



**Australian Government**

# **RIIOGF302E Operate drilling fluids and mud pits**

**Release: 1**

## R110GF302E Operate drilling fluids and mud pits

### Modification History

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

### Application

This unit describes the skills and knowledge required to operate drilling fluids and mud pits in drilling. It prepares individuals to operate mud pits, use, maintain and repair mud conditioning equipment and monitor mud.

This unit applies to those working in operational roles. They generally perform tasks involving a broad range of skilled applications in a wide variety of contexts, which may involve some discretion and judgement in selecting equipment, services and contingency measures.

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

### Unit Sector

Drilling

### Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
1. Plan and prepare for operations	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply documentation required to operate drilling fluids and mud pits and confirm work activity is compliant 1.3 Identify and minimise environmental issues and potential hazards, and assess and address risks within scope of own role and according to workplace procedures 1.4 Select and wear personal protective equipment required for work activities 1.5 Communicate with other personnel at site according to work requirements and confirm briefings and handover details are communicated and received 1.6 Confirm availability and status of necessary permits to work 1.7 Confirm availability of necessary third party utilities
2. Operate mud pits	2.1 Align valves in pits to confirm required pit usage 2.2 Confirm plugs are fit for operation 2.3 Seal or secure tanks according to manufacturer specifications 2.4 Set high and low alarms according to site requirements 2.5 Operate mud pit room ventilation system according to site requirements 2.6 Operate hoppers according to manufacturer specifications 2.7 Operate dust extraction system during mixing according to manufacturer specifications 2.8 Supervise forklift operations 2.9 Store chemicals in required storage area
3. Operate, maintain and repair mud conditioning equipment	3.1 Engage and adjust required equipment according to job requirements and as directed by supervisors or mud engineer 3.2 Clean all equipment and visually inspect for leaks and correct operation 3.3 Identify faults and potential faults, record and report to relevant personnel as required 3.4 Perform periodic or scheduled preventative maintenance on all mud treatment units according to workplace procedures

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
4. Monitor mud	4.1 Monitor and record mud properties and parameters according to workplace procedures 4.2 Set alarms to monitor mud according to site requirements 4.3 Check viscosity and weight of mud conform to specifications as directed by mud engineer 4.4 Maintain required volumes and types of drilling fluids as required by well program or company 4.5 Use required mixing procedures to obtain desired properties 4.6 Recognise warning signs of a kick, record and report immediately

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.*

<b>SKILL</b>	<b>DESCRIPTION</b>
Reading	<ul style="list-style-type: none"> <li>Identifies and interprets information from workplace procedures, documentation and regulations</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>Monitors and minimises own exposure to worksite hazards during activities</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Uses verbal communication techniques to communicate with others</li> </ul>

## Unit Mapping Information

Supersedes and is equivalent to RIIOGF302D Operate drilling fluids and mud pits.

## Links

Companion Volume implementation guides is found on VETNet -

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