



Australian Government

Department of Education, Employment and Workplace Relations

RIICBS204A Conduct aggregate spreader box operations

Release: 1

RIICBS204A Conduct aggregate spreader box operations

Modification History

Not applicable.

Unit Descriptor

This unit covers the conduct of aggregate spreader box operations in the civil construction industry. It includes planning and preparing, setting up and disconnecting the spreader box, spreading aggregate, performing hand spreading and spotting duties, 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.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Obtain and confirm safety requirements from the site safety plan and organisational policies and procedures, and apply to the allotted task 1.3. Identify, obtain and implement signage requirements from the project traffic management plan 1.4. Place cut on/cut off paper in preparation for bitumen spraying and at the end of the spray run 1.5. Select plant, tools and equipment to carry out tasks consistent with the requirements of the job, check for serviceability and rectify or report any faults 1.6. Identify, confirm and apply environmental protection requirements from the project environmental management plan
2. Set up and disconnect spreader box	2.1. Connect equipment to the truck in accordance with the manufacturer's and site requirements prior to operation 2.2. Set spreader box to required width 2.3. Check spreader box operation to ensure correct operation 2.4. Check spreader box calibration as conforming to job specifications 2.5. Disconnect spreader box after operation in accordance with manufacturer's recommended procedures 2.6. Check truck to ensure that it is completely free of spreader and the spreader has all connecting parts correctly positioned for transportation or further use
3. Spread aggregate	3.1. Establish communication with the truck driver 3.2. Check and record size of aggregate prior to spreading 3.3. Remove cut on/cut off paper in preparation for aggregate spreading 3.4. Coordinate opening and closing of the

	spreader box accurately with speed and application of aggregate 3.5. Instruct driver to adjust speed, line or angle of body as required to suit operations 3.6. Monitor spread rate and make adjustments to ensure aggregate is spread to specifications 3.7. Complete spreading within specifications
4. Perform hand spreading and spotting duties	4.1. Check and correct uniformity of run as required 4.2. Use correct hand spreading method to specifications
5. Clean up	5.1. Clear work area and dispose of or recycle materials in accordance with project environmental management plan 5.2. 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 conduct aggregate spreader box operations:

- apply legislative, organisation and site requirements and procedures for conducting aggregate spreader box 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 conduct aggregate spreader box operations:

- site and equipment safety requirements
- sprayed seal types
- aggregate types and sizes
- spreader box operations
- equipment types, characteristics, technical capabilities and limitations
- operational, maintenance and basic diagnostic procedures for the spreader box
- 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

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.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	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: • knowledge of the requirements, procedures and instructions for conducting aggregate spreader box operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of conduct of aggregate spreader box operations • working with others to conduct aggregate spreader box operations that meets all of the required outcomes • consistent timely completion of aggregate spreader box operations that safely, effectively and efficiently meets the required outcomes • a minimum of four transverse paper joints are placed, picked up and disposed of • a minimum of six truck loads of at least two different aggregate are spread to the design application rate. It must include three runs of wings, tapers and turning lanes on at least three sites varying in complexity
Context of and specific resources for assessment	• 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. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection

	and use of resources for particular worksites may differ due to the site circumstances. • 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. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • 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.
Method of assessment	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: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete aggregate spreader box operations
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

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.

Relevant compliance documentation may include:	• legislative, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Site locations may include:	• car parks • airport runways • container yards • hard stands • footpaths • bikeways • roadways
Traffic conditions may include:	• congested urban environments • low traffic rural areas • off-road un-trafficked areas • buildings • parking sites • pedestrian areas
Tools and equipment may include:	• manual spreader boxes • remote controlled spreader boxes (preferred method) • shovels • hand brooms • drag brooms • measuring equipment • calibration test equipment • ride on spreader boxes • spreader boxes with rollers
Environmental protection requirements may include:	• organisational/project environmental management plan • waste management

	• water quality protection • noise • vibration • dust and clean-up management
Spreader box operation may include:	• box is securely in place • there is no spillage over side of box or tailgate • gates work smoothly • aggregate flows smoothly
Aggregate spreading is to be:	• applied on a sprayed bituminous material
Monitor may include:	• spreading started and finished on cut on/cut off paper • correct speed • adjustment of tray angle to ensure smooth flow of aggregate • correct line followed • aggregate spread at a uniform rate • stones do not bounce or scatter • over spreading or under spreading is corrected • over spread and under spread areas are identified and repaired • blockages in spreader are cleared quickly or truck directed off spreading area • areas where sprayer has missed marked and reported
Materials may include:	• aggregate • cut on/cut off paper • sprayed seal including seals, primers seals and emulsion seals including gritting of primes, bleeding seals and rack in seals

Unit Sector(s)

Bituminous Surfacing

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.