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BCCRC2001B

Repair potholes

Unit Descriptor

This unit covers the competency required to repair potholes using pavement materials, hot mix and cold mix preparations. It includes the minimum criteria for competency assessment.

The unit includes preparation, repair and clean up of the pavement and the wearing surface.

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

Elements define the essential outcomes of a unit of competency.

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

- | | | |
|---|---------------------------|---|
| 1 | Plan and prepare for work | <p>1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied to the allotted task</p> <p>1.2 Safety requirements are obtained from the site safety plan and organisational policies and procedures, confirmed and applied to the allotted task</p> <p>1.3 Signage requirements are identified and obtained from the project traffic management plan and implemented</p> <p>1.4 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</p> <p>1.5 Environmental protection requirements are identified from the project environmental management plan, confirmed and applied to the allotted task</p> |
| 2 | Repair potholes | <p>2.1 Water and loose material are removed from pothole or defective area</p> <p>2.2 Pothole/defect is trimmed to ensure mechanical interlock of repair material</p> <p>2.3 Binder is applied to provide adequate adhesion of repair material and waterproofing of repaired area to specifications</p> <p>2.4 Materials are placed and compacted to specification</p> <p>2.5 Repaired area is cleaned, excess loose materials are removed and sand or blinding material applied where</p> |

specified

- | | | | |
|---|----------|-----|--|
| 3 | Clean up | 3.1 | Work area is cleared and materials disposed of or recycled in accordance with project environmental management plan |
| | | 3.2 | Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and workplace procedures |

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 may be present for this particular unit:

Unit scope

- Types of pavements and wearing surfaces can include road, pedestrian, airfield, hardstand, carparks and bikeway pavements
- Types of pothole repair are to include but not be limited to subgrade, pavement sub-base, base and the wearing surface
- Materials may include but not be limited to granular pavement materials, water, pre-mix preparations, hot mix bituminous preparations, cold mix bituminous preparations sand and binding materials

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, overhead services, other machines, personnel restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public

Safety (OH&S) (continued)	<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 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
Tools and equipment	<ul style="list-style-type: none"> • Tools and equipment are to include but not be limited to spades, shovels, rakes, quick-cut saws, jack hammers, vibrating plates and pedestrian rollers, crow bars, hand tampers, picks, emulsion/binder applicators and rammers
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
Fault reporting	<ul style="list-style-type: none"> • Reporting of faults is to be in accordance with company's workplace procedures and may be written or verbal

Information

- 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, material safety data sheets (MSDS), diagrams or sketches and maintenance contract documents
- Safe work procedures related to the repair of potholes and the environment
- Regulatory/legislative requirements pertaining to potholes and the environment
- Manufacturers' specifications and instructions
- Organisation work specifications and requirements.
- Instructions issued by authorised organisational or external personnel
- State road authority specifications
- Local government specifications

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
- Preparation, repair and clean up of a minimum of three potholes including at least two to subgrade level, using specified materials. The repairs are to be in accordance with the prescribed job specification
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others

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- 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
 - Holistic assessment should be applied where appropriate to form a complete work function
- Specific knowledge required to achieve the performance criteria**
- A knowledge of:
 - The types and causes of potholes
 - Type, uses, limitations and safety requirement of pothole repair equipment and materials
 - Pothole repair techniques
 - Site and equipment safety requirements in accordance with organisational policy and procedures and the project safety plan
 - Site isolation and traffic control responsibilities and authorities
 - Work recording techniques including specifications, check-lists and drawings
 - Processes for the calculation of material requirements
 - Materials handling methods
 - Project quality requirements
 - Civil construction terminology
 - Processes for calculating material requirements and usage
 - Road maps and map reading techniques
 - JSA's/Safe work method statement
- The context of assessment**
- The application of competency is to be assessed in the workplace or a realistically simulated workplace.
 - Assessment is to occur under standard and authorised work practices, job specifications, risks and 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 Australian Standards, State Road Authority and/or local

government requirements.

Methods of assessment

- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- 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 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

Specific resource requirements for this unit

The following resources should be made available:

- A range of potholes requiring repair
- Construction materials relevant to repairing potholes
- Hand and power tools, small plant and equipment appropriate to repairing potholes
- Suitable work area appropriate to the construction activity
- Enterprise work schedules and instructions and job specifications
- Relevant documentation including manufacturers' technical notes and enterprise documentation requirements.

... End ...

BCGCM2007B**Unit Descriptor****Use explosive power tools (EPT)**

This unit specifies the competency required to apply safe and effective operation of explosive power tools used to fasten materials or fix fasteners to bases of concrete, masonry or steel.

The unit includes both direct action and indirect action explosive powered fastening tools.

Element

Elements define the essential outcomes of a unit of competency.

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

1 Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified 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 prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2 Set out fasteners

- 2.1 Minimum distances from edge of substrate material are adhered to in accordance with legislation/regulations/codes of practice
- 2.2 Material is located and temporarily held or fixed into designed position according to detailed drawings

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|---|--|--|
| 3 | Use explosive power tools | <p>3.1 Explosive power tool is checked for operation to manufacturers' specifications and safety requirements</p> <p>3.2 Fastener is selected to requirements of job</p> <p>3.3 Charge is selected to assessed requirements for material, base and penetration</p> <p>3.4 Attachments and/or accessories are installed to explosive power tool in accordance with manufacturers' specifications and safety requirements</p> <p>3.5 Fastener and charge in explosive power tool are located to manufacturers' specification</p> <p>3.6 Explosive power tool operation is carried out and fastener fixed into place in accordance with manufacturers' recommendations, legislation/regulations/codes of practice</p> <p>3.7 Fastening penetration is checked and appropriate depth into material applied</p> <p>3.8 Power regulating device is adjusted for conditions</p> <p>3.9 Misfire procedures is carried out to manufacturers' recommendations and legislation/regulations/codes of practice</p> <p>3.10 Temporary holding/fixings are removed without damage to material</p> |
| 4 | Secure and store equipment and charges | <p>4.1 Charges are stored in designated container in accordance with legislation/regulations/codes of practice and used charges recorded</p> <p>4.2 Unused fasteners, the EPT and attachments are stored in a carry case to manufacturers recommendations</p> <p>4.3 Log book is checked and maintenance recorded to manufacturers recommendations</p> |

- | | | |
|---|----------------------|---|
| 1 | Maintain EPT and kit | 5.1 Safety features of the tool are checked for serviceability in accordance with manufacturers operating manual |
| | | 5.2 Tool is cleaned and lubricated to manufacturers recommendations |
| | | 5.3 Periodic maintenance service is carried out to manufacturers specifications |
| | | 5.4 Diminished stocks of charges and fasteners are replenished to designed effectiveness of power tool kit |
| 2 | Clean up | 6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification |
| | | 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

- Planning and preparation is to include but not be limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements
- Minimum distance for set out of fasteners are to be in accordance with regulated minimum distances
- Bases may include concrete, masonry or steel
- Use of explosive power tools is to include stripping and assembly of the tool, completing the log of serviceability, maintaining and cleaning, selecting charges and fasteners applicable to the base material and material being fixed, misfire procedures, using attachments, complying with storage and security regulations, OH&S requirements for the working environment, selection of signage and test fire
- Types of EPT are to include direct action and indirect action
- Attachments may include channel, rebate and other manufacturers attachments
- Selection of charge is to include a test shot
- Misfire procedure is to include the regulated safety procedure for misfire

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	<ul style="list-style-type: none">• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and Equipment	<ul style="list-style-type: none">• Tools and equipment are to include a direct action EPT and an indirect action EPT and may include clamps and levels
Materials	<ul style="list-style-type: none">• Materials may include timber, metals and patented fasteners
Communications	<ul style="list-style-type: none">• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals• 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, memos, material safety data sheets (MSDS), diagrams or sketches• Safe work procedures related to using EPT• Regulatory/legislative requirements pertaining to using EPT• Manufacturers' specifications and instructions where specified• 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 and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The fixing of metal or timber to a steel, concrete or masonry base on one project of each to job specifications including completion of all activities listed in the fourth dot point of the Unit Scope

Relationship to other units

- Pre-requisite units are:
BCGCM1001B 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
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Explosive power tools, charges and fasteners
 - EPT materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Relevant acts, regulations and codes of practice
 - Equipment safety manuals and instructions
 - Security and storage procedures for equipment and charges
 - JSA's/Safe work method statements

Specific key competencies, underpinning and employability skills required to achieve the performance criteria

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

- Level 1 – relates to working effectively within set conditions and processes;
- Level 2 – relates to the management or facilitation of conditions or processes; and
- Level 3 – relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? **The candidate will need to:**

Collect, analyse and organise information	Collect, organise, interpret and understand the information required for using EPT equipment, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	Level 1
Communicate ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	Level 1
Plan and organise activities	Conduct activities associated with using EPT equipment, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	Level 2
Work with others and in a team	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	Level 1
Solve problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	Level 2
Use mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances, calculate material requirements and establish quality checks	Level 1
Use technology	Use workplace technology related to using EPT equipment, including the use of calculators, explosive charged equipment, the use of communication devices and the reporting/recording of results	Level 2
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 using 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 requirements including specified Australian Standards 	

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General 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 and it must also reinforce the integration of key competencies
- 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
 - materials relevant to using EPT equipment
 - EPT equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

... End ...

BCGCM2008B scaffolding

Unit Descriptor

Erect and dismantle restricted height

This unit specifies the competency required to erect and dismantle restricted height scaffolding to provide work platforms for various occupational applications.

The unit includes placement of safety barriers and only involves modular scaffolding restricted to a height of 4 metres.

Element

Elements define the essential outcomes of a unit of competency.

1. Plan and prepare

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2	Erect scaffolding	2.1	Purpose for scaffolding is confirmed and associated work tasks identified
		2.2	Expected loading on scaffold and supporting structure is determined using load tables
		2.3	Site access and egress routes are identified
		2.4	Scaffolding and components are selected and inspected with damaged components labelled and rejected or repaired
		2.5	Adequate footing is established in accordance with AS for scaffolding
		2.6	Scaffolding is erected in accordance with regulations and planned hazard prevention and control measures, acceptable safe work practices and manufacturers' requirements
3	Inspect, repair and alter scaffolding	3.1	Critical structural and safety areas of scaffolding are inspected for damage, corrosion and wear
		3.2	Current use of scaffolding is checked for accordance with the type of scaffolding equipment
		3.3	Inspection log and handover is completed
		3.4	Scaffolding is reviewed to determine if changes or modifications were scheduled as per original planning
		3.5	Alteration or repair carried out where specified
4	Dismantle scaffolding	4.1	Scaffolding is dismantled using reverse procedure as for erection
5	Clean up	5.1	Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
		5.2	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

- Planning and preparation is to include but not be limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements
- Erection of scaffolding, to a maximum height of 4 metres is to include but not be limited to placement, sequencing, squaring, levelling, and the reverse for dismantling
- Purposes of scaffolding are to include but not be limited to provision of work platforms for various occupational applications
- Types of restricted height scaffolding may include but not be limited to systems scaffolding, modular, A frame, H frame, tube and coupler and aluminium
- Establishment of footings is to include review of JSA's to determine the bearing capacity of ground or working surfaces
- Alteration and repair may be required due to storm damage, accidents, misuse and process changes

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management

Quality Requirements	<ul style="list-style-type: none">• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	<ul style="list-style-type: none">• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	<ul style="list-style-type: none">• Tools and equipment are to include but not be limited to aluminium modular scaffolding equipment, ladders, scaffolding planks, steel box spanners, hammers, spirit levels, tape measures and may include shovels and spanners
Communications	<ul style="list-style-type: none">• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals• 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, memos, material safety data sheets (MSDS), diagrams or sketches• Safe work procedures related to erecting and dismantling restricted height scaffolding• Regulatory/legislative requirements pertaining to erecting and dismantling restricted height scaffolding• Engineers design specifications/manufacturers' specifications and instructions where specified• 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 and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Completion of planning, erection and dismantling of a modular scaffolding system, in accordance with JSA's/Safe work method statements and regulations, including a minimum of:
 - 3 bays (one with a return)
 - 1 lift with ladder
 - fall/edge protection

Relationship to other units

- Pre-requisite units are:
BCGCM1001B 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
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Scaffolding techniques
 - Scaffolding equipment
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statements
 - Relevant acts, regulations and codes of practice
 - Lifting devices

Specific key competencies, underpinning and employability skills required to achieve the performance criteria

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 – relates to working effectively within set conditions and processes;

Level 2 – relates to the management or facilitation of conditions or processes; and

Level 3 – relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? **The candidate will need to:**

Collect, analyse and organise information

Collect, organise, interpret and understand the information required for erection and dismantling of restricted height scaffolding, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions

Level 1

Communicate ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes Level 1
Plan and organise activities	Conduct activities associated with erection and dismantling of restricted height scaffolding, including the coordination and use of equipment, materials and tools to avoid backtracking and rework Level 1
Work with others and in a team	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity Level 1
Solve problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage Level 1
Use mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks Level 1
Use technology	Use workplace technology related to erection and dismantling of restricted height scaffolding, including the use of calculators, the use of communication devices and the reporting/recording of results Level 1
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 using 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 requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General 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 and it must also reinforce the integration of key competencies
- 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
 - materials relevant to erection and dismantling of restricted height scaffolding
 - hand and power tools, plant and equipment appropriate to erection and dismantling of restricted height scaffolding
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

... End ...

