



Australian Government

Department of Education, Employment and Workplace Relations

BCCPO3002B Conduct dozer operations

Release: 1

Modification History

Not Available

INTRODUCTION TO CONDUCT DOZER OPERATIONS

Unit Descriptor This unit specifies the competency required to conduct civil construction dozer operations. It includes the minimum criteria for competency assessment.

The unit covers planning and preparation for work, the conduct of operational checks, the safe and effective operation of the dozer for a range of mandatory tasks, the fitting, use and removal of attachments and operator maintenance activities.

Employability Skills The required outcomes described in this Unit of Competency contain applicable facets of employability skills. The Employability Skills Qualification Summary for the qualification in which this Unit of Competency is packaged will assist in identifying employability skill requirements.

Element

Performance Criteria

Elements define the essential outcomes of a unit of competency. Performance criteria specify the level of performance required to demonstrate achievement of the element.

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| 1 Plan and prepare | <ul style="list-style-type: none"> 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied to the allotted task 1.2 Safety requirements are obtained from the site safety plan and organisational policies and procedures, confirmed and applied to the allotted task 1.3 Signage requirements are identified and obtained from the project traffic management plan and implemented 1.4 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported 1.5 Environmental protection requirements are identified from the project environmental management plan, confirmed and applied to the allotted task |
| 2 Conduct machine pre-operational checks | <ul style="list-style-type: none"> 2.1 Pre-start, start up, park and shut down procedures are carried out in accordance with manufacturers' and/or site specific requirements 2.2 Dozer controls and functions, including implements or other |

- attachments, brakes and manoeuvrability are checked for serviceability and any faults are rectified or reported
- 3 Operate dozer
- 3.1 Site hazards associated with dozer operations are identified and safe operating techniques are used to minimise risk
- 3.2 Operating techniques for dozer are identified and applied to achieve optimum output in accordance with manufacturers' design specifications while achieving specified tolerances
- 3.3 Dozer is operated to work instructions in accordance with company operating procedures
- Select, remove and fit attachments
- Attachment is selected for the task
 - Attachment is removed and fitted according to manufacturers' manual and site requirements
 - Attachment is tested to ensure correct fitting and operation as specified in manufacturers' manual
 - Attachment is used in accordance with manufacturers' recommendations and design limits
 - Removed attachments are cleaned and stored in designated location
- 4 Relocate the dozer
- 4.1 Dozer is moved safely between work sites, observing relevant codes and traffic management requirements
- 4.2 Dozer is prepared for relocation in accordance with the manufacturers' specifications
- 5 Carry out machine operator maintenance
- 5.1 Dozer is safely parked, prepared for maintenance and shut down in accordance with manufacturers' manual and organisational requirements
- 5.2 Inspection and fault finding are conducted in accordance with manufacturers' specifications and/or organisational requirements
- 5.3 Defective parts are removed and replaced safely and effectively according to manufacturers' manual and organisational requirements
- 5.4 Regular programmed maintenance tasks are carried out in accordance with manufacturers' and/or organisational requirements
- 6 Clean up
- 6.1 Work area is cleared and materials disposed of or recycled in accordance with project environmental management plan
- 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers'

recommendations and standard work practices

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- A dozer is a self-propelled tracked or wheeled purpose designed machine with a blade mounted at the front end
- Dozers are to include tracked and may include wheeled
- Dozer tasks are to include stripping/spreading topsoil and materials, cut and fill, battering, stockpiling, bulk excavation, cutting drains, benching and backfilling
- Dozer tasks may include land clearing, track rolling, ripping, push loading, scrapers, towing equipment, working in tandem, winching, boxing, mixing materials and constructing fire breaks
- Attachments may include but not be limited to stick rakes, root rakes, push blade, angle blade, bull blade, power angle tilt blade, rippers, winch, tree pusher, cable plough, stump plough, power control unit and cable drum
- Operator maintenance is to include cleaning, authorised servicing and the monitoring, recording and reporting of faults. It may also include the conduct of authorised minor replacements and the provision of assistance to maintenance personnel during maintenance and repair activities

Safety (OH&S)

- OH&S requirements are to be in accordance with State or Territory legislation and regulations, organisational safety policies and procedures, and project safety plan. This may include 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
- Personal protective equipment is to include that prescribed under legislation, regulation and workplace policies and practices
- Safe operating procedures are to include but not be limited to recognising and preventing hazards associated with underground and overhead services, other machines, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Safe parking practices are to include but not be limited to ensuring access ways are clear, equipment/ machinery is away from overhangs and refuelling sites, safe distance from excavations, and secured from unauthorised access or

	<p>movement</p> <ul style="list-style-type: none"> • Hazards and risks may include but not be limited to uneven/unstable terrain, trees, fires, overhead and underground services, bridges, buildings, excavations, traffic, embankments, cuttings, structures and hazardous materials • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	<ul style="list-style-type: none"> • Environmental requirements are to include but are not limited to organisational/project environmental management plan, waste management, water quality protection, noise, vibration, dust and clean-up management
Quality Requirements	<ul style="list-style-type: none"> • Quality requirements may include but not be limited to dimensions, tolerances, standards of work and material standards as detailed in the project drawings, specifications and project documentation to meet client satisfaction
Statutory/Regulatory Authorities	<ul style="list-style-type: none"> • State/Regulatory Authorities may include Federal, State and Local Authorities
Materials	<ul style="list-style-type: none"> • Materials may include but are not limited to clays, silts, stone, gravel, mud, rock, sand, topsoil, timber, blended materials, organic materials, typical construction site materials/waste and bituminous mixes • Rock types may include metamorphic, igneous and sedimentary
Tools and equipment	<ul style="list-style-type: none"> • Tools and equipment are to include hand tools and maintenance equipment relevant to the particular dozer
Communications	<ul style="list-style-type: none"> • Communications are to include but not be limited to verbal instructions and fault reporting and may include two way radio, hand signals, mobile phone, site specific instructions, written instructions or instructions related to job/task • On site meeting processes may include notification/ scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	<ul style="list-style-type: none"> • Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, charts and hand drawings, memos, maps, material safety data sheets (MSDS) and diagrams or sketches

- Safe work procedures related to the operation of dozers on construction sites
- Regulatory/legislative requirements pertaining to dozer operations and the environment
- Manufacturers' specifications and instructions
- Organisation work specifications and requirements.
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan, OH&S regulations and State/Territory legislation applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- The conduct of dozer operations are to be performed in a minimum of two different soil types and are to include the mandatory tasks of:
 - stripping/spreading topsoil and materials
 - cut and fill
 - battering
 - stockpiling
 - bulk excavation
 - cutting drains
 - benching and backfilling
- The application of emergency procedures
- The conduct of authorised operator maintenance
- Communication and working effectively and safely with others

Relationship to other units

- Pre-requisite units are:
BCCCM1001C Follow OH&S policies and procedures
Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

A knowledge of

- Dozer types, characteristics, technical capabilities and limitations
- Basic principles of soil technology for civil works
- Site and equipment safety requirements
- Dozer techniques related to essential tasks
- Processes for interpreting drawings and sketches
- Operational, maintenance and basic diagnostic procedures
- Site isolation and traffic control responsibilities and

	<ul style="list-style-type: none"> authorities • Materials Safety Data Sheets and materials handling methods • Project quality requirements • Civil construction terminology • Methods of changing machine attachments • Safe operating techniques in all terrain • Basic earthworks calculations • Civil construction activity sequences of road construction, earthworks and drainage • Levelling techniques • JSA's/Safe work method statement •
The context of assessment	<ul style="list-style-type: none"> • The application of competency is to be assessed in the workplace or realistically simulated construction site • Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints • Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context • Assessment is to comply with relevant regulatory or Australian Standards requirements
Methods of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's Civil Construction Training Package and relevant NOHSC standards where they apply • Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge • Assessment must be by direct observation of tasks, with questioning on underpinning knowledge • Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge • Assessment may be applied under project related conditions (real or simulated) and require evidence of process • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances • Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - an operational tracked dozer with appropriate attachment(s)
 - realistic tasks covering the mandatory task requirements
 - maintenance materials appropriate to the dozer equipment
 - specifications and work instructions