



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **RIICBS205A Roll aggregate in sprayed sealing operations**

**Release: 1**

## RIICBS205A Roll aggregate in sprayed sealing operations

### Modification History

Not applicable.

### Unit Descriptor

This unit covers the rolling of aggregate in sprayed sealing operations in the civil construction industry. It includes planning and preparing, preparing for rolling of aggregate, rolling aggregate, and cleaning up. 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.

### Application of the Unit

This unit is appropriate for those working in an assistant role at worksites within:

- Civil construction

### Licensing/Regulatory Information

Refer to Unit Descriptor.

### Pre-Requisites

Not applicable.

### Employability Skills Information

This unit contains employability skills.

### Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare	1.1. Access, interpret and apply <b>compliance documentation</b> relevant to the work activity 1.2. Obtain and confirm <b>safety requirements</b> from the <b>site</b> safety plan and organisational policies and procedures, and apply to the allotted task 1.3. Identify, obtain and implement signage requirements from the project <b>traffic</b> management plan 1.4. Select plant, <b>tools and equipment</b> to carry out tasks consistent with the requirements of the job, check for serviceability and rectify or report any faults 1.5. Identify <b>environmental protection requirements</b> from the project environmental management plan, and confirm and apply to the allotted task
2. Prepare for rolling of aggregate	2.1. Carry out pre-operational checks in accordance with manufacturer's or company procedures 2.2. Put in place appropriate traffic control measures for spreading operation 2.3. Inspect site and plan for potential hazards 2.4. Inflate tyres to correct pressure 2.5. Develop and follow work schedule
3. Roll aggregate	3.1. Operate roller to required <b>rolling patterns to roll aggregate</b> 3.2. Monitor quality of <b>surface</b> and report <b>faults</b> 3.3. Maintain safe distance from other vehicles 3.4. Control rolling speed to suit operations
4. Clean up	4.1. Clear work area and dispose of or recycle <b>materials</b> in accordance with project environmental management plan 4.2. Clean, check, maintain and store plant, tools and equipment

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

Specific skills are required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following, as required to roll aggregate in sprayed sealing operations:

- apply legislative, organisation and site requirements and procedures for rolling aggregate in sprayed sealing operations
- organise work activities
- select and use relevant tools and equipment safely
- identify and report on hazards related to the worksite and work activity
- communicate effectively to receive and clarify work instructions

### Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes knowledge of the following, as required to roll aggregate in sprayed sealing operations:

- site and equipment safety requirements
- self propelled multi wheel pneumatic tyred roller or combination roller operations
- sprayed sealing operations
- aggregate types and sizes
- primerseal and seal materials
- equipment types, characteristics, technical capabilities and limitations
- operational, maintenance and basic diagnostic procedures
- site isolation and traffic control responsibilities and authorities
- processes for the calculation of material requirements, application rates and travel speed
- materials safety data sheets and materials handling methods
- project quality requirements
- civil construction terminology
- JSAs/safe work method statements

## Evidence Guide

<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p><b>Overview of assessment</b></p>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following:</p> <ul style="list-style-type: none"> <li>• knowledge of the requirements, procedures and instructions for rolling aggregate in sprayed sealing operations</li> <li>• implementation of requirements, procedures and techniques for the safe, effective and efficient rolling of aggregate in sprayed sealing operations</li> <li>• working with others to undertake and complete the rolling of aggregate in sprayed sealing operations that meets all of the required outcomes</li> <li>• consistent timely completion of rolling of aggregate in sprayed sealing operations that safely, effectively and efficiently meets the required outcomes</li> <li>• a minimum of three separate projects of at least 5000m<sup>2</sup> each are to be rolled</li> <li>• a minimum of three restricted access projects selected from a car park, sub-division, turning lane, intersection, corner and a cul-de-sac are to be rolled</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<ul style="list-style-type: none"> <li>• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills.</li> <li>• Assessment of this competency requires typical resources normally used in a resources and</li> </ul>