BCGCM3001B**Unit Descriptor****Operate elevated work platforms**

This unit specifies the competency required to safely and effectively operate elevated work platforms (EWP's) in a variety of different terrains and situations to access isolated work areas.

The unit includes locating, setting up, operation and shut down.

Element

Elements define the essential outcomes of a unit of competency.

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

1 Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment are selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

- | | | |
|---|--|--|
| 2 | Conduct routine checks of platform | 2.1 Power source is determined and connected to platform equipment to manufacturers' specifications |
| | | 2.2 Routine pre-operational equipment checks are carried out in accordance with checklist from operator's manual or manufacturers specifications |
| | | 2.3 Equipment is switched on in accordance with start up procedures and controls checked for correct operation and ease of movement |
| | | 2.4 Emergency safety devices are checked to comply with instructions from operator's manual and checked for manual operation |
| | | 2.5 Work location is checked for level ground or floor surface to determine stabilising and safe working area requirements |
| 3 | Locate equipment in place for work application | 3.1 Platform is positioned for work application and stabilisers engaged to set equipment base level into place |
| | | 3.2 Tools, equipment and materials are placed into bucket/platform to job application requirements |
| 4 | Elevate platform to work location | 4.1 Harness is fitted securely and lanyard connected to attachment point |
| | | 4.2 Controls are operated to manufacturers' recommendations and platform elevated to work position |
| | | 4.3 Power is switched off where specified and locking devices engaged to operator's manual |
| | | 4.4 Work is carried out to job specification and safety requirements of operator's manual |
| 5 | Lower platform and shut down | 5.1 Controls are operated to manufacturers' recommendations and platform lowered to down position |
| | | 5.2 Shut down procedures are carried out to operator's manual and equipment switched off |

- | | | | |
|---|----------|-----|---|
| 6 | Clean up | 6.1 | Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification |
| | | 6.2 | Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices |
| | | 6.3 | Work completion procedures are applied and relevant personnel notified that work is finished |

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

- Planning and preparation is to include but not be limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements
- Types of EWP's are to include but not be limited to scissor lifts, boom lifts, knuckle booms and truck mounted work platforms
- Emergency safety devices are to include but not be limited to bleed valves, hydraulic accumulators, electronic override, ground controls and emergency descent devices
- Harness is to include a full body rescue harness
- Operations may include but not be limited to telescope in and out, slew left and right, operate outriggers, boom up and down, operate attachments, motion and four wheel drive
- EWP's may include but not be limited to electrical, hydraulic and mechanical

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to equipment operation are to include but may not be limited to emergency shutdown and stopping, extinguishing equipment fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and Equipment

- Tools and equipment are to include but not be limited to EWP's, extension leads, log books, service manuals, operation manual, safety harnesses and lanyards

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to operating EWP's
- Regulatory/legislative requirements pertaining to EWP's
- Manufacturers' specifications and instructions where specified
- 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 and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Completion of set up and operation of all EWP's stated in the Range Statement including all functions to their maximum extension

Relationship to other units

- Pre-requisite units are:

BCGCM1001B 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
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - EWP techniques
 - EWP equipment
 - Processes for the calculation of load mass requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Relevant acts, regulations and codes of practice
 - Designs and functions of EWP equipment
 - Signalling methods and communications
 - Fault finding and identification
 - Working at heights

Specific key competencies, underpinning and employability skills required to achieve the performance criteria	<p>- JSA's/Safe work method statements</p> <p>These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.</p> <p>Application of the key competencies in this unit are to satisfy the nominated level in which:</p> <p>Level 1 – relates to working effectively within set conditions and processes;</p> <p>Level 2 – relates to the management or facilitation of conditions or processes; and</p> <p>Level 3 – relates to the design, development and evaluation of conditions or process.</p> <p>How will the candidate apply the following key competency in this unit? The candidate will need to:</p>
Collect, analyse and organise information	<p>Collect, organise, interpret and understand the information required for operating EWP's, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions</p> <p>Level 1</p>
Communicate ideas and information	<p>Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes</p> <p>Level 2</p>
Plan and organise activities	<p>Conduct activities associated with operating EWP's, including the coordination and use of equipment, materials and tools to avoid backtracking and rework</p> <p>Level 2</p>
Work with others and in a team	<p>Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity</p> <p>Level 1</p>
Solve problems	<p>Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage</p> <p>Level 1</p>

Use mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	Level 1
Use technology	Use workplace technology related to operating EWP's, including the use of calculators, EWP equipment, the use of communication devices and the reporting/recording of results	Level 1
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 using 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 requirements including specified Australian Standards 	
Methods of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General 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 and it must also reinforce the integration of key competencies • 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
 - hand and power tools, plant and equipment appropriate to operating EWP's
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

... End ...

BCGCM3002B**Unit Descriptor****Operate a truck mounted loading crane**

This unit specifies the competency required to safely and effectively operate a truck mounted loading crane to load and unload building products, delivered from supplier to the construction site.

The unit includes setting up, operation, control and shut down of the crane.

Element

Elements define the essential outcomes of a unit of competency.

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

1 Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified 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 prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

- | | | | |
|---|--|-----|---|
| 2 | Truck mounted crane is set up and operated | 2.1 | Truck is positioned at the designated drop off point |
| | | 2.2 | Truck is positioned to ensure a level surface to operate the crane from |
| | | 2.3 | Crane is activated and manoeuvred to its operating position from its lock down position |
| | | 2.4 | Crane movements are checked for safe operation |
| | | 2.5 | Load is prepared for lifting in accordance with crane, truck and dogging requirements |
| | | 2.6 | Site is confirmed as clear and safe to receive/dispatch the load |
| | | 2.7 | Load is manoeuvred to position using the control levers to manufacturers specifications |
| | | 2.8 | Load is continually monitored throughout its travel |
| | | 2.9 | Crane is shut down and returned to its lock down position |
| 3 | Clean up | 3.1 | Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification |
| | | 3.2 | 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	<ul style="list-style-type: none"> • Planning and preparation is to include but not be limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements • Types of cranes are to include truck mounted (e.g. a crane mounted on a semi-trailer or delivery truck) and may include cranes mounted on other vehicles • Truck mounted cranes are generally used for loading and unloading building and construction products, however, larger versions are used for loading and unloading containers • Operations may include but not be limited to telescope in and out, slew left and right, operate outriggers, boom up and down and operate attachments • Truck mounted cranes may include but not be limited to electrical, hydraulic and mechanical operating systems • Load masses should not exceed the working capacity of the crane and recommended manufacturer limits
Safety (OH&S)	<ul style="list-style-type: none"> • OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
Safety (OH&S) (continued)	<ul style="list-style-type: none"> • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to equipment operation are to include but may not be limited to emergency shutdown and stopping, extinguishing equipment 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 waste management, noise, dust, vibration

and clean-up management

- | | |
|---|---|
| Quality Requirements | <ul style="list-style-type: none">• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified |
| Statutory/Regulatory Authorities | <ul style="list-style-type: none">• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice |
| Tools and Equipment | <ul style="list-style-type: none">• Tools and equipment are to include but not be limited to truck mounted cranes and allocated slinging equipment |
| Communications | <ul style="list-style-type: none">• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals• 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, memos, material safety data sheets (MSDS), diagrams or sketches• Safe work procedures related to operating truck mounted cranes• Regulatory/legislative requirements pertaining to truck mounted cranes• Manufacturers' specifications and instructions where specified• 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 and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Completion of set up and operation of a truck mounted crane including all functions to their maximum extension in the loading and unloading of at least two full loads of building and construction materials and products

Relationship to other units

- Pre-requisite units are:
BCGCM1001B 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
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Truck mounted crane techniques
 - slinging equipment
 - Processes for the calculation of load mass requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Relevant acts, regulations and codes of practice
 - Designs and functions of truck mounted cranes
 - JSA's/Safe work method statements

Specific key competencies, These include a number of processes that are learned These

underpinning and employability skills required to achieve the performance criteria

include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 – relates to working effectively within set conditions and processes;

Level 2 – relates to the management or facilitation of conditions or processes; and

Level 3 – relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? **The candidate will need to:**

Collect, analyse and organise information

Collect, organise, interpret and understand the information required for operating truck mounted cranes, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions

Level 1

Communicate ideas and information

Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes

Level 1

Plan and organise activities

Conduct activities associated with operating truck mounted cranes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework

Level 2

Work with others and in a team

Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity

Level 1

Solve problems

Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage

Level 1

Use mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	Level 1
Use technology	Use workplace technology related to operating truck mounted cranes, including the use of calculators, cranes, the use of communication devices and the reporting/recording of results	Level 1
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 using 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 requirements including specified Australian Standards 	
Methods of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General 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 and it must also reinforce the integration of key competencies • 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
 - hand and power tools, plant and equipment appropriate to operating truck mounted cranes
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

... End ...

BCGSF2003B equipment

Unit Descriptor

Cut and bend materials using Oxy/LPG

This unit specifies the competency required to heat, cut and bend construction materials using Oxy/LPG equipment.

The unit includes the planning and preparation for the work, the set up and testing of the equipment, the cutting of materials, the heating and bending of materials, the shut down of equipment and the completion of clean-up activities.

Element

Elements define the essential outcomes of a unit of competency.

