



Australian Government

RIICBS317 Conduct road maintenance operations

Release: 1

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Modification History

This unit replaces RIICBS208D Conduct road maintenance operations. Minor endorseable amendments have been made to Elements, Performance Criteria, Foundation Skills, Performance Evidence and Knowledge Evidence to better reflect current industry practices and clarify training outcomes.

Application

This unit describes the skills and knowledge required to conduct road maintenance operations in civil construction.

It applies to those working in operational roles. The individual is generally a skilled operator and may provide theoretical advice and support a team.

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

Civil construction

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to conduct road maintenance operations	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply road maintenance operations documentation and confirm the work activity is compliant 1.3 Identify environmental issues and potential hazards, and assess and address risks within scope of own role and according to workplace procedures 1.4 Select and wear personal protective equipment required for work activities 1.5 Confirm and comply with environmental protection, safety and traffic management signage requirements 1.6 Select plant, tools and equipment to carry out tasks and check for faults within scope of own role 1.7 Obtain and interpret emergency procedures and identify steps required in case of fire, accident and other

ELEMENT	PERFORMANCE CRITERIA
	emergencies
2. Set up road maintenance unit	2.1 Carry out start-up, park, shutdown and secure equipment procedures 2.2 Check operating components of the vehicle for serviceability 2.3 Check tank for prevention of contamination 2.4 Fill tank with the materials required for maintenance operations 2.5 Determine standard mix of emulsion and type of asphalt as required for application 2.6 Add vehicle attachments as required
3. Repair damaged surfaces	3.1 Position vehicle forward of the damaged areas to be repaired 3.2 Clean dust and debris from area to be repaired 3.3 Select equipment required to repair defective area 3.4 Prepare defective area for resurfacing or filling 3.5 Conduct, control and monitor resurfacing and filling of the damaged area as required 3.6 Finish repaired surface ready for use 3.7 Measure, calculate and record material quantities and additives for each site
4. Carry out operator maintenance	4.1 Conduct fault finding inspections 4.2 Maintain equipment and the asphalt storage hopper 4.3 Carry out routine operational servicing and lubrication tasks 4.4 Complete written equipment condition reports and records
5. Clean up	5.1 Clear work area and dispose of and recycle materials as required according to workplace procedures and environmental requirements 5.2 Clean, check, perform maintenance on in scope of own role, and store plant, tools and equipment 5.3 Carry out housekeeping to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Reading	Identifies and interprets information from workplace procedures, documentation, legislation and regulations
Oral communication	Uses a range of communication techniques and systems to communicate with others

Unit Mapping Information

Supersedes and is equivalent to RIICBS208D Conduct road maintenance operations.

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 RIICBS317 Conduct road maintenance operations

Modification History

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit; including evidence of the ability to:

- conduct road maintenance operations on at least two occasions, including maintaining at least 50m² of road surface defects.

During the above, the candidate must:

- load and mix the specified materials
- apply all of the road maintenance unit equipment
- repair the damaged areas to specification
- locate and apply legislation, documentation, policies and procedures required for conducting road maintenance operations
- position vehicles and equipment as required
- work with others to undertake and complete the road maintenance operations that meets the required outcomes, including:
 - organising work activities to meet all task requirements
 - communicating with others to receive and clarify work instructions
 - using a range of communication techniques and systems
 - using signage to advise others of work activity and exclusion zone
- identify, report and record hazards and risks
- complete records of repair work undertaken and materials used for each site
- clean, check, perform maintenance on and store equipment
- complete housekeeping activities.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- on site processes and responsibilities relating to site isolation and traffic control
- processes for calculating material requirements, application rates and travel speed
- safety data sheet (SDS) compliance processes

- key components of job safety analyses (JSAs)/job safety environmental analyses (JSEAs)/safe work method statements (SWMSs)
- key legislation for conducting road maintenance operations
- key policies, procedures and established requirements for conducting road maintenance operations, including those for:
 - site and equipment safety
 - work quality
 - environmental protection, including waste disposal and recycling
 - bituminous surfacing operations
 - cleaning and repairing defective areas
 - housekeeping
 - operating and maintaining equipment
- key factors affecting work activities described in performance evidence above, including:
 - equipment types, characteristics, technical capabilities and limitations
 - bitumen/asphalt repair procedures
 - bituminous materials and their characteristics
 - resource requirements
 - pavement defects
 - processes for heating bitumen.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
 - road maintenance operating equipment
 - personal protective equipment
- be conducted in a safe environment; and,
- be assessed in context of this sector's work environment; and,
- be assessed in compliance with legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.
- Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sectors workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Assessor Requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory competency standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing a high level of RII training product knowledge
- having an understanding and knowledge of legislations and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence as outlined in this unit of competency, and
- the minimum years of current** work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.
- It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must hold the relevant vocational competencies and have current industry skills directly relevant to the training and assessment being provided and must work alongside a trainer and/or assessor to conduct the assessment. This means the industry subject matter expert should hold the unit being assessed (or an equivalent unit), and must also demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

Industry sector	AQF indicator level***	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure	1	1 year
	2	2 years
Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure	3-6	3 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.
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*Guidance on simulated environments has been stipulated in the RII Companion Volume Implementation Guide located on VETNet.

**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 a minimum number of site assessments as determined by the relevant industry sector, across various locations.

*** While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

Links

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