	<p>infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances.</p> <ul style="list-style-type: none"> <li>• The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.</li> <li>• Customisation of assessment and delivery environment to sensitively accommodate cultural diversity.</li> <li>• Aboriginal people and other people from a non English speaking background may have second language issues.</li> <li>• Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required.</li> </ul>
<b>Method of assessment</b>	<p>This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of the candidate's required knowledge</li> <li>• observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>• consistent achievement of required outcomes</li> </ul> </li> <li>• first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• working with others to undertake and complete the rolling of aggregate in sprayed sealing operations</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>



## Range Statement

<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.</p>	
<p><b>Relevant compliance documentation</b> may include:</p>	<ul style="list-style-type: none"> <li>• legislative, organisational and site requirements and procedures</li> <li>• manufacturer's guidelines and specifications</li> <li>• Australian standards</li> <li>• Employment and workplace relations legislation</li> <li>• Equal Employment Opportunity and Disability Discrimination legislation</li> </ul>
<p><b>Safety requirements</b> may include:</p>	<ul style="list-style-type: none"> <li>• OHS requirements in accordance with state or territory legislation and regulations, organisational safety policies and procedures, and project safety plan including protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, use of First Aid equipment, hazard control and hazardous materials and substances</li> <li>• safe parking practices including ensuring access ways are clear, equipment/machinery is away from overhangs and refuelling sites, safe distance from excavations, and secured from unauthorised access or movement</li> <li>• safe operating procedures including recognising and preventing hazards associated with uneven/unstable terrain, trees, pits, poles, dirt mounds, overhead service lines, bridges, surrounding buildings, obstructions, structures, facilities, dangerous materials, recently filled trenches, other machines, personnel, traffic control, working in proximity to others, worksite visitors and the public</li> <li>• recognising hazards and risks including to uneven/unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials</li> <li>• emergency procedures including extinguishing fires, organisational First Aid requirements and</li> </ul>



	evacuation
<b>Site</b> locations may include:	<ul style="list-style-type: none"> <li>• car parks</li> <li>• airport runways</li> <li>• container yards</li> <li>• hard stands</li> <li>• footpaths</li> <li>• bikeways</li> <li>• roadways</li> </ul>
<b>Traffic</b> conditions may include:	<ul style="list-style-type: none"> <li>• congested urban environments</li> <li>• low traffic rural areas</li> <li>• off-road un-trafficked areas</li> <li>• buildings</li> <li>• parking sites</li> <li>• pedestrian areas</li> </ul>
<b>Tools and equipment</b> may include:	<ul style="list-style-type: none"> <li>• self propelled multi wheel pneumatic tyred rollers</li> <li>• combination rollers</li> </ul>
<b>Environmental protection requirements</b> may include:	<ul style="list-style-type: none"> <li>• organisational/project environmental management plan</li> <li>• waste management</li> <li>• water quality protection</li> <li>• noise</li> <li>• vibration</li> <li>• dust and clean-up management</li> </ul>
<b>Rolling patterns</b> may include:	<ul style="list-style-type: none"> <li>• rolling as close to aggregate spreader as is safe for first run</li> <li>• rolling in a straight line</li> <li>• rolling in direction of traffic flow unless instructed otherwise</li> <li>• rolling to pre-determined pattern ensuring uniform coverage of full length and width of cover</li> <li>• maintaining required speed (starts slow then increases speed, smooth start-up and stop)</li> <li>• not turning or stopping on newly sealed surface</li> </ul>
<b>Roll aggregate</b> may include:	<ul style="list-style-type: none"> <li>• the use of a self propelled, multi wheel pneumatic tyred roller and may include the use of a drag broom</li> </ul>
<b>Surface</b> may include:	<ul style="list-style-type: none"> <li>• primerseal</li> <li>• seal</li> </ul>
<b>Faults</b> in the surface may include:	<ul style="list-style-type: none"> <li>• missed areas</li> <li>• light or heavy spread areas</li> </ul>

	<ul style="list-style-type: none"><li>• corrugations</li><li>• uncovered binder</li><li>• binder pick up</li></ul>
<b>Materials</b> may include:	<ul style="list-style-type: none"><li>• primer seals</li><li>• seals</li><li>• aggregates</li></ul>

## **Unit Sector(s)**

Bituminous Surfacing

## **Competency field**

Refer to Unit Sector(s).

## **Co-requisite units**

Not applicable.