



Australian Government

Department of Education, Employment and Workplace Relations

FDFSUG206A Drive a cane locomotive

Release: 1

FDFSUG206A Drive a cane locomotive

Modification History

New Unit based on *SUGTDCL2A Drive a cane locomotive*.

Unit Descriptor

This unit describes the outcomes required to prepare, start-up, operate and shut down a cane locomotive. Locos may or may not be fitted with break vans and may be single or double-headed. For locomotives in a master-slave configuration see *FDFSUG309A Drive a master-slave locomotive*.

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 Prepare for locomotive operation	1.1 Health and safety hazards / maintenance requirements are identified and reported to appropriate personnel according to workplace reporting procedures 1.2 Workplace records are checked to confirm operational status 1.3 Locomotive and related equipment is inspected to confirm status and pre-start checks and warm up procedures are conducted 1.4 Pre-departure checks are conducted to confirm locomotive and related equipment meets operating standard 1.5 Appropriate end of train tail flags and brake vans are fitted as required
2 Start, operate and monitor locomotive	2.1 Authority to move locomotive is obtained 2.2 Locomotive is operated in accordance workplace procedures and manufacturer's specifications to meet transport requirements 2.3 Locomotive, rake and related equipment are monitored to maintain optimum operating condition and identify faults or defects 2.4 Operation is monitored against schedule and communicated as required 2.5 Housekeeping standards are maintained
3 Analyse and respond to abnormal conditions and performance	3.1 Hazardous situations and conditions are recognized and appropriate action taken to maintain safety of personnel and equipment 3.2 Faults are assessed to determine risk of injury to personnel or damage to equipment 3.3 Corrective action is taken in accordance with workplace procedures in response to Hazards, abnormal or unacceptable equipment condition or performance 3.4 Emergency procedures are implemented as required according to workplace procedures and manufacturer's recommendations
4 Prepare for shift handover	4.1 Workplace records are maintained in accordance with statutory requirements and workplace procedures 4.2 Handover is carried out according to workplace procedure 4.3 Changeover drivers are aware of locomotive and related equipment status, track conditions and incidents at completion of handover
5 Shut down locomotive	5.1 Locomotive is parked in the appropriate location 5.2 Locomotive is shut down and secured in accordance with workplace procedures
6 Complete work	6.1 Workplace information is recorded according to workplace

ELEMENT**PERFORMANCE CRITERIA**

recording requirements

6.2 Tools, plant and equipment are cleaned and stored/parked as required

6.3 Defects and faults are identified and reported according to workplace procedures

Required Skills and Knowledge

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

Required skills include:

Ability to:

- access workplace information such as running slips to identify driving requirements
- select, fit and use personal protective clothing and/or equipment
- prepare the locomotive and related equipment such as brake vans for operation including conducting visual inspection of equipment, pre-start checks and warm up procedures and pre-departure checks
- operate the locomotive and associated equipment such as brake vans according to work procedure to achieve work requirements including demonstrating manual and automatic control procedures
- monitor locomotive and equipment condition including monitoring operating status of the locomotive and related equipment and monitoring condition of bins in the rake
- take corrective action in response to abnormal or unacceptable quality of bins, rolling stock or equipment performance
- assess equipment faults to determine appropriate corrective action
- follow procedures to drop off and tag damaged bins including identifying an appropriate location, shunting bins and notifying appropriate personnel
- follow procedure to notify a locomotive breakdown
- communicate with the traffic officer and rail personnel as required
- use appropriate communication methods and equipment
- maintain workplace records
- 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
- safe work procedures including awareness of health and safety hazards related to driving a locomotive and associated control measures
- purpose and limitations of protective clothing and equipment
- functions and basic operating principles of a locomotive and related equipment such as brake vans including the layout and purpose of the principal mechanical, pneumatic and electrical systems and of all equipment components
- function of all instruments and controls
- safe operating capacities of equipment
- methods used to render equipment safe to inspect, maintain and/or clean including lock-out, tag-out and isolation procedures
- cane rail system layout to identify the location of points, signals and crossings including crossover of non-company rail lines

- options for responding to unplanned events such as derailments, breakdowns, accidents or track damage including an understanding of the impact of different options on efficient performance and safety issues when parking/dropping off damaged bins or locomotives
- safe operating conditions and speeds including awareness of typical conditions and situations that are hazardous and appropriate preventative action
- typical faults to be able to assess severity and risk in order to determine appropriate corrective action
- acceptable bin and rake condition
- communication procedures, methods and equipment including an understanding of warning devices and signals
- meaning of hand and audible signals, including use of lights
- procedures for responding to emergency situations including use of two-way radio system to report emergencies
- environmental issues and controls
- requirements to liaise/advise related work areas and personnel
- housekeeping standards
- reporting and recording systems and responsibilities

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: • prepare the locomotive and related equipment such as brake vans for operation • operate the locomotive and associated equipment such as brake vans • assess equipment faults to determine appropriate corrective action • communicate with the traffic officer and rail personnel • use appropriate communication methods and equipment • maintain workplace records.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • Locomotive and related equipment such as brake vans • Cane railway system • Relevant services and equipment required to carry out inspections, checks and monitoring • Workplace information including running slips and daily schedule, to advise of driving requirements • Operating procedures and related advice on equipment operation • 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.
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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) • manufacturer's specifications.
Hazard	Typical hazards include working with moving machinery, manual handling and working in exposed conditions.
Workplace documentation	Documentation and recording requirements may include: • marshalling strategy • documentation relating to the traffic schedule such as run slips, loco running sheets and log books • tags to identify damaged bins • maintenance request forms.
Visual inspection and pre-departure checks	Visual inspection may include checking: • wheels and braking equipment, hoses and fittings for signs of wear or damage • fuel, oil, water and coolant levels • emergency and safety equipment • condition of the rake Pre-departure checks may include checking: • lubrication system • water and oil leaks • brake testing • communications equipment • traction systems • battery charging

	• sand boxes • gear changes.
Cane transport network	Cane transport network features and their characteristics may include: • main and branch lines • yards • sidings • loops • dump points and pads.
Information systems	Information systems may be print or screen based.
Equipment	Equipment may include: • control systems • braking systems • manual and remote control systems • communication systems.
Equipment status	Confirming equipment status involves: • conducting relevant pre-start checks • determining equipment is ready and safe to operate.
Teamwork	Work may require the ability to work within a team environment.
Communication methods	Communication methods include: • use of two-way radios used in accordance with workplace requirements and state authority protocols • hand and audible signalling.

Unit Sector(s)

Sugar Milling.