



Australian Government

Department of Education, Employment and Workplace Relations

RIIOGD206A Assist with coal seam gas control

Release: 1

RIIOGD206A Assist with coal seam gas control

Modification History

Not applicable.

Unit Descriptor

This unit covers assisting with coal seam gas control in the drilling industry. It includes planning and preparing for and assisting with coal seam gas control activities, and monitoring and reporting safety issues.

Application of the Unit

This unit is appropriate for those working in a operational roles in coal-seam methane gas drilling operations, at worksites within:

- Coal Mining
- Drilling

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for assisting with coal seam gas control	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Obtain, confirm and apply work instructions for the allocated task 1.3. Resolve coordination requirements with others at the site prior to commencing and during work activities
2. Assist with coal seam gas control activities	2.1. Monitor flows and returns for correct volumes and rates, and report inconsistencies to Driller 2.2. Assist in operation of coal seam gas control pumps 2.3. Read and interpret measuring devices to monitor correct operation of coal seam gas control process and equipment 2.4. Communicate operational activities and information to other crew during coal seam gas control operations 2.5. Assist in installation and maintenance of equipment 2.6. Participate in emergency drills and exercises
3. Monitor and report safety issues	3.1. Identify, address and report hazards associated with coal seam gas control under varying working conditions 3.2. Recognise kick indicators and advise Driller during coal seam gas control operations 3.3. Identify and report ignition sources 3.4. Identify and report sources and presence of flammable gases and emissions 3.5. Identify and report running coal seam gas control equipment malfunctions

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to assist with coal seam gas control:

- apply legislative, organisation and site requirements and procedures
- work in a team
- apply gauge and graph interpreting skills
- apply work instruction and procedures interpreting skills
- apply process status recording and reporting procedures
- use hand and power tools

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to assist with coal seam gas control:

- the principles and practices of coal seam gas control
- control procedures
- risks and their controls
- sources of ignition and their dangers and controls
- sources of flammable gases and emissions and their dangers and controls
- pumping systems principles
- purpose, operation and interpretation of measuring and testing devices
- kick detection warnings and indications and the responses to them
- purpose, type and conduct of emergency drills and exercises
- communication methods and protocols

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for assisting with coal seam gas control • implementation of requirements, procedures and techniques for the safe, effective and efficient assisting with coal seam gas control • working with others to undertake and complete coal seam gas control that meets all of the required outcomes • consistent timely provision of assistance with coal seam gas control that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second

	language issues. • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances. • Where applicable, physical resources should include equipment modified for people with disabilities. • Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the coal seam gas control
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Relevant compliance documentation may include:	• legislative, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Work instructions may come from briefings, handovers, plans and work orders and may be written or verbal, formal or informal and may include:	• nature and scope of tasks • specifications • quality of finished works • achievement targets • operational conditions • obtaining of permits required • site layout • out of bounds areas • worksite inspection requirements • lighting conditions • plant or equipment defects • hazards and potential hazards • coordination requirements or issues • contamination control requirements • environmental control requirements • barricade and signage requirements
Coordination requirements may include	• drill team • other equipment operators • maintenance personnel • supervisors • worksite personnel
Measuring devices may include:	• 2-way radio • hand signals • telephone • public address system

	• written work instructions
Drills and exercises may include:	• pit drill • trip drill • abandonment drill • evacuation
Hazards may include:	• blow out gas to surface • ignition of gas • toxic gases • pressurised coal seam gas system
Working conditions may include:	• night time operations • day time operations • hot climates • cold climates • snow • wet weather conditions • high wind
Kick indicators may include:	• flow from wells (pump off) • increase in flow from well (pumps on) • pit volume gain
Ignition sources may include:	• non-explosion protected devices such as: • electrical connections/leads • rig lights and wiring • flashlights • computers • mobile phones • electronic car keys • charging circuits from solar panels • charging and starting circuits from vehicles • drill rigs • mud pumps • lighting plants • auxiliary equipment • static discharge - lightning • flare stacks • engine exhausts from vehicles, drill rigs, auxiliary equipment
Flammable gases and emissions may include:	• methane (CH₄) • hydrogen sulphide (H₂S) • carbon dioxide (CO₂) • carbon monoxide (CO)

Coal seam gas control equipment may include:	• mud system • blooie diverter lines • auxiliary equipment • pressure measuring devices • gas detection equipment and devices • diverters
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Unit Sector(s)

Drilling (Oil and Gas)

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.