



Australian Government

Department of Education, Employment and Workplace Relations

FDFSUG101A Install pre-ballast

Release: 1

FDFSUG101A Install pre-ballast

Modification History

New Unit based on *SUGSPPB1A Prepare pre-ballast*.

Unit Descriptor

This unit describes the outcomes required to lay pre-ballast in preparation for laying railway track for a cane haulage system.

Application of the Unit

This unit has application in the sugar milling industry.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

There are no pre-requisite units for this competency standard.

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 work	1.1 The location and scope of work are identified 1.2 Materials required to complete the work are confirmed and available 1.3 Equipment status is confirmed 1.4 Personal protective equipment is selected, correctly fitted and used 1.5 Safety procedures are followed to confirm that work is clearly signed and relevant authorities are advised that work is in progress 1.6 Site is inspected prior to commencing work to identify and remove potential hazards
2. Set out base and run pre-ballast	2.1 Base/foundation is set out from off-set pegs to centre line and width for ballast according to track design and specifications 2.2 Pre-ballast is applied evenly to meet specified thickness 2.3 Pre-ballast is compacted to meet specifications
3. Complete work	3.1 The construction area is cleared of debris 3.2 Unused materials are stored as required 3.3 Tools, plant and equipment is cleaned and stored as required

Required Skills and Knowledge

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

Required skills include:

Ability to:

- interpret workplace information such as drawings and related instructions to identify the project requirements
- estimate material requirements for a given project
- assess operational status of pre-ballast laying equipment
- operate pre-ballast equipment to lay and compact materials to the required location and thickness
- identify faulty operation of equipment
- identify unacceptable work outcomes
- take corrective action in response to abnormal or unacceptable performance
- use appropriate communication methods and equipment
- report and/or record corrective action as required
- maintain work area to meet housekeeping standards

Required knowledge includes:

Knowledge of:

- relevant state OHS legislation, standards and codes of practice relating to work responsibilities
- understanding of the steps involved in constructing/repairing track
- functions and basic operating principles of pre-ballast laying equipment
- the impact of the pre-ballast base on related track laying operations
- the quality requirements of the foundation including the materials used, thickness and compactness of foundation
- common problems related to laying pre-ballast and corrective action required
- traffic control signage, communication and procedures
- safe work procedures including awareness of health and safety hazards related to pre-ballast laying and associated control measures and safe manual handling procedures
- purpose and limitations of protective clothing and equipment
- environmental issues and controls
- requirements to liaise/advise related work areas
- housekeeping standards for the work area
- reporting and recording systems

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	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • estimate material requirements for a given project • operate pre-ballast equipment to lay and compact materials to the required location and thickness • take corrective action in response to abnormal or unacceptable performance.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • Site and related project information • Relevant codes of practice and industry standards • Spreader, roller and related equipment • Materials handling equipment as required • Operating procedures and related advice on equipment operation • Base materials - typically gravel and stone • Personal protective clothing and equipment • Communication systems and equipment • Housekeeping standards and procedures • Workplace information recording systems, requirements and procedures.
Method of assessment	Other units of competency relevant to the work role should be assessed in conjunction with this unit.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

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.

Policies and procedures	Work is carried out in accordance with company policies and procedures, licensing requirements, legislative requirements, codes of practice and industrial awards and agreements.
Codes of Practice	Codes of practice include the Sugar Milling Operations Industry Code of Practice and sugar industry codes of practice related to cane railway and transport operations.
Workplace information	Workplace information can include: • Standard Operating Procedures (SOPs) and • manufacturer's specifications.
Cane railway networks	Cane railway network features and their characteristics may include: • main and branch lines • yards • sidings • loops • dump points and pads • and road transport delivery points.
Information systems	Information systems may be print or screen based.
Equipment	Equipment may include: • materials handling equipment such loaders and jacks, • spreader • roller and • compacting equipment.
Equipment status	Confirming equipment status involves • conducting relevant pre-start checks • confirming that all safety guards and equipment are ready and safe to operate.
Teamwork	Work may require the ability to work within a team environment.
Communication	Communication methods may include:

	• use of two-way radios.
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Unit Sector(s)

Sugar Milling