



Australian Government

RIISAM310D Install and commission plant, machinery and services

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIISAM310A Install and commission plant, machinery and services
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 install and commission plant, machinery and services in Civil construction, Metalliferous and Coal mining, and Extractive.

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

Civil construction

Coal mining

Extractive

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare for installing and commissioning of plant, machinery and services	1.1 Access, interpret and apply documentation for installing and commissioning plant, machinery and services 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
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	the work activities 1.5 Obtain and interpret emergency procedures and be prepared for fire/accident/emergency 1.6 Set up and schedule work 1.7 Resolve coordination requirements with others at the site prior to commencing, during and on completion of work activities
2. Select plant, machinery and mine services equipment	2.1 Identify plant, machinery and mine services equipment options 2.2 Gather, validate and assess the data on the various options 2.3 Analyse the various options and select the options that best meet the required parameters 2.4 Procure/obtain and organise delivery of plant, machinery and mine services delivery equipment to the mine-site
3. Install plant, machinery and services	3.1 Obtain, transport and prepare materials and resources required for installation 3.2 Apply and monitor isolation procedures 3.3 Install plant, machinery and services 3.4 Perform installation work
4. Commission plant, machinery and services	4.1 Carry out inspection of installed plant and machinery 4.2 Carry out pre-start checks 4.3 Test and test run plant and machinery 4.4 Configure and test the operation and capacity of mine services delivery equipment/lines 4.5 Return plant and machinery to service 4.6 Develop and document plant and machinery inspection and maintenance schedules

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

RIISAM310A Install and commission plant, machinery and services

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 RIISAM310D Install and commission plant, machinery and services

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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
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of the installation and commissioning of plant, machinery and services including:
 - identifying, addressing and reporting potential hazards and risks
 - controlling identified hazards
 - identifying, addressing and reporting environmental issues
 - preparing written records and reports
 - undertaking inspections and fault finding
 - applying site and manufacturer's requirements and procedures for installing and commissioning plant, machinery and services
- works effectively with others to undertake and complete the installation and commissioning of plant, machinery and services in a way that meets all of the required outcomes including:
 - preparing for and organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - establishing and maintaining coordination with others relating to the work activity
- complying with written and verbal reporting requirements

- demonstrates completion of the installation and commissioning of plant, machinery and services that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - obtaining, transporting and preparing materials and resources required for installation
 - carrying out pre-start, start-up, park-up and shutdown procedures
 - installing and commissioning plant, machinery and services
 - operating equipment controls, monitoring gauges and systems
 - conducting safety checks
 - operating equipment within specified limitations and capabilities

Knowledge Evidence

The candidate must demonstrate knowledge in installing and commissioning plant, machinery and services through:

- accessing, interpreting and applying legislative, organisation and site requirements and procedures for:
 - identifying and managing risks
 - identifying, addressing and reporting environmental issues
 - setting up work activity
 - selecting and checking for faults, all plant, tools and equipment to carry out tasks
 - work health and safety
 - related plant and equipment operations
 - identifying and correcting operational faults
- applying site and manufacturer's requirements and procedures

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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