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

1 Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2 Set up and test equipment

- 2.1 Correct fire extinguisher is selected and located to be readily accessible prior to and during operations
- 2.2 Regulators are attached to Oxy and Acetylene bottles in accordance with manufacturers' specifications and OH&S regulations
- 2.3 Lines are purges to manufacturers' recommendations prior to lighting up
- 2.4 Equipment is tested for leaks and corrective action undertaken or faults reported
- 2.5 Correct pressures and cutting tips are selected in

		accordance with material to be cut and manufacturers' specifications
3	Cut material	<p>3.1 Material is accurately marked and secured or clamped ready for cutting</p> <p>3.2 Torch is lit correctly and safely according to manufacturers' specifications</p> <p>3.3 Setting of flame is adjusted for cutting to manufacturers' recommendations</p> <p>3.4 Correct cutting position is adopted during cutting to set out mark</p>
4	Heat and bend material	<p>4.1 Material is accurately marked and secured to clamped ready for cutting</p> <p>4.2 Torch is lit correctly and safely according to manufacturers' specifications</p> <p>4.3 Heat is applied to specified material and weakening effects of the heating process are minimised</p> <p>4.4 Material is bent to specification and correctly cooled</p>
5	Shut down	<p>5.1 Torch is switched off according to manufacturers' specifications</p> <p>5.2 Gas supply is shut off according to manufacturers' specifications</p>
6	Clean up	<p>6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification</p> <p>6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices</p>

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	<ul style="list-style-type: none"> • Equipment is to include cylinders, regulators, gas tubing, cutting blowpipes, flint lighters, measuring tapes/rules, clamps and support stands • Cutting of steel may include cutting up of waste for salvage, cutting reinforcement steel and cutting holes in plate • Bending is to include reinforcement steel • All work is to conform with the requirements of relevant Australian Standards
Safety (OH&S)	<ul style="list-style-type: none"> • OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, confined work areas, lighting, hazardous materials, cutting, grinding and welding equipment, working with metals under stress, traffic control, working at heights, working in proximity to others, worksite visitors and the public
Safety (OH&S) continued	<ul style="list-style-type: none"> • Emergency procedures related to this unit are to include but may not be limited to organisational first aid requirements, evacuation and extinguishing fires
Environmental Requirements	<ul style="list-style-type: none"> • Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management
Quality Requirements	<ul style="list-style-type: none"> • Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	<ul style="list-style-type: none"> • Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Materials	<ul style="list-style-type: none"> • Materials are to include deformed bars, plain rods, mesh sheets of plain bars and mesh sheets of deformed bars, cutting consumables and may include scaffolding

components, pipe sections and structural steel sections

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to cut and bend materials using Oxy/LPG equipment
- Regulatory/legislative requirements pertaining to steelfixing tools and equipment
- Manufacturers' specifications and instructions where specified
- 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 and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Use both Oxy Acetylene and LPG systems to cut to specification a range of bars up to and including 36 mm
- Heat and bend a minimum of three bars to specification including at least one 36 mm bar

Relationship to other units

- Pre-requisite units are:
BCGCM1001B 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
 - Workplace and equipment safety requirements
 - Quality requirements
 - Construction and steelfixing terminology
 - Oxy acetylene and LPG heating and cutting equipment types, characteristics, uses and limitations
 - Oxy acetylene and LPG heating and cutting equipment set-up and operating techniques
 - The types and properties of steelfixing materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

Specific key competencies, These include a number of processes that are learned

underpinning and employability skills required to achieve the performance criteria

throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 – relates to working effectively within set conditions and processes;

Level 2 – relates to the management or facilitation of conditions or processes; and

Level 3 – relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? **The candidate will need to:**

Collect, analyse and organise information

Collect, organise, interpret and understand the information required for the cutting and bending of materials using Oxy/LPG equipment, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturer's instructions, material safety data sheets and equipment instructions

Level 1

Communicate ideas and information

Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes

Level 1

Plan and organise activities

Conduct activities associated with the cutting and bending of materials using Oxy/LPG equipment, including the coordination and use of equipment, materials and tools to avoid backtracking and rework

Level 1

Work with others and in a team

Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity

Level 1

Solve problems

Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage

Level 1

Use mathematical ideas and techniques

Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks

Level 1

Use technology

Use workplace technology related to the cutting and bending of materials using Oxy/LPG equipment, including the use of calculators, the use of heating and cutting equipment, the use of communication devices and the reporting/recording of results

Level 1

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using 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 requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- 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
 - materials relevant to the cutting and bending of materials using Oxy/LPG equipment
 - hand and power tools, plant and equipment appropriate to the cutting and bending of materials using Oxy/LPG equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

... End ...

BCGSF2004B**Unit Descriptor****Place and fix reinforcement materials**

This unit specifies the competency required to place and fix reinforcement for concrete work as part of construction processes.

The unit includes the planning and preparation for the work, the final preparation for placement, the placing and fixing of reinforcement, the checking of the reinforcement and the completion of clean-up activities.

Element

Elements define the essential outcomes of a unit of competency.

Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

1 Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Stock of reinforcement is checked for correct type and quantities against reinforcement schedule and details in plans/specifications
- 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2 Prepare for reinforcement placement

- 2.1 Formwork is checked for completion and conformity to receive reinforcement
- 2.2 Reinforcement bars are cut and bent to required set out and plans/specifications
- 2.3 Bars are tied to designed configuration from plans/specifications
- 2.4 Reinforcement sheets are cut to required sizes
- 2.5 Stiffening rods are attached to panels as required to facilitate handling processes
- 2.6 Bar chairs/spacers are located to requirements of reinforcement schedule and plans/specifications

- | | | |
|---|--|---|
| 3 | Place and fix reinforcement | <p>3.1 Fabric reinforcement sheets are placed into position in accordance with engineer's drawings and specifications</p> <p>3.2 Reinforcement bars are located and positioned in accordance with engineer's drawings and specifications</p> <p>3.3 Reinforcement is located and placed using bar chairs, ligatures and spacers according to engineer's drawings and specifications</p> <p>3.4 Reinforcement material is supported and secured into position in accordance with engineer's drawings and specifications</p> <p>3.5 Cast-in items are secured to reinforcement in accordance with engineer's drawings and specifications</p> <p>3.6 Ends of protruding reinforcement material are covered and protected in accordance with plans/specifications</p> |
| 4 | Check reinforcement prior to concrete pour | <p>4.1 Location and position of reinforcement and fixing ties to reinforcement are checked for accuracy</p> <p>4.2 Depth of coverage, clearance, spacing and overlap of reinforcement material are checked in accordance with engineer's drawings/job specification</p> |
| 5 | Clean up | <p>5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification</p> <p>5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices</p> |

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 may be present for this particular unit:

Unit scope	<ul style="list-style-type: none"> Reinforcement materials are to include wire ties, ligatures and spacers/spreaders assemblies, deformed bars, plain rods, bar chairs, mesh sheets of plain bars and mesh sheets of deformed bars and may include scaffolding components, pipe sections and structural steel sections Steelfixing may involve reinforcing concrete for foundations, pits and slabs, columns, walls, stairs, plinths, kerbs, gutters, pathways and hard standings
Safety (OH&S)	<ul style="list-style-type: none"> OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, confined work areas, lighting, hazardous materials, cutting, grinding equipment and welding equipment, working with metals under stress, traffic control, working at heights, working in proximity to others, worksite visitors and the public Emergency procedures related to this unit are to include but may not be limited to organisational first aid requirements, evacuation and extinguishing fires
Environmental Requirements	<ul style="list-style-type: none"> Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management
Quality Requirements	<ul style="list-style-type: none"> Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	<ul style="list-style-type: none"> Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	<ul style="list-style-type: none"> Tools and equipment are to include but not be limited to bolt cutters, wire nippers, tie wire reels, measuring tapes/rules, reinforcement benders, mesh guillotines and may include a range of general hand and power

tools, MMAW machines and oxy acetylene set and cutting attachments

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the placement and fixing of reinforcement materials
- Regulatory/legislative requirements pertaining to the placement and fixing of reinforcement materials
- Manufacturers' specifications and instructions where specified
- 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 and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- The placement and fixing of reinforcement materials to specification on a minimum of three different jobs and involving deformed bars, rods and mesh sheets

Relationship to other units

- Pre-requisite units are:
BCGCM1001B 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
 - Workplace and equipment safety requirements
 - Quality requirements
 - Construction and steelfixing terminology
 - Job specifications related to the layout of reinforcement materials
 - Reinforcement materials placement and fixing techniques
 - The types, properties, uses and limitations of reinforcement materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

Specific key competencies, underpinning and employability skills

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies,

required to achieve the performance criteria

although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 – relates to working effectively within set conditions and processes;

Level 2 – relates to the management or facilitation of conditions or processes; and

Level 3 – relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? **The candidate will need to:**

Collect, analyse and organise information

Collect, organise, interpret and understand the information required for the placement and fixing of reinforcement materials, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions

Level 2

Communicate ideas and information

Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes

Level 1

Plan and organise activities

Conduct activities associated with the placement and fixing of reinforcement materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework

Level 2

Work with others and in a team

Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity

Level 1

Solve problems

Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage

Level 1

Use mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	Level 1
Use technology	Use workplace technology related to the placement and fixing of reinforcement materials, including the use of calculators, the use of communication devices and the reporting/recording of results	Level 1
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 using 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 requirements including specified Australian Standards 	
Methods of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package • Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge • Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies • 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	<ul style="list-style-type: none"> • The following resources should be made available: 	

requirements for this unit

- workplace location or simulated workplace
- materials relevant to the placement and fixing of reinforcement materials
- hand and power tools, plant and equipment appropriate to the placement and fixing of reinforcement materials
- realistic activities covering the mandatory task requirements
- specifications and work instructions

... End ...

BSBCMN310A customers

Deliver and monitor a service to

Unit Descriptor

This unit covers the skills and knowledge required to identify customers' needs and monitor a service provided to customers.

This unit is related to BSBCMN208A Deliver a service to customers and BSBCMN410A Coordinate implementation of customer service strategies.

Competency Field

Common

Element

Performance Criteria

- | | |
|---|---|
| 1. Identify customers' needs | <p>1.1 Customers' <i>needs and expectations</i> are clarified and accurately identified using <i>appropriate interpersonal skills</i></p> <p>1.2 <i>Customers'</i> needs are assessed for urgency to determine priorities for service delivery in accordance with <i>organisational requirements</i></p> <p>1.3 Customers are provided with information about available choices for meeting their needs and assisted in the selection of preferred options</p> <p>1.4 Limitations in addressing customers' needs are identified and appropriate assistance is sought from <i>designated individuals</i></p> |
| 2. Deliver a service to customers | <p>2.1 Service is provided promptly to customers to meet identified needs in accordance with organisational requirements</p> <p>2.2 Appropriate rapport is established and maintained with customers to ensure completion of the delivery of a quality service.</p> <p>2.3 <i>Customers' complaints</i> are handled sensitively and courteously in accordance with organisational requirements</p> <p>2.4 Customers with <i>special needs</i> or assistance are responded to in accordance with organisational requirements</p> <p>2.5 Available <i>opportunities</i> are identified and used to promote and enhance services and products to customers</p> |
| 3. Monitor and report on service delivery | <p>3.1 Customer satisfaction with service delivery is regularly reviewed using <i>verifiable evidence</i> in accordance with organisational requirements</p> <p>3.2 Opportunities to enhance the quality of service and products are identified and pursued within organisational requirements</p> |

- 3.3 Procedural aspects of service delivery are monitored for effectiveness and suitability to customer requirements
- 3.4 Customer feedback is regularly sought and used to improve the provision of products and services
- 3.5 Decisions to modify products or services incorporate evidence of customer satisfaction and are within organisational requirements
- 3.6 Reports are clear, detailed and contain recommendations focused on critical aspects of service delivery

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 may be present for this particular unit:

Legislation, codes and national standards relevant to the workplace which may include:

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

Customer needs and expectations may relate to:

- advice or general information
- specific information
- further information
- making an appointment
- complaints
- purchasing organisation's products and services
- returning organisation's products and services
- accuracy of information
- fairness/politeness
- prices/value

Appropriate interpersonal skills may include:

- using appropriate body language
- summarising and paraphrasing to check understanding of customer's message
- providing an opportunity for the customer to confirm their request
- seeking feedback from the customer to confirm understanding of needs
- questioning to clarify and confirm the customer's needs
- listening actively to what the customer is communicating

Customers can be:

- internal or external
- other agencies
- individual members of the organisation
- corporate customers
- individual members of the public

Organisational requirements may include:

- quality assurances and/or procedures manuals
- goals, objectives, plans, systems and processes
- legal and organisational policy/guidelines and requirements
- Occupational Health and Safety policies, procedures and programs
- anti-discrimination and related policy
- access and equity principles and practice
- quality and continuous improvement processes and standards
- defined resource parameters
- who is responsible for products or services
- pricing and discount policies
- replacement and refund policy and procedures
- payment and delivery options

Designated individuals may include:

- supervisor
- customers
- colleagues
- line management

Customers' complaints may include:

- damaged goods or goods not delivered
- administrative errors such as incorrect invoices or prices
- warehouse or store room errors such as incorrect product delivered
- service errors
- delivery errors
- product not delivered on time
- customer satisfaction with service quality

Customers with special needs may include:

- disabilities
- language
- beliefs/values
- religious/spiritual observances
- gender, age
- culture
- age

Opportunities for enhancing quality of service or product may include:

- procedures for delivery of goods
- returns policy
- system for recording complaints
- extending timelines
- packaging procedures
- update of customer service charter

Verifiable evidence may include:

- customer satisfaction questionnaires
- audit documentation and reports
- quality assurance data
- returned goods
- lapsed customers
- service calls
- complaints

Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning 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 Range Statement.

