



Australian Government

RIISAM209D Carry out operational maintenance

Release: 2

RIISAM209D Carry out operational maintenance

Modification History

Release	Comment
1	This unit replaces RIISAM209A Carry out operational maintenance
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 carry out operational maintenance in the Drilling and Metalliferous Mining Industries.

This unit is appropriate for those working in operational roles.

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

Unit Sector

Drilling

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare to carry out operational maintenance	1.1 Access, interpret and apply service and maintenance 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 and wear personal protective equipment appropriate to the work activities 1.5 Obtain and interpret emergency procedures and be prepared for fire/accident/emergency 1.6 Resolve coordination requirements with others prior to commencing and during work activities
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2. Perform pre-start checks and maintenance	2.1 Inspect and carry out pre-start checks on equipment 2.2 Complete site and/or company checklist sheet 2.3 Lubricate all systems 2.4 Check and top up fluid levels and bleed 2.5 Check filters and clean or replace 2.6 Check security of all circulation systems 2.7 Check safety appliances are fitted and in serviceable condition 2.8 Keep cabin, seat belts and windscreen clean and windscreen washer functioning
3. Perform equipment checks	3.1 Carry out timed and regular equipment checks, servicing and lubrication and record details 3.2 Identify faults or potential faults and report immediately 3.3 Obtain, confirm and apply isolation, tag out and lock out procedures 3.4 Identify, record and/or report requirement for repair or maintenance and critical time line for rectification 3.5 Monitor effectiveness of maintenance performed
4. Maintain tools, components and consumables	4.1 Maintain tools and components 4.2 Maintain and store tools and consumables in good condition
5. Carry out hot work	5.1 Clear area around the worksite of flammable material 5.2 Position fire extinguishers at company recommended locations 5.3 Undertake hot work in compliance with district fire controls 5.4 Liaise with spotter during hot work operations 5.5 Inspect the area prior to leaving to ensure that no potential exists for later combustion
6. Perform equipment maintenance	6.1 Perform scheduled equipment servicing, maintenance and overhauls 6.2 Use tag out and/or lock out when servicing 6.3 Carry out minor servicing of equipment avoiding disruption to production 6.4 Carry out routine inspection, servicing, lubrication and housekeeping tasks 6.5 Identify and change worn parts and record relative frequency of replacement

	6.6 Identify operational faults in and maintain hydraulic, pneumatic and drive systems 6.7 Report service and repair requirements and take action 6.8 Undertake diagnostics and troubleshooting and take action
7. Perform field repairs	7.1 Isolate and rectify equipment faults 7.2 Identify extent of repair needed and obtain spare parts 7.3 Identify, select and use tools required for maintenance and repairs 7.4 Return re-usable components or accessories 7.5 Review equipment and re-set in response to variations in production needs 7.6 Recognise system faults and formulate appropriate responses within agreed time lines 7.7 Maintain records of action taken 7.8 Dismantle, assess, service, repair, reassemble and test a given component

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

RIISAM209B Carry out operational maintenance

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 RIISAM209D Carry out operational maintenance

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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 documentation, policies and procedures
- works effectively with others to undertake and complete operational maintenance 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 coordinate work activities
- demonstrates completion of the carrying out of operational maintenance that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - carrying out pre-start checks on equipment
 - checking fluid levels, filters and safety appliances
 - completing inspections and identifying faults
 - performing equipment maintenance
 - performing field repairs
 - monitoring maintenance effectiveness
 - undertaking hot work

Knowledge Evidence

The candidate must demonstrate knowledge in carrying out operational maintenance through:

- accessing, interpreting and applying legislative, organisation and site requirements and procedures for:
 - using manufacturer's handbooks
 - environmental issues
 - hot work
 - fire prevention and control
 - mechanical/electrical/hydraulic systems and power tools
 - isolation and tag out
 - recording and reporting
 - workplace health and safety
- identifying characteristics, technical capabilities and limitations of equipment
- identifying lubricants and their uses
- identifying purpose of equipment electric and hydraulic indicators and gauges
- identifying characteristics of transmission and drive systems

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 is best assessed in the context of this sector's 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 this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills; 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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