



Australian Government

RIIMPO301D Conduct hydraulic excavator operations

Release: 4

RIIMPO301D Conduct hydraulic excavator operations

Modification History

Release	Comment
1	This unit replaces RIIMPO301C Conduct hydraulic excavator operations. Performance Criteria amended to make requirements more explicit; manoeuvring, driving and parking up added; operator maintenance element added.
2	Removed repetition in Performance Criteria; editorial corrections; modification History inserted.
3	Editorial corrections; amend reference to Licensing requirements in Unit Application.
4	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 conduct hydraulic excavator operations in Coal and Metalliferous mining and Extractive.

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

Coal mining

Extractive

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare for hydraulic excavator operations	1.1 Access, interpret and apply hydraulic excavator documentation, and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address risks, hazards and environmental issues
--	--

	and implement control measures 1.4 Select and wear personal protective equipment appropriate for work activities 1.5 Access, interpret and clarify geological and survey data required to complete the allocated work 1.6 Inspect and prepare work area in coordination with others 1.7 Select, and check for faults, equipment and/or attachments for work activities 1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Operate hydraulic excavator	2.1 Carry out start-up, park, shutdown and secure equipment procedures 2.2 Coordinate activities with others at the site prior to commencing, during, and on completion of the work activity 2.3 Walk excavator and position for operation 2.4 Select and modify the operating technique to appropriately meet changing work conditions 2.5 Monitor and manage equipment performance using indicators, and ensure efficiency of operations 2.6 Act on or report monitoring systems and alarms 2.7 Distribute bulk materials into materials handling equipment considering load limits, and ensuring equipment stability 2.8 Side cast bulk materials 2.9 Continuously monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment 2.10 Complete the work plan, within the operating capacities of the equipment
3. Carry out operator maintenance	3.1 Prepare machine for maintenance 3.2 Conduct inspections and fault finding procedures 3.3 Carry out scheduled maintenance tasks 3.4 Return equipment to service 3.5 Process written maintenance records
4. Carry out housekeeping activities	4.1 Clear work area and dispose of or recycle materials 4.2 Manage and/or report hazards, and maintain a safe working environment 4.3 Process written records

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

No equivalent unit

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 RIIMPO301D Conduct hydraulic excavator operations

Modification History

Release	Comment
1	This unit replaces RIIMPO301C Conduct hydraulic excavator operations. Performance Criteria amended to make requirements more explicit; manoeuvring, driving and parking up added; operator maintenance element added.
2	Removed repetition in Performance Criteria; editorial corrections; modification History inserted.
3	Editorial corrections; amend reference to Licensing requirements in Unit Application.
4	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.

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 hydraulic excavator operations including:
 - conducting prestart checks prior to commencing operations and shutdown procedures on completion of operations
 - carrying out vehicle refuelling requirements and procedures
 - applying safe work practices and identifying and reporting all potential hazards, risks and environmental issues
 - applying problem solving and troubleshooting techniques
 - conducting bucket loading and discharge
 - side casting bulk materials
 - distributing bulk materials into materials handling equipment
 - inspection and preparation of work area
 - conducting equipment positioning

- works effectively with others to undertake and complete hydraulic excavator operations that meets all of the required outcomes including:
 - using a range of communications techniques and equipment to convey information to others
 - maintaining written and verbal reporting requirements and procedures
 - communicates with others in and around the trench before commencing work, during and on completion of the work
- demonstrates completion of conducting hydraulic excavator operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - driving and operating the excavator for operations
 - adjusting equipment operations to suit site conditions
 - walking the machine in a straight line
 - jump turning the machine
 - connecting auxiliary hydraulic lines and buckets/attachments
 - cleaning the undercarriage out as needed
 - keeping clear of obstacles and not running over items
 - effectively using the heel of the bucket
 - correctly shutting down and parking the excavator equipment

Knowledge Evidence

The candidate must demonstrate knowledge of the following when conducting hydraulic excavator operations:

- complying with worksite inspection requirements
- applying signage and barricade requirements
- communicating and performing isolation procedures
- identifying equipment processes, technical capability and limitations
- identifying, interpreting and using geological and technical data (basic)
- being prepared for fire/accident/emergency
- identifying signs of operator fatigue and how it should be managed
- applying site quality requirements
- applying operational, maintenance and basic diagnostics
- completing housekeeping activities

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**

Links

Companion Volume implementation guides are found in VETNet -

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