Critical Aspects of Evidence

- Identifying needs and priorities of customers
- Distinguishing between different levels of customer satisfaction
- Treating customers with courtesy and respect
- Identifying and complying with organisational requirements
- Responding to and reporting on customer feedback

Underpinning Knowledge*

* At this level the learner must demonstrate some relevant theoretical knowledge.

- The relevant legislation from all levels of government that affects business operation, especially in regard to Occupational Health and Safety and environmental issues, equal opportunity, industrial relations and anti-discrimination
- Knowledge of the principles of excellent customer service
- Understanding the organisation's business structure, products and services
- Understanding the organisation's policy and procedures for customer service including handling customer complaints
- Knowledge of product and service standards and best practice models
- Understanding the principles of quality assurance
- Understanding public relations and product promotion
- Consultation methods, techniques and protocols
- Techniques for dealing with customers, including customers with special needs

Evidence Guide

Underpinning Skills

- Literacy skills to read and understand a variety of texts; prepare general information and papers according to target audience; spell with accuracy; use grammar and punctuation effectively as an aid to understanding
- Proofreading and editing skills to ensure clarity of meaning and conformity to organisational requirements, check for accuracy and consistency of information
- Report writing skills to identify and elaborate on customer service strategies; assess information for relevance and accuracy; source additional information as required
- Technology skills including the ability to select and use technology appropriate to a task
- Problem solving skills to deal with customer enquiries or complaints
- Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

Resource implications

The learner and trainer should have access to appropriate documentation and resources normally used in the workplace

Consistency of Performance

In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations

Context/s of Assessment

- Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement
- Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package
- Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment
- Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit

Key Competency Levels

NB: These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Collect, analyse and organise information	Communicate ideas and information	Plan and organise activities	Work with others and in teams	Use mathematical ideas and techniques	Solve problems	Use technology
Level 2	Level 2	Level 2	Level 1	Level 1	Level 2	Level 1

Three levels of performance denote level of competency required to perform a task.

1. Perform 2. Administer 3. Design

- **Collecting, analysing and organising information** – to monitor and report on customer services
- **Communicating ideas and information** – with customers on products and services
- **Planning and organising activities** – to meet customer needs
- **Working with teams and others** – in completing scheduled tasks
- **Using mathematical ideas and techniques** – to determine service or product costs
- **Solving problems** – to respond to customer enquiries or complaints
- **Using technology** – to complete allocated tasks

Please refer to the Assessment Guidelines for advice on how to use the Key Competencies

DRTOGOF21B

Operate drilling fluids and mud pits

Descriptor:

This unit has been borrowed from the oil gas sector where it covers the operation of drilling fluids and mud pits as carried out by an offshore derrickman. It also applies to 'mud specialists' who would work on larger, more complex drilling operations.

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.

Sector specific information:

Units replaced:

Links to other units:

Links outside this Training Package:

Element

Performance Criteria

- | | |
|-------------------------------------|---|
| 1. Plan and prepare for operations. | 1.1 Obtain operational instructions and organise the work to be carried out accordingly.
1.2 Clarify difficulties in carrying out the instructions with the relevant personnel.
1.3 Confirm availability and status of necessary permits to work in accordance with operational requirements.
1.4 Confirm availability of necessary third party utilities in accordance with operational requirements.
1.5 Conform to safe working practices and operational requirements. |
| 2. Operate mud pits. | 2.1 Align valves in pits to ensure correct pit usage as directed.
2.2 Give safety the highest priority during the operation and entry of mud pits.
2.3 Align valves in pits to ensure correct pit usage as directed.
2.4 Double check plugs for operation.
2.5 Seal or secure tanks to prevent accidental entry.
2.6 Set high and low alarms where applicable.
2.7 Operate mud pit room ventilation system as required.
2.8 Operate hoppers in accordance with operating procedures.
2.9 Operate dust extraction system during mixing, if applicable.
2.10 Check safety showers and eye washes are accessible and operational.
2.11 Supervise forklifts operations.
2.12 Store chemicals in appropriate storage area.
2.13 Read, interpret and place material Safety Data Sheets (MSDS) in an accessible place. |

Element	Performance Criteria
3. Operate, maintain and repair mud conditioning equipment.	3.1 Engage and/or adjust appropriate equipment as directed by supervisors or mud engineer. 3.2 Clean all equipment and visually inspect for leaks, proper operation, in accordance with company and/or manufacturer's specifications. 3.3 Identify faults or potential faults and report immediately. 3.4 Perform periodic or scheduled preventative maintenance on all mud treatment units in accordance with company and/or manufacturer's specifications.
4. Monitor mud.	4.1 Monitor and record mud properties/parameters. 4.2 Set alarms to monitor mud. 4.3 Check viscosity and weight of mud conform to specifications as directed by mud engineer. 4.4 Maintain appropriate volumes and types of drilling fluids as required by well program or company. 4.5 Use appropriate mixing procedures to obtain desired properties. 4.6 Apply proper safety procedures and equipment for mixing and handling of chemicals. 4.7 Recognise warning signs of a kick and report immediately.

Range of Variables

This unit covers the role of an offshore derrickman in operating the mud pits or a mud specialist in the non-hydrocarbon sector.

Briefings/handover details may include:

- Safety briefing/induction
- Pre-tour safety meeting
- Weekly safety meetings
- Job Safety Analysis (JSA)
- Agreed procedures may include:
 - company
 - facility
 - client
- Toolbox
- Permit to work

Statutory adherence may include:

- (PSLA) Petroleum Submerged Lands Act
- Duty of care
- Australian Standards

Communications may include:

- Alarm systems
- Two-way radio
- Hand signals
- Telephone
- Public address system
- Written work instructions

Recording requirements can include:

- Shaker screens
- Mud properties
- Volume of liquid mud
- Size of cuttings
- Pit level
- Service and maintenance
- Replacement parts
- Chemical stocks

Reading materials may include:

- Job instructions
- Manufacturer's specifications
- Chemical labels
- Material Safety Data Sheet (MSDS)

Numerical calculations may include:

- Mud viscosity
- Mud weight
- Volume
- Uphole velocity
- Quantities
- Pressure
- Water loss

Alarm systems may include:

- Gas
- Fire

Equipment may include:

- Shaker
- Degasser
- Desilter
- Desander
- Mud cleaner
- Agitators

Weather conditions may include:

- Sun, rain, wind, storms
- Hot and cold
- Calm to severe weather conditions
- 24 hour operation

Safety equipment includes:

- Fire protection
- First aid
- Survival

Discharges may include:

- Liquids
- Gases
- Solids
- Dry powder

Materials may include:

- Flammable
- Toxic
- Corrosive
- Explosive
- Radioactive

Personal protective equipment may include:

- Eye protection
- Hearing protection
- Gloves
- Footwear
- Hard hats
- Respirators
- Aprons
- Rubber boots
- Full face visors
- Rubber gloves

Working practices may include:

- Individual operation
- Team operation
- Use of personal protective equipment
- Consideration of toxic substances
- Continuous communication maintained
- Reacting to on-site emergencies

Recognised warning signs of a kick are:

- Pit level change is observed and reported immediately
- Mud property change is observed and reported immediately

- Volume of mud change is observed and reported immediately
- Size of cuttings change is observed and reported immediately
- Pump pressure is observed and reported immediately

Alarm systems may include:

- High and low alarm
- Mud density alarm
- Low/high pressure
- Gas
- Fire

Evidence Guide

Critical aspects of evidence to be considered

It is essential that competence is fully observed in the critical aspects of:

- Safety is highest priority during operation and entry of mud pits
- Application of calculations such as:
 - flow rates
 - mud weight, control of pressurised formation
- Adequate training in the use of well control and system procedure
- Ability to adapt to new situations using appropriate strategies (e.g. innovations, persistence, resourcefulness)
- Recognise kick signs
- Inadvertent opening of chump valves
- Well control and system procedure

Interdependent assessment of units

- DRTOG13B Apply occupational health and safety in the workplace
- DRTOG14B Control emergencies and critical situations
- DRTOG15B Create, maintain and enhance productive working relationships
- DRTOG20B Conduct and maintain derrick operations
- DRTOG19B Operate and maintain ancillary equipment
- DRTOG21B Trip casing
- DRTOG22B Trip pipe
- DRTOGOF20B Monitor, operate and maintain mud pits and equipment
- Relevant non-hydrocarbon units

Underpinning knowledge

- Drilling operation
- Functions of the mud pits
- Warning signs of kicks
- Company and statutory safety guidelines, procedures and practices
- Safe operating procedures when operating equipment
- Troubleshooting techniques

Underpinning skills

- Recognise and report equipment malfunction or failure
- Supervise and train subordinates to provided standards
- Work as directed by driller and assistant driller
- Operate equipment in accordance with good oilfield practice and company policy
- Align valves in pits for operability and safety
- Operate and service mud treatment equipment
- Perform periodic or scheduled preventative maintenance on mud condition equipment
- Replace screens and cones on shakers and desilters/desanders
- Operate and service transfer valve
- Weigh mud and perform viscosity checks
- Maintain volumes and types of drilling fluids as required
- Use correct mixing procedures to ensure required properties in drilling fluid
- Use correct safety procedures and equipment for mixing and handling chemicals in accordance with manufacturer's data sheet
- Regularly monitor pit levels, mud properties and cuttings size

Resource implications

This unit requires access to the mud operations in a complex drilling operation.

Consistency in performance

Evidence should be available of the ability to operate mud systems in a range of typical complex drilling operations.

Context of assessment

Assessment would typically look for evidence accumulated as a result of operating mud systems in a number of complex drilling operations.

DRTOGON24B

Operate mud systems

Descriptor:

This unit has been borrowed from the oil gas sector where it covers the operation of drilling fluids and mud pits as carried out by an offshore derrickman. It also applies to 'mud specialists' who would work on larger, more complex drilling operations.

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.

Sector specific information:

Units replaced:

Links to other units:

Links outside this Training Package:

Element

Performance Criteria

- | | |
|-------------------------------------|---|
| 1. Plan and prepare for operations. | 1.1 Conform to safe working practices and current legislative and operational requirements. |
| | 1.2 Obtain operational instructions and organise the work to be carried out accordingly. |
| | 1.3 Clarify difficulties in carrying out the instructions with the relevant personnel. |
| | 1.4 Confirm availability and status of necessary permits to work in accordance with operational and legislative requirements. |
| | 1.5 Confirm availability of necessary third party utilities in accordance with operational requirements. |
| 2. Operate mud system. | 2.1 Ensure compliance with good oilfield practice and company policy when operating equipment. |
| | 2.2 Align valves in pits to ensure correct pit usage as directed. |

Element	Performance Criteria
3. Operate, maintain and repair mud conditioning equipment.	<p>3.1 Engage and/or adjust appropriate equipment as directed by supervisors or mud engineer (e.g. shaker, degasser, desilter, desander, mud cleaner, agitators).</p> <p>3.2 Clean all equipment and visually inspect for leaks, proper operation, and so on, in accordance with company and/or manufacturer's specifications.</p> <p>3.3 Identify faults or potential faults and reported immediately.</p> <p>3.4 Identify, record and report requirement for repair or maintenance of mud conditioning equipment.</p> <p>3.5 Replace screens or cones as necessary, on shakers, desilters, desanders in accordance with company and/or manufacturer's specifications.</p> <p>3.6 Perform periodic or scheduled preventative maintenance on all mud treatment units in accordance with company and/or manufacturer's specifications.</p>
4. Operate and service transfer (butterfly) valves in mud pits.	<p>4.1 Align valves as appropriate.</p> <p>4.2 Lubricate valve stems of butterfly valves as appropriate.</p> <p>4.3 Clean and inspect transfer valves when pits are empty.</p> <p>4.4 Replace or repair defective parts as necessary.</p>
5. Recognise warning signs of kicks.	<p>5.1 Monitor, adjust and report pit level.</p> <p>5.2 Monitor and report mud properties.</p> <p>5.3 Monitor and report size of cuttings.</p> <p>5.4 Monitor and report volume of mud returns.</p>

Range of Variables

This unit covers the role of an onshore derrickman/derrickhand in operating the mud system.

