Assessment Requirements for RIICWD524E Prepare design of spray seal surfacing

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Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 6.0.

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:

- prepare spray seal surfacing designs on at least two occasions, including:
  - carrying out risk assessments
  - evaluating design options for spray seal surfacing
  - interpreting and analysing data, including calculating:
    - areas
    - volumes
    - densities
    - mass
    - percentages
    - grades
- determining and applying binder application rates and aggregate spread rates
- determining traffic category to be used in sprayed seal surfacing design
- preparing spray seal surfacing design plans
- preparing cost estimates
- obtaining design approval
- participating in performance reviews of design processes
- providing clarification and advice to personnel implementing the design
- maintaining design and cost records
- validating designs.

During the above, the candidate must:

- locate and apply required legislation, documentation, policies and procedures
- implement the requirements, procedures and techniques to prepare sprayed seal surfacing designs, including:

- accessing and interpreting required documentation, including:
    - plans
    - drawings
    - specifications
    - design briefs
    - engineering surveys
    - geotechnical information
    - hydrological, meteorological, cultural and heritage data
    - selection data for spray seal surfacing
  - applying binder selection criteria, including:
    - bitumen
    - bituminous emulsion
    - polymer modified binders
- work with others to prepare sprayed seal surfacing designs in a way that meets required outcomes, including:
  - complying with reporting requirements and procedures
  - communicating with others to receive and clarify work instructions
  - communicating with others to coordinate work 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:

- applying legislative, organisation and site requirements and procedures for:
  - Australian and other relevant Standards
  - cultural and heritage management
  - design approvals and reviews
  - environmental management
  - geotechnical management
  - hydrological and meteorological management
  - incident and emergency response
  - performance reviews
  - quality management
  - risk assessment and management
  - statutory compliance
  - surveying
  - system close outs
  - work health and safety
  - workplace recording and reporting

- types, characteristics, technical capabilities and limitations of materials, plant and equipment required for spray seal surfacing design and construction
- principles and techniques for preparing detailed spray seal surfacing designs, including:
  - techniques for evaluating potential site hazards, constraints and conditions
  - techniques for identifying and evaluating design options
  - data analysis techniques, including calculating:
    - areas
    - volumes
    - densities
    - mass
    - percentages
    - grades
  - cost estimation techniques
  - requirements of a design plan
  - design review and validation techniques
  - performance review techniques
  - techniques for advising on design implementation
- principles and techniques for leading and coordinating teams.

Assessment Conditions

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

- include access to:
  - designs for spray seal surfacing
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes 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 outcomes of this unit occur in an office-based setting, assessment may occur in a simulated work 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.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/Australian Quality Training Framework 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 the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence 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 have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must 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.	

*Guidance on simulated environments has been stipulated in the 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

Companion Volume Implementation Guide is found on VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272