



Australian Government

RIICBS310D Conduct patching operations

Release: 2

RIICBS310D Conduct patching operations

Modification History

Release	Comment
1	This unit replaces RIICBS310A Conduct patching operations
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 conduct patching operations in Civil Construction.

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

Civil construction

Elements and Performance Criteria

1. Plan and prepare for patching operations	1.1 Access, interpret and apply patching operations 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 for work activities 1.5 Obtain, interpret and implement traffic management signage requirements 1.6 Select and check for faults plant, tools and equipment to carry
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	out tasks 1.7 Confirm and apply environmental protection and safety requirements 1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Set up patching truck	2.1 Carry out pre-operational checks 2.2 Check tank for prevention of contamination 2.3 Fill tank with the required materials to perform repair operations 2.4 Determine standard mix of emulsion ready for application to surfaces
3. Repair damaged surfaces	3.1 Carry out start-up, park, shutdown and secure equipment procedures 3.2 Drive and operate truck 3.3 Position truck according to the range of the boom 3.4 Position boom manually or automatically over the damaged surface to be repaired 3.5 Blow area to be repaired free of dust and debris 3.6 Apply patching material to the defective area under the pressure of compressed air 3.7 Measure, calculate and record material quantities and additives for each site 3.8 Conduct, control and monitor patching work and ensure that materials are placed to specification
4. Carry out operator maintenance	4.1 Prepare machine for maintenance 4.2 Conduct inspection and fault finding 4.3 Carry out scheduled maintenance tasks 4.4 Process written maintenance records
5. Clean up	5.1 Clear work area and dispose of or recycle materials 5.2 Clean, check, maintain and store plant, tools and equipment 5.3 Carry out housekeeping requirements

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

RIICBS310A Conduct patching 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 RIICBS310D Conduct patching 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 applicable legislation, documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient completion of patching operations including:
 - select and use relevant tools and equipment safely
 - identify and report on hazards related to the worksite and work activity
- works effectively with others to undertake and conduct patching operations that meet all of the required outcomes including:
 - organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication techniques and systems such as signage to advise others of work activity and exclusion zone
- demonstrates completion of conducting patching operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - completion of patching operations for a minimum of 20m² of road surface defects by loading and mixing the specified materials and patching the damaged areas to specification
 - completion of all records of patching work undertaken and materials used for each site

Knowledge Evidence

The candidate must demonstrate knowledge in conducting patching operations through:

- accessing, interpreting and applying legislative, organisation and site requirements and procedures for:
 - site and equipment safety requirements
 - bitumen patching
 - identifying pavement defects
 - housekeeping
- applying project quality requirements
- complying with the site and equipment safety requirements
- using bituminous materials and understanding their characteristics
- understanding aggregate properties and conformance
- understanding equipment types, characteristics, technical capabilities and limitations
- complying with the operational, maintenance and basic diagnostic procedures
- complying with site isolation and traffic control responsibilities and authorities
- understanding the processes for the calculation of material requirements and application rates
- safety data sheets and materials handling methods
- preparing and/or implementing JSAs/JSEA/safe work method statements

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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