Briefings/handover details may include:

- Review of operational requirements
- Maintenance and inspection of pumping equipment
- Maintenance fluid system to pumps
- Review PTW requirements
- Pre-tour safety meeting
- Review of relative Job Safety Analysis (JSA)
- Maintenance and operation of solids control equipment

Statutory adherence may include:

- Occupational health and safety
- Duty of care
- Environment
- Codes of practice
- Australian Standards

Communications may include:

- Two-way radio

- Intercom
- Telephone
- Written instruction
- Oral instruction
- Hand signals

Reading materials may include:

- Job instructions
- Manufacturer's instructions

Numerical calculations may include:

- Viscosity
- Mud weight
- Volume
- Up hole velocity
- Quantities
- Pressure

Recording requirements may include:

- Mud test recording
- Pit level
- Service and maintenance
- Replacement parts

Weather conditions may include:

- Day/night
- Storms and lightning
- Hot/cold
- Wet/dry (dusty)

Evidence Guide

Critical aspects of evidence to be considered

It is essential that competence is fully observed in the critical aspects of:

- Recognising warning signs of kicks
- Align mud system for required operations
- Prepare, measure and monitor mud properties
- Report and record on mud chemical usage
- Comply with safety procedures and use of personal protective equipment
- Application of calculations such as flow rate, control of pressurised formations

Interdependent assessment of units

Competence must be assessed and achieved for each unit:

- DRTOG13B Apply occupational health and safety in the workplace
- DRTOG14B Control emergencies and critical situations

- DRTOGON15B Manage subordinates and equipment
- DRTOG15B Create, maintain and enhance productive working relationships
- DRTOGON17B Prepare and operate drilling fluid systems
- DRTOGON18B Maintain services and operations to meet quality standards
- DRTOG19B Operate and maintain ancillary equipment
- DRTOG20B Conduct and maintain derrick operations
- DRTOG21B Trip casing
- DRTOG22B Trip pipe
- DRTOGON23B Operate mud pumps
- Relevant non-hydrocarbon units

Underpinning knowledge

- Drilling operation
- Functions of the mud pits
- Warning signs of kicks and indicators
- Company and statutory safety guidelines, procedures and practices
- Safe operating procedures when operating equipment
- AOA policy procedure and practices
- Rig maintenance
- Normal drilling operations
- Non-routine drilling operations
- Man management/rig management

Underpinning skills

- Recognise and report equipment malfunction or failure
- Supervise and train subordinates to provided standards
- Work as directed by driller timely and efficiently
- Operate equipment in accordance with good oilfield practice and company policy
- Align valves in pits to ensure correct pit usage
- Operate mud condition equipment, including shakers, degasser, desilter, desander, mud cleaner and agitators
- Perform periodic or scheduled preventative maintenance on mud condition equipment
- Replace screens and cones on shakers and desilters/desanders
- Operate and service transfer valve
- Weight mud for viscosity check
- Maintain volumes and types of drilling fluids as required
- Use correct mixing procedures to ensure required properties in drilling fluid
- Use correct safety procedures and equipment for mixing and handling chemicals in accordance with manufacturer's data sheet
- Regularly monitor pit levels, mud properties and cuttings size

Resource implications

This unit requires access to the mud systems of a complex drilling job.

Consistency in performance

Evidence should be available of the competent operation of mud systems in a range of complex jobs, or competent operation of a mud system on a single complex job over an extended period of time.

Context of assessment

Assessment should focus on evidence produced by operation of mud systems on complex drilling jobs.

FPI FGM 069 A Trim and cross-cut felled trees (non-commercial/non-production)

Description

This unit describes the work required to move or remove a fallen tree which may either pose an inconvenience or a hazard. This unit is intended for use in situations where the production of timber is not the primary focus of the activity.

This is adapted from an endorsed unit of competence within the Forest Industry National Competency Standards - Harvesting Sector.

Suggested Pre-Requisites/Co-Requisites

FPI OHS 1A	Follow defined Occupational Health & Safety policies and procedures
FPI G41 A	Use basic hand held tools
FPI FGM 065 A	Select trees (for tending purposes)
FPIC2029A	Work within environmental constraints

1 Identify cross-cutting requirements

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Describe cutting methods for various log types and situations.
- 4) Communication with supervisor and other workers is maintained to ensure efficient work flow co-ordination and personnel co-operation.

2 Prepare and maintain equipment

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Chainsaw and component options suitable for planned cutting are selected and prepared.
- 4) Chainsaw is checked to relevant safety standards prior to use.
- 5) Required support tools, protective equipment, first aid gear, spares, maintenance requirements and fuel are selected, prepared, carried and positioned to minimise cutting delays.
- 6) Characteristics of blunt or damaged chainsaw are recognised.
- 7) Chainsaw is sharpened and adjusted or components changed to maintain cutting safety and productivity.

3 Assess tree and plan cutting

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Environmental conditions including ground growth, ground slope and ground hazards are identified and used to assess the cutting of each tree.
- 4) Awareness of environmental conditions and other personnel's activity are maintained and cutting activity modified as a result of significant changes.
- 5) Tree, location and stability are assessed for conditions likely to affect safety of cross cutting.
- 6) Tree is moved or stabilised for safe cutting.
- 7) Sequence of cross cuts is planned to maintain control of cut sections and minimise cutting problems.
- 8) Debris likely to cause saw damage during trimming or cutting is cleared from tree surface.
- 9) Trees which cannot be safely cut are identified and referred to others.
- 10) Communicate with supervisor and other workers is maintained to share relevant workplace information.

4 Trim and cross-cut tree

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Slash is regularly cleared from tree and work site to allow access for cutting and movement.
- 4) Tree section on each side of planned cut is secured or potential movement recognised and planned for.
- 5) Area is checked to ensure saw clearance around full log circumference
- 6) Individual cross cut is planned to optimise time and safety.
- 7) Saw is operated and tree cut in accordance with safety standards applicable to site conditions.
- 8) Cutting technique is adjusted in response to movement and condition of tree.
- 9) Unexpected characteristics of tree are identified and planning reviewed
- 10) Wedges are used as required to assist cutting.
- 11) Cross cut is completed once initiated.
- 12) Communication with supervisor and other workers is maintained to ensure efficient work flow co-ordination and personnel co-operation and to meet safety requirements.

Range of Variables

- Assessment of tree and location includes stresses, ground conditions, slope, tree support, compression of branches, hazards from other logs or ground obstacles
- Cross-cutting will be undertaken in all conditions for which it is safe including slopes up to the maximum allowed by relevant regulations
- Defects to be found when assessing prior to cutting include splits; falling damage; fire damage; infestation; pipe; shake; twist; and branch/knot locations
- Occupational health and safety regulations include codes of practice and AS 2727 and requirements include availability of correct first aid kit; erection of warning signs; wearing of required personal protection including head; eye; cut proof leg protection; safety footwear and high visibility vest; manual handling requirements; maintenance of safe forest practices including location of other people and potential falling objects; required actions relating to forest fire; working alone requirements; recognition of hazards and required actions in bush and tree falling procedures for cross-cutting on slopes; acceptable cutting positions and use of approved containers for fuel and oil
- Legislation, regulations, standards may include Environment Protection Act; environmental agencies regulations; duty of care; isolation procedures; occupational health and safety legislation; site regulations and procedures; Australian Standards; manufacturers' specifications and recommendations; State forest codes of practice or equivalent; statutory requirements; Trade Practices Act; traditional land owners requirements
- Trees may be trimmed and cross-cut on site before extraction
- Trees of any size and condition that can be safely trimmed and cross-cut.

Evidence Guide

Critical underpinning knowledge

- Identification and evaluation of structural defects in trees
- Occupational health and safety guidelines, procedures, and principles, including manual handling
- All safety and environmental requirements for operation in forest settings.

Critical underpinning skills

- Contribute to a tree assessment
- Assess, plan, trim, and cross-cut within the range of variables for trees and conditions
- Recognise common diseases, pests, and nutrition deficiencies
- Identify own limitations
- Select and maintain appropriate equipment
- Prepare and communicate in a way which maintains efficient operation
- Safe operation and maintenance of a chainsaw
- Communicate orally and using hand signals with other operators to maintain effective and safe felling.

Assessment context

Competency should be demonstrated in an actual workplace or in a situation which reproduces workplace conditions.

Key Competencies and Application to Standards

Key Competency

	1	Level 2	3
Collecting, analysing and organising information	•		
Communicating ideas and information			
Planning and organising activities		•	
Working with others in teams			
Using mathematical ideas and techniques			
Solving problems	•		
Using technology		•	

FPI FGM 111 A Fall trees manually - intermediate (non-commercial/ non-production)

Description

This unit is based on the National Industry Competency Standards Harvesting Sector of the Forest Industries. This unit is intended for use in situations where the production of timber is not the primary focus of the industry.

Suggested Pre-Requisites/Co-Requisites

FPI OHS 1A	Follow defined Occupational Health & Safety policies and procedures
FPI G20 A	Collect, analyse and organise information - basic
FPI G23 A	Plan a complete activity
FPI G41 A	Use basic hand held tools
FPI FGM 065 A	Select trees (for tending operations)
FPIC2029A	Work within environmental constraints

1 Plan falling sequence

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) General factors affecting falling requirements and specific forest/site hazards are identified.
- 4) Falling direction is identified.
- 5) Falling sequence for individual trees is progressively planned.
- 6) Communication with supervisor and other workers is maintained to ensure efficient work flow co-ordination and personnel co-operation.

2 Prepare and maintain falling equipment

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Chainsaw and component options suitable for planned falling are selected and prepared.
- 4) Chainsaw is checked to relevant standards prior to use.
- 5) Required support tools, protective equipment, first aid gear, spares, maintenance requirements and fuel are selected, prepared, carried and positioned to minimise falling delays.
- 6) Characteristics of blunt or damaged chainsaw are recognised.
- 7) Chainsaw is sharpened and adjusted or components changed to maintain falling safety and productivity.

3 Assess conditions and surroundings

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Environmental conditions including ground growth, canopy, general forest lean, ground slope, ground hazards, wind speed and direction.
- 4) Awareness of environmental conditions and the activity of other personnel are maintained and falling activity modified as a result of significant changes.
- 5) Communication with supervisor and other workers is maintained to share relevant workplace information.

4 Assess tree and plan falling

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Growth is cleared to enable visual assessment of tree to be felled.
- 4) Tree is visually assessed for falling characteristics.
- 5) Direction required for falling and degree of error allowable are identified.
- 6) Trees which cannot be safely felled with own skills are identified and referred to others.
- 7) Sequence of cuts to fall tree is planned to control direction of fall.

5 Prepare surroundings

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Most suitable escape route is selected and cleared of growth and other obstacles.
- 4) Location of other personnel is noted and monitored.

