



**Australian Government**

# **RIIMPO303D Conduct rope shovel operations**

**Release: 4**

# RIIMPO303D Conduct rope shovel operations

## Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                      |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | This unit replaces RIIMPO303A Conduct rope shovel operations. Performance Criteria amended to make requirements more explicit; manoeuvring, driving and parking up added; operator maintenance element added.                                                                                                |
| 2       | Modification History information inserted.                                                                                                                                                                                                                                                                   |
| 3       | Knowledge Evidence amended; removed repetition in Performance Criteria; 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 develops a participant's skills and knowledge required to conduct rope shovel 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

Metalliferous mining

Extractive

## Elements and Performance Criteria

|                                                |                                                                                                                                                                                                                                                                                |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Plan and prepare for rope shovel operations | <p>1.1 Access, interpret and apply rope shovel documentation and ensure the work activity is compliant</p> <p>1.2 Obtain, read, interpret, clarify and confirm work requirements before proceeding</p> <p>1.3 Identify and address risks, hazards and environmental issues</p> |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | <p>and implement control measures</p> <p>1.4 Select and wear personal protective equipment appropriate for work activities</p> <p>1.5 Select, and check for faults, equipment and/or attachments for work activities</p> <p>1.6 Position or move cable towers, power lines and/or crossovers to location according to work plan, ensuring safety of operator and other personnel</p> <p>1.7 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency</p>                                                                                                                                                                                                                                                                                                                                                             |
| 2. Operate shovel                       | <p>2.1 Carry out start-up, park, shutdown and secure equipment procedures</p> <p>2.2 Coordinate activities with others at the site prior to commencing, during, and on completion of the work activity</p> <p>2.3 Monitor and manage equipment performance using indicators and alarms, and ensure efficiency of operation</p> <p>2.4 Act on or report monitoring systems and alarms</p> <p>2.5 Drive and operate shovel smoothly, with correct reach angle, and ensure optimum bucket load without overload or strain on shovel</p> <p>2.6 Continually monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment</p> <p>2.7 Complete the work plan, within the operating capacities of the equipment</p>                                                                                                         |
| 3. Dig and load trucks with rope shovel | <p>3.1 Position and set up shovel for safe, efficient digging</p> <p>3.2 Determine and maintain depth of bench, ensure optimum use of bucket capacity</p> <p>3.3 Set and monitor bucket penetration and ensure optimum bucket load and to minimise overload or strain on shovel</p> <p>3.4 Walk shovel and re-position for safe and efficient operation</p> <p>3.5 Communicate with driver and direct truck positioning, and ensure safe loading operation</p> <p>3.6 Load material on truck, and ensure bucket clears side of truck and is not swung over truck cabin</p> <p>3.7 Ensure material is placed in the centre of truck tray and does not exceed truck load limit</p> <p>3.8 Re-position shovel, and ensure safety of other operations personnel, property and equipment</p> <p>3.9 Keep floor clear and level and remove spillages</p> |

|                                    |                                                                                                                                                                                                          |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    | 3.10 Park shovel in safe area, on flat, level ground at end of operation                                                                                                                                 |
| 4. Carry out operator maintenance  | 4.1 Prepare machine for maintenance<br>4.2 Conduct inspection and fault finding<br>4.3 Carry out scheduled maintenance tasks<br>4.4 Return machine to service<br>4.5 Process written maintenance records |
| 5. Conduct housekeeping activities | 5.1 Clear work area and dispose of or recycle materials<br>5.2 Manage and/or report hazards, and maintain a safe working environment<br>5.3 Process 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 RIIMPO303D Conduct rope shovel operations

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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 rope shovel operations, including:
  - conducting prestart checks prior to commencing operations and shutdown procedures on completion of operations
  - carrying out vehicle refuelling requirements and procedures
  - driving and operating the equipment to site conditions
  - 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
  - conducting equipment positioning
  - selecting and using the required tools and equipment
  - applying lifting techniques
  - working safely around other machines and personnel

- works effectively with others to undertake and complete rope shovel operations that meet 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
- demonstrates completion of conducting rope shovel operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
  - driving and operating the rope shovel for operations
  - adjusting equipment operations to suit site conditions
  - positioning and setting up shovel
  - walking the machine in a straight line
  - repositioning shovel
  - correctly shutting down and parking the rope shovel equipment

## Knowledge Evidence

The candidate must demonstrate knowledge of the following when conducting rope shovel operations:

- 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
- apply loading techniques
- interpreting plans, reports, maps and specifications
- 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

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