
 - site isolation, signage and erecting barriers
 - work health and safety
 - selecting and checking for faults, all plant, tools and equipment to carry out tasks
 - carrying out work to specifications
 - applying standard working practices and procedures
 - applying correct methods to control identified hazards
 - applying technical solutions for shut down rig operations
- using mud pumps
- following emergency signals and procedures
- following safe operating procedures when operating equipment

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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