6 Fall tree

- 1) Organisational occupational health and safety procedures, practices, policies, and precautions are observed and followed.
- 2) Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
- 3) Scarf is cut to plan in accordance with standards for accuracy.
- 4) Unexpected characteristics of tree are identified and planning reviewed.
- 5) Help is requested if cuts made may lead to loss of control of tree in falling.
- 6) Backcut(s) is/are made to provide planned hinge-wood and maintain control of tree.
- 7) Cutting technique is adjusted in response to movement and condition of tree.
- 8) Wedges are used to control movement and direction of falling.
- 9) Falling is completed once initiated.
- 10) Planned escape route is used when tree starts to fall.
- 11) Fall of tree and movement on ground are monitored until tree is stable.
- 12) Trees that hang up are immediately cleared or assistance requested.
- 13) Communication with supervisor and other workers is maintained to share relevant workplace information and to ensure personnel co-operation and safety.

Range of Variables

- Trees will have the following characteristics height not more than 40 metres; lean and weight distribution which can be adapted to falling direction with the use of wedges and/or control with hinge wood
- Trees fallen may have the following characteristics single leader; sound wood condition in barrel
- Falling may require the use of multiple back cuts
- Conditions under which falling may be undertaken include ground slope not more than 15 degrees; moderate wind speed; absence in growth or fallen trees preventing complete fall; works mainly alone with general supervision available to provide assistance related to planning, falling.
- Visual assessment of tree covers size, weight distribution, lean, species, multi leaders, soundness of timber, growth characteristics and stresses.
- Occupational health and safety regulations include codes of practice and AS 2727 and requirements include carrying of correct first aid kit, wearing of required personal protection including head, eye, cut proof leg protection, safety footwear and high visibility vest, manual handling requirements, maintenance of safe forest practices including location of other people and potential falling objects, recognition of hazards and required actions in bush and tree falling and use of approved containers for fuel and oil.

Evidence Guide

Critical underpinning knowledge

- Identification and evaluation of structural defects in trees
- All safety and environmental requirements for operation in forest settings.

Critical underpinning skills

- Contribute to a tree assessment
- Understand own limitations in conditions and trees for falling.
- Assess, plan and fall within the range of variables for trees and conditions
- Select and maintain appropriate equipment
- Prepare and communicate in a manner that maintains efficient falling.
- Communicate orally and using hand signals with other operators to maintain effective and safe felling
- Read and interpret written material appropriately for local conditions
- Calculate slopes and weights in the metric system.

Assessment context

Competency should be demonstrated in an actual workplace or in a situation which reproduces workplace conditions.

Key Competencies and Application to Standards

Key Competency	1	Level 2	3
Collecting, analysing and organising information	•		
Communicating ideas and information			
Planning and organising activities		•	
Working with others in teams			
Using mathematical ideas and techniques			
Solving problems	•		
Using technology		•	

MNQOPS413A Conduct shot firing

Unit Descriptor

This unit covers work-site surface blast shot firing and applies solely to on site activities. It includes planning for blasting, preparing for charging, storing and transporting explosives on the blast area, loading and firing shots, completing shot firing operations, and carrying out equipment maintenance.

Units Replaced

- This unit replaces the units MNQOP32A Carry out shot firing.

The work covered in this unit is relevant to Australian Standard AS/NZS 2187 series.

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
1. Plan for blasting.	<p>1.1 Access, interpret and clarify <i>legislative and site requirements and procedures</i>.</p> <p>1.2 Receive, interpret and clarify <i>shot firing requirements</i> and confirm by preliminary site inspection.</p> <p>1.3 Identify <i>potential hazards</i>, assess risks and ensure work area is safe.</p> <p>1.4 Access, interpret and apply atmospheric, geological, drilling logs and survey data required to complete the allocated work in accordance with site requirements.</p> <p>1.5 Apply basic calculations for shot firing operations to verify the blast design criteria.</p> <p>1.6 Identify and confirm the <i>explosives and accessories</i> required.</p> <p>1.7 Co ordinate support requirements in accordance with legislative and site requirements and procedures.</p> <p>1.8 Select appropriate personal protective equipment and environmental monitoring equipment.</p>
2. Prepare for charging.	<p>2.1 Identify, manage and report potential hazards and risks.</p> <p>2.2 <i>Secure blast area</i> in accordance with legislative and site requirements and procedures.</p> <p>2.3 Establish and communicate access routes to blast area for authorised persons and vehicles.</p> <p>2.4 Identify hole locations and any non-conforming conditions in preparation for charging.</p> <p>2.5 Establish stemming stockpile(s) and accessories on shot site.</p>
3. Store and transport explosives on the	<p>3.1 Store and transport explosives in accordance with legislative and site requirements and procedures.</p>

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| blast area. | 3.2 | Deliver explosives and accessories to blast area and segregate in accordance with legislative and site requirements and procedures. |
| | 3.3 | Ensure that explosives are not left unattended, in accordance with legislative and site requirements and procedures. |
| 4. Load shot. | 4.1 | Prepare and mix bulk explosives in accordance with legislative and site requirements and procedures. |
| | 4.2 | Prime and charge holes in accordance with the blast plan. |
| | 4.3 | Ensure blast holes are charged in accordance with loading plan and identify non-conforming conditions. |
| | 4.4 | Check and adjust charges as required to ensure compliance with the blast plan. |
| | 4.5 | Stem blast holes in accordance with blast plan and legislative and site requirements and procedures. |
| | 4.6 | Connect surface detonation system in accordance with blast plan and legislative and site requirements and procedures. |
| 5. Prepare for and initiate blast. | 5.1 | Identify, communicate and coordinate with blast crew and sentries, the details of scheduled blast and confirm their understanding. |
| | 5.2 | Carry out <i>pre-blasting procedures</i> in accordance with legislative and site requirements. |
| | 5.3 | Activate blast monitoring system and monitor blast in accordance with legislative and site requirements. |
| | 5.4 | Initiate blast in accordance with legislative and site requirements and procedures. |
| | 5.5 | Supervise all personnel within the blast area in accordance with legislative and site requirements and procedures. |
| | 5.6 | Carry out and record activities in accordance with the blast plan and legislative and site requirements and procedures. |
| | 5.7 | Ensure the use of selected personal protective equipment by all persons as required. |
| | 5.8 | In the event that the blast schedule is delayed, record and report situation to management and other relevant persons in accordance with legislative and site requirements and procedures. |
| 6. Complete shot firing operations. | 6.1 | Carry out post blast inspection in accordance with site procedures. |
| | 6.2 | Deal with misfires in accordance with legislative and site requirements and procedures. |
| | 6.3 | Declare area safe for re-entry. |
| | 6.4 | Carry out <i>post blast coordination</i> in accordance with legislative and site requirements and procedures. |
| | 6.5 | Flag large rocks for further fragmentation. |
| | 6.6 | Complete reports in accordance with legislative and site requirements and procedures. |

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| 7. Carry out equipment maintenance. | 7.1 Carry out inspection and required <i>maintenance</i> after shot firing operations in accordance with legislative and site requirements and procedures. |
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RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and occupational health and safety and other relevant legislation apply to all elements and performance.

Legislative and site requirements and procedures may include:

- explosives legislation for relevant State or Territory
- mining, safety and health legislation for relevant State or Territory
- dangerous goods legislation for relevant State or Territory
- major hazard facility legislation for relevant State or Territory
- occupational health and safety legislation for relevant State or Territory
- Local Government legislation
- common law
- criminal law
- development consent (or equivalent) conditions
- environmental legislation
- organisation's policies and procedures on all or some of these.

Shot firing requirements may include:

- blast plan – including location
- equipment required
- security measures and procedures
- monitoring requirements
- type and quantity of explosives and initiation methods
- wet or dry holes
- stemming material.

Potential hazards may include:

- ground conditions
- tipping hazards
- fire/flames
- not following safety precautions near an open stope
- broken detonation leads
- premature explosion
- atmospheric contaminants
- debris

- faulty equipment
- air blast and fly rock
- high air and water pressures
- high voltage electricity
- lack of ventilation
- unauthorised personnel
- wet holes
- uncontrolled radio frequencies and transmitters
- EMF hazards (e.g. static electricity, lightning)
- hot ground
- lost holes
- drilling in butts
- drilling into misfires
- dust
- noise.

Explosives may include:

- wet or dry
- variable density
- packaged
- free flowing or bulk
- bulk
- primers
- delays
- downlines
- trunklines
- lead-in lines
- detonators and detonating cord.

Accessories may include:

- gas bags
- decking material
- stemming
- hole liners
- blast monitoring equipment
- firing cables/bell wire
- exploders and testers

- electronic firing equipment.

Securing the blast area may include:

- signage
- windrows
- bund walls
- ribbons
- tapes
- witches hats
- ropes
- flags or pegs
- sentries
- gates.

Pre-blasting procedures may include:

- issuing of warnings
- placement of sentries
- inspection and clearance of the area
- positioning stemming
- cleaning up
- checking the weather
- ensuring adequacy of fencing/signage and access routes
- marking/hole identification
- measuring holes
- dewatering holes
- applying plugs (to seal finished holes prior to loading)
- using measuring tape
- using cutting implements
- setting up and testing blast monitoring systems
- setting up video camera
- hooking up the blast
- testing the circuit.

Post-blast coordination may include:

- the return of unused explosives
- the return of other equipment
- the withdrawing sentries
- collection of environmental monitoring equipment

- recording of environmental monitoring data.

Maintenance may include:

- testing of exploders
- servicing of mixing equipment
- maintenance of hand tools
- operational maintenance of bulk delivery equipment.

EVIDENCE GUIDE

Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to fire shots on a work site
- implementation of appropriate procedures and techniques for the efficient and effective firing of shots on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
 - a. conducting an activity safely and efficiently
 - b. achieving quality and productivity targets
 - c. adhering to and understanding relevant legislative (State/Federal) requirements
 - d. adhering to and understanding environmental and heritage issues.

Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- Australian codes and standards (e.g. AS/NZS 2187 series)
- site shot firing procedures
- explosives and safety and health legislation
- emergency procedures
- environmental procedures
- equipment processes, technical capability and limitations
- equipment safety requirements
- basic geological and technical information
- blast plans
- hazardous goods procedures (handling and transport)
- isolation and lock out procedures
- labelling procedures
- manufacturers instructions

- management systems
- safe operating procedures
- risk management including application of appropriate controls to identify risks
- site procedures
- job safety analysis
- start up and shut down procedures
- explosives storage procedures
- types and characteristics of blasting agents, explosives and initiation systems.

Required Skills

Specific skills are required to achieve the performance criteria in this unit. Assessment needs to obtain evidence of the ability to:

- selection and use of personal protective equipment
- plan and document reading
- communications by electronic, radio and other means
- blasting preparation techniques
- hazard identification
- hazardous substances handling techniques
- mathematical calculations
- diagnostic techniques.

Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

Prerequisite Units

There are no prerequisite units for this unit.

Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

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. For advice on ways of ensuring fairness and validity of assessment, please refer to the Training Package Assessment Guidelines.

Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures
- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

TDTD1097B

OPERATE A FORKLIFT

Field D

Load Handling

DESCRIPTION:

This unit involves the skills and knowledge required to operate a forklift, including checking forklift condition, driving the forklift to fulfil operational requirements, monitoring site conditions and monitoring and maintaining forklift performance. Assessment of this unit will usually be undertaken within a licensing examination conducted by, or under the authority of, the relevant State/Territory OHS Authority.

Persons achieving competence in this unit will need to fulfil all of the relevant State/Territory OHS regulatory requirements concerning the safe operation of forklifts

<u>ELEMENT</u>	<u>PERFORMANCE CRITERIA</u>
1. Check forklift condition	<ul style="list-style-type: none"> a. Condition of forklift is checked for compliance with OHS and workplace requirements for warning devices, manufacturer's specifications and the nature of the load shifting task b. Attachments are checked to ensure appropriate adjustment and operation c. Mirrors and seats are adjusted for safe operation by the driver d. Log books are checked and appropriate workplace documentation is completed in accordance with workplace requirements
2. Drive the forklift	<ul style="list-style-type: none"> a. Forklift is started, steered, manoeuvred, positioned and stopped in accordance with regulations and manufacturer's instructions b. Engine power is managed to ensure efficiency and performance and to minimise engine and gear damage c. Operational hazards are identified and/or anticipated and avoided or controlled through defensive driving and appropriate hazard control techniques d. Forklift is driven in reverse, maintaining visibility and achieving accurate positioning e. The forklift is parked, shut down and secured in accordance with manufacturer's specifications, regulations and workplace procedures
3. Operate a forklift to handle loads	<ul style="list-style-type: none"> a. The lifting task to be undertaken is appropriately planned and the correct lifting truck and attachments are selected b. The load is lifted, carried, lowered and set down in accordance with OHS legislation, manufacturer's specifications and company procedures
4. Monitor site conditions	<ul style="list-style-type: none"> a. When selecting the most efficient route, hazards and traffic flow are identified and appropriate adjustments are made b. Site conditions are assessed to enable safe operations and to ensure no injury to people or damage to property, equipment, loads or facilities occurs
5. Monitor and maintain forklift performance	<ul style="list-style-type: none"> a. Performance and efficiency of vehicle operation is monitored during use b. Defective/irregular performance and malfunctions reported to relevant personnel c. Forklift records are maintained/updated in accordance with workplace procedures and legislative requirements

Range Of Variables

OPERATE A FORKLIFT

<u>VARIABLE</u>	<u>SCOPE</u>
1. General context	<ul style="list-style-type: none"> a. Operation of a forklift must be carried out in compliance with the licence requirements and regulations of the relevant State/Territory authority b. Operation of a forklift is performed under some supervision, generally within a team environment c. Operation of a forklift involves the application of routine equipment operation principles and procedures to maintain the safety and operation of a forklift in a variety of operational contexts
2. Worksite environment	<ul style="list-style-type: none"> a. Types of forklift may include counterbalance trucks, reach trucks and pallet trucks b. Operations may be carried out in typical forklift operational situations, including: <ul style="list-style-type: none"> b.1. operations conducted at day or night b.2. typical weather conditions b.3. on the open road b.4. on a private road or worksite b.5. while at a workplace c. Customers may be internal or external d. Workplaces may comprise large, medium or small worksites e. Work may be conducted in: <ul style="list-style-type: none"> e.1. restricted spaces e.2. exposed conditions e.3. controlled or open environments f. Loads to be shifted may require special precautions g. Loads to be shifted may be: <ul style="list-style-type: none"> g.1. irregularly shaped g.2. packaged or unpackaged g.3. labelled or unlabelled g.4. palletted or unpalletted h. Hazards in the work area may include exposure to: <ul style="list-style-type: none"> h.1. chemicals h.2. dangerous or hazardous substances h.3. movements of equipment, goods and materials i. Personnel in the work area may include: <ul style="list-style-type: none"> i.1. workplace personnel i.2. site visitors i.3. contractors i.4. official representatives j. Forklift handling procedures may include: <ul style="list-style-type: none"> j.1. starting a forklift j.2. steering and manoeuvring a forklift j.3. accelerating and braking j.4. positioning and stopping a forklift j.5. reversing a forklift j.6. operating forklift controls, instruments and indicators j.7. using defensive driving techniques j.8. managing engine performance

Range of Variables (continued)

OPERATE A FORKLIFT

<p>2. Worksite environment (continued)</p>	<p>k. Pre-operational checks may include:</p> <ul style="list-style-type: none"> k.1. visual check of forklift k.2. checking and topping up of fluid levels k.3. checks of tyres k.4. checks of operation of forklift lights and indicators k.5. checks of brakes <p>l. Hazards may include (examples only):</p> <ul style="list-style-type: none"> l.1. wet and iced operating surfaces l.2. oil on operating surface l.3. faulty brakes l.4. workplace obstacles and other operational equipment and vehicles l.5. damaged loads and pallets l.6. other personnel in work area <p>m. Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:</p> <ul style="list-style-type: none"> m.1. company procedures m.2. enterprise procedures m.3. organisational procedures m.4. established procedures <p>n. Personal protection equipment may include:</p> <ul style="list-style-type: none"> n.1. gloves n.2. safety headwear and footwear n.3. safety glasses n.4. two-way radios n.5. high visibility clothing
<p>3. Sources of information/documents</p>	<p>a. Information/documents may include:</p> <ul style="list-style-type: none"> a.1. goods identification numbers and codes, including IMDG markings and HAZCHEM signs a.2. manifests, bar codes, picking slips, merchandise transfers, stock requisitions, goods and container identification a.3. Australian Standard 2359 - Industrial Truck Code a.4. manufacturer's specifications for forklift and associated equipment a.5. operations and service record book or log a.6. workplace procedures and policies for the operation of forklifts a.7. supplier and/or client instructions a.8. ADG Code and material safety data sheets a.9. regulatory requirements concerning the use of forklifts a.10. award, enterprise bargaining agreement, other industrial arrangements a.11. standards and certification requirements a.12. quality assurance procedures a.13. emergency procedures
<p>4. Applicable regulations and legislation</p>	<p>a. Applicable procedures and codes may include:</p> <ul style="list-style-type: none"> a.1. relevant State/Territory regulations pertaining to the operation of forklifts a.2. relevant codes and standards, including Australian Standard 2359 - Industrial Truck Code a.3. relevant State/Territory OHS legislation a.4. relevant State/Territory fatigue management regulations a.5. relevant State/Territory environmental protection legislation

Evidence Guide

OPERATE A FORKLIFT

1. Critical aspects of evidence to be considered	<ul style="list-style-type: none"> a. Assessment must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> a.1. operate a forklift safely in a workplace environment a.2. handle loads and drive defensively a.3. manage forklift controls, read instruments and adjust engine power to site requirements a.4. locate, interpret and apply relevant information a.5. carry out pre-operational checks on a forklift a.6. work effectively with colleagues a.7. convey information in written and oral form a.8. maintain workplace records a.9. use workplace colloquial and technical language and communication technologies in the workplace context a.10. meet relevant regulatory requirements
2. Interdependent assessment of units	<ul style="list-style-type: none"> a. This unit of competency may be assessed in conjunction with other units that are part of a worker's job function
3. Required knowledge and skills	<ul style="list-style-type: none"> a. Knowledge of relevant duty of care requirements pertaining to the operation of a forklift b. Relevant OHS and environmental procedures and regulations c. Forklift controls, instruments and indicators and their use d. Forklift handling procedures e. Procedures to be followed in the event of an operational emergency f. Engine power management and safe operating strategies g. Efficient driving techniques h. Pre-operational checks carried out on forklift and related action i. Site layout and obstacles j. Operating hazards and related defensive driving and hazard control techniques k. Principles of stress management when driving a forklift l. Workplace operating procedures m. Ability to identify points of balance and safe lifting positions on a range of loads when operating a forklift n. Ability to read instructions, procedures and signage relevant to the operation of a forklift o. Ability to monitor and anticipate operational hazards and take appropriate action
4. Resource implications	<ul style="list-style-type: none"> a. Access is required to opportunities to: <ul style="list-style-type: none"> a.1. participate in a range of exercises, case studies and other real or simulated practical and knowledge assessments that demonstrate the skills and knowledge to operate a forklift to carry out a range of load shifting operations in a workplace, and/or a.2. operate a forklift to shift loads in an appropriate range of operational situations

Evidence Guide (continued)

OPERATE A FORKLIFT

5. Consistency in performance	<ul style="list-style-type: none"> a. Applies underpinning knowledge and skills when: <ul style="list-style-type: none"> a.1. operating a forklift safely in workplace environment a.2. handling loads and driving defensively a.3. managing forklift controls, reading instruments and adjusting engine power to site requirements a.4. locating, interpreting and applying relevant information a.5. carrying out pre-operational checks a.6. working effectively with colleagues a.7. conveying information in relevant form a.8. maintaining workplace records b. Shows evidence of application of relevant workplace procedures including: <ul style="list-style-type: none"> b.1. relevant State/Territory regulations and licence requirements pertaining to forklift operation b.2. OHS policies and procedures b.3. identification of operational hazards and the use of appropriate defensive driving and hazard control techniques b.4. workplace procedures and work instructions (including security and housekeeping procedures) b.5. forklift manufacturer's guidelines and instructions b.6. environmental protection procedures when operating a forklift and carrying out pre-operational checks c. Action is taken promptly to report and/or rectify accidents, incidents and any identified faults or malfunctions in accordance with manufacturer's instructions, regulatory requirements and workplace procedures d. Performance is demonstrated consistently over a period of time and in a suitable range of contexts e. Work is completed systematically with required attention to detail and without injury to self or others or damage to goods or equipment
6. Context for assessment	<ul style="list-style-type: none"> a. Assessment of competence must comply with the assessment requirements of the relevant State/Territory forklift licensing authority b. Assessment of this unit must be undertaken by a Registered Training Organisation: <ul style="list-style-type: none"> b.1. As a minimum, assessment of knowledge must be conducted through appropriate oral and/or written questioning b.2. Appropriate practical assessment must occur: <ul style="list-style-type: none"> b.2.1. at the Registered Training Organisation, and/or b.2.2. in an appropriate work situation

KEY COMPETENCIES						
Collect, Analyse & Organise Information	Communicate Ideas & Information	Plan & Organise Activities	Work with Others & in Teams	Use Mathematical Ideas & Techniques	Solve Problems	Use Technology
1	1	2	1	2	2	2

TDTD1197B OPERATIONS

CONDUCT SPECIALISED FORKLIFT

Field D

Load Handling

DESCRIPTION:

This unit involves the skills and knowledge required to operate a forklift with specialised attachments or all-terrain equipment, including checking attachments and worksite for suitability, selecting the type of forklift and accessories for required load shifting tasks, and shifting load and completing work in accordance with operational requirements. Assessment of this unit will usually be undertaken within a licensing examination conducted by, or under the authority of, the relevant State/Territory OHS Authority.

Persons achieving competence in this unit will need to fulfil all of the relevant State/Territory OHS regulatory requirements concerning the safe specialised operation of forklifts.

<u>ELEMENT</u>	<u>PERFORMANCE CRITERIA</u>
1. Check attachments and worksite for suitability	<ul style="list-style-type: none"> a. Suitable work site is selected for operations b. Work area is checked for overhead obstructions and proximity to service delivery lines c. Barriers or warning signs are erected in areas subject to passing traffic d. Attachments and platforms are securely fixed to carriage or tines e. Personnel support platforms are inspected to ensure compliance with the relevant Australian Standard
2. Select type of forklift and accessories for the required workplace task	<ul style="list-style-type: none"> a. Special equipment, accessories or attachments are identified to match load characteristics and work requirements b. Appropriate specialised equipment is selected c. Existing attachments are removed and stored according to workplace procedures d. Specialised equipment is fitted according to manufacturer's instructions and workplace procedures e. Designated staff are notified regarding specialist operations
3. Shift load and complete work	<ul style="list-style-type: none"> a. Equipment is operated within safe working limits and to maximise efficiency of operations b. Load is lifted, carried and set down in accordance with workplace and manufacturer's procedures and regulatory requirements c. Documentation is completed reporting any damage or faults to goods or equipment d. Specialist equipment and forklift are returned to appropriate storage/parking area

Range Of Variables

CONDUCT SPECIALISED FORKLIFT OPERATIONS

<u>VARIABLE</u>	<u>SCOPE</u>
1. General context	<ul style="list-style-type: none"> a. Specialised operation of a forklift must be carried out in compliance with the licence requirements and regulations of the relevant State/Territory authority b. Specialised operation of a forklift is performed under some supervision, generally within a team environment c. Specialised operation of a forklift involves the application of equipment operation principles and procedures to maintain the safety and specialised operation of a forklift in a wide variety of operational contexts
2. Worksite environment	<ul style="list-style-type: none"> a. Types of forklift may include counterbalance trucks, reach trucks, pallet trucks, container-handling heavy forklifts, vacuum and top frame b. Specialised forklift operations may be carried out in typical forklift operational situations, including: <ul style="list-style-type: none"> b.1. operations conducted at day or night b.2. typical weather conditions b.3. on the open road b.4. on a private road or worksite b.5. while at a workplace c. Customers may be internal or external d. Workplaces may comprise large, medium or small worksites e. Specialised forklift may be used to assist in a range of workplace tasks, including: <ul style="list-style-type: none"> e.1. stock/goods/container handling e.2. loading and unloading vehicles e.3. stacking stock and goods e.4. lifting and moving equipment e.5. transporting materials and goods in a workplace f. Work may be conducted in: <ul style="list-style-type: none"> f.1. restricted spaces f.2. exposed conditions f.3. controlled or open environments g. Loads to be shifted may require special precautions h. Specialised forklift operations may involve the use of a range of attachments and accessories, including: <ul style="list-style-type: none"> h.1. spikes h.2. drum carriers h.3. bale carriers h.4. tines h.5. personnel carriers h.6. high reaching h.7. pantograph h.8. jibs h.9. paper clamps h.10. hooks h.11. side lifters

Range of Variables (continued)

CONDUCT SPECIALISED FORKLIFT OPERATIONS

<u>VARIABLE</u>	<u>SCOPE</u>
2. Worksite environment (continued)	<ul style="list-style-type: none"> i. Loads to be shifted may be: <ul style="list-style-type: none"> i.1. irregularly shaped i.2. packaged or unpackaged i.3. labelled or unlabelled i.4. palletted or unpalletted i.5. containerised j. Personnel in the work area may include: <ul style="list-style-type: none"> j.1. workplace personnel j.2. site visitors j.3. contractors j.4. official representatives k. Forklift operational procedures may include: <ul style="list-style-type: none"> k.1. starting a forklift (including pre-start checks) k.2. steering and manoeuvring a forklift k.3. accelerating and braking k.4. positioning and stopping a forklift k.5. reversing a forklift k.6. operating forklift controls, instruments and indicators k.7. using defensive driving techniques k.8. managing engine performance l. Pre-operational checks may include but are not limited to: <ul style="list-style-type: none"> l.1. visual checking of forklift and its associated accessories and equipment l.2. checking and topping up of fluid levels l.3. checks of tyres l.4. checks of operation of forklift lights and indicators l.5. checks of brakes m. Post-operational checks may include but are not limited to: <ul style="list-style-type: none"> m.1. parking in a safe place m.2. shutting down forklift m.3. lowering all equipment m.4. visually checking for faults or damage n. Hazards may include (examples only): <ul style="list-style-type: none"> n.1. wet and iced operating surfaces n.2. oil on operating surface n.3. faulty brakes n.4. workplace obstacles and other operational equipment and vehicles n.5. damaged loads and pallets n.6. other personnel in work area o. Depending on the type of organisation concerned and the local terminology used, workplace procedures may include: <ul style="list-style-type: none"> o.1. company procedures o.2. enterprise procedures o.3. organisational procedures o.4. established procedures

Range Of Variables (continued)

CONDUCT SPECIALISED FORKLIFT OPERATIONS

<u>VARIABLE</u>	<u>SCOPE</u>
2. Worksite environment (continued)	<p>p. Personal protection equipment may include:</p> <ul style="list-style-type: none"> p.1. gloves p.2. safety headwear and footwear p.3. safety glasses p.4. two-way radios p.5. high visibility clothing
3. Sources of information/ documents	<p>a. Information/documents may include:</p> <ul style="list-style-type: none"> a.1. goods identification numbers and codes, including IMDG markings and HAZCHEM signs a.2. manifests, bar codes, picking slips, merchandise transfers, stock requisitions, goods and container identification a.3. Australian Standard 2359 - Industrial Truck Code a.4. manufacturer's specifications for forklift and associated accessories and equipment a.5. operations and service record book or log a.6. workplace procedures and policies for the operation of forklifts a.7. supplier and/or client instructions a.8. material safety data sheets a.9. regulatory requirements concerning the use of forklifts a.10. award, enterprise bargaining agreement, other industrial arrangements a.11. standards and certification requirements a.12. quality assurance procedures a.13. emergency procedures
4. Applicable regulations and legislation	<p>a. Applicable procedures and codes may include:</p> <ul style="list-style-type: none"> a.1. relevant State/Territory regulations pertaining to the operation of forklifts a.2. relevant codes and standards, including Australian Standard 2359 - Industrial Truck Code a.3. relevant State/Territory OHS legislation a.4. relevant State/Territory fatigue management regulations a.5. relevant State/Territory environmental protection legislation

Evidence Guide

CONDUCT SPECIALISED FORKLIFT OPERATIONS

1. Critical aspects of evidence to be considered	<ul style="list-style-type: none"> a. Assessment must confirm appropriate knowledge and skills to: <ul style="list-style-type: none"> a.1. carry out specialised forklift operations safely in a workplace environment a.2. handle loads and drive defensively a.3. manage forklift controls, ancillary accessories and equipment, read instruments and adjust engine power to site requirements a.4. locate, interpret and apply relevant information a.5. carry out pre-operational checks on a forklift and accessories a.6. work effectively with colleagues a.7. convey information in written and oral form a.8. maintain workplace records a.9. use workplace colloquial and technical language and communication technologies in the workplace context a.10. meet relevant regulatory requirements for specialised forklift operations
2. Interdependent assessment of units	<ul style="list-style-type: none"> a. This unit of competency may be assessed in conjunction with other units that are part of a worker's job function
3. Required knowledge and skills	<ul style="list-style-type: none"> a. Knowledge of relevant duty of care requirements pertaining to the specialised operation of a forklift b. Relevant OHS and environmental procedures and regulations c. Forklift controls, instruments and indicators and their use d. Types of forklift accessories and ancillary equipment, their purposes and procedures for their use e. Handling procedures for forklifts involved in specialised operations f. Procedures to be followed in the event of an operational emergency g. Engine power management and safe operating strategies h. Efficient driving techniques i. Pre-operational checks carried out on forklift and accessories and related action j. Site layout and obstacles k. Operating hazards and related defensive driving and hazard control techniques l. Principles of stress management when driving a forklift m. Workplace operating procedures n. Ability to identify points of balance and safe lifting positions on a range of loads when operating a forklift (including accessories) o. Ability to read instructions, procedures and signage relevant to the operation of a forklift p. Ability to monitor and anticipate operational hazards and take appropriate action

Evidence Guide (continued)

CONDUCT SPECIALISED FORKLIFT OPERATIONS

4. Resource implications	<ul style="list-style-type: none"> a. Access is required to opportunities to: <ul style="list-style-type: none"> a.1. participate in a range of exercises, case studies and other real or simulated practical and knowledge assessments that demonstrate the skills and knowledge to carry out specialised forklift operations in a workplace, and/or a.2. carry out specialised forklift operations in an appropriate range of operational situations
5. Consistency in performance	<ul style="list-style-type: none"> a. Applies underpinning knowledge and skills when: <ul style="list-style-type: none"> a.1. carrying out specialised forklift operations in a workplace environment a.2. handling loads and driving defensively a.3. managing forklift controls, ancillary accessories and equipment, reading instruments and adjusting engine power to site requirements a.4. locating, interpreting and applying relevant information a.5. carrying out pre-operational checks a.6. working effectively with colleagues a.7. conveying information in relevant form a.8. maintaining workplace records b. Shows evidence of application of relevant workplace procedures including: <ul style="list-style-type: none"> b.1. relevant State/Territory regulations and licence requirements pertaining to specialised forklift operation b.2. OHS policies and procedures b.3. identification of operational hazards and the use of appropriate defensive driving and hazard control techniques b.4. workplace procedures and work instructions (including security and housekeeping procedures) b.5. manufacturer's guidelines and instructions for the forklift and accessories b.6. environmental protection procedures when operating a forklift and carrying out pre-operational checks c. Action is taken promptly to report and/or rectify accidents, incidents and any identified faults or malfunctions in accordance with manufacturer's instructions, regulatory requirements and workplace procedures d. Performance is demonstrated consistently over a period of time and in a suitable range of contexts e. Work is completed systematically with required attention to detail and without injury to self or others or damage to goods or equipment

Evidence Guide (continued)

CONDUCT ADVANCED FORKLIFT OPERATIONS

- | | |
|---------------------------|---|
| 6. Context for assessment | <ul style="list-style-type: none"> a. Assessment of competence must comply with the assessment requirements of the relevant State/Territory forklift licensing authority b. Assessment of this unit must be undertaken by a Registered Training Organisation: <ul style="list-style-type: none"> b.1. As a minimum, assessment of knowledge must be conducted through appropriate oral and/or written questioning b.2. Appropriate practical assessment must occur: <ul style="list-style-type: none"> b.2.1. at the Registered Training Organisation, and/or b.2.2. in an appropriate work situation |
|---------------------------|---|

KEY COMPETENCIES						
Collect, Analyse & Organise Information	Communicate Ideas & Information	Plan & Organise Activities	Work with Others & in Teams	Use Mathematical Ideas & Techniques	Solve Problems	Use Technology
2	2	3	2	2	2	2

THTGTM02B**Carry out grounds maintenance****Unit Descriptor**

This unit deals with the skills and knowledge required to carry out general routine grounds and garden maintenance in tourism and hospitality enterprises. Where gardening forms a major part of the job role, please refer to the standards within the Horticulture Training Package.

Element**Performance Criteria**

- | | |
|--|--|
| 1 Perform routine gardening activities | 1.1 Carry out routine gardening activities, following any directions from a supervisor or other designated person.

1.2 Select and use appropriate equipment safely and according to manufacturer's instructions.

1.3 Follow proven gardening techniques.

1.4 Wear correct/required clothing according to type of work being completed and prevailing conditions.

1.5 Carry out tasks according to schedules.

1.6 Cause minimum disruption to customers and colleagues.

1.7 Meet quality requirements for completed work.

1.8 Clean work areas following completion of work.

1.9 Identify problems requiring specialist assistance and seek help from the appropriate person.

1.10 Observe safe workplace practices. |
| 2 Monitor the appearance and quality of grounds and gardens | 2.1 Identify sickly and unsightly plants and either treat or remove them.

2.2 Keep grounds free of litter.

2.3 Maintain lawns in the condition specified by the enterprise.

2.4 Keep garden beds and lawns free of weeds.

2.5 Identify hazards and take action promptly within the scope of individual responsibility.

2.6 Identify ways of improving grounds and gardens presentation and make suggestions to the appropriate supervisor or other person. |

- | | | | |
|----------|---|-----|---|
| 3 | Perform administrative tasks | 3.1 | Interpret grounds maintenance requests accurately. |
| | | 3.2 | Clarify instructions with persons making a request, when required. |
| | | 3.3 | Complete work report forms and other required documentation accurately. |
| | | 3.4 | Forward documentation to the appropriate person, as required. |
| | | | |
| 4 | Maintain and store equipment | 4.1 | Identify equipment problems or faults and report them to the appropriate person. |
| | | 4.2 | Carry out basic maintenance on gardening equipment, according to manufacturer's recommendations and enterprise practice. |
| | | 4.3 | Store equipment in the designated area. |
| | | 4.4 | Store equipment in accordance with manufacturer's specifications, enterprise requirements and occupational health and safety standards. |
| | | | |
| 5 | Assist in special gardening projects | 5.1 | Carry out work on special projects correctly, under direction from the appropriate specialist or supervisor. |
| | | 5.2 | Liaise with other project members to ensure effective co-ordination of tasks within the total project. |
| | | | |
| 6 | Liaise with contractors | 6.1 | Establish and maintain contact with appropriate contractors to ensure effective co-ordination of contract work. |
| | | 6.2 | Provide assistance and information to contractors when required. |
| | | 6.3 | Relay accurate information between contractors and maintenance supervisors when required. |

Range Statement

This unit may apply to any sector of the tourism and hospitality industry but has particular relevance for attractions and theme parks, hotels, motels, resorts and caravan parks. The following explanations identify how this unit may be applied in different workplaces and circumstances.

Routine gardening tasks may include:

- mowing
- weeding
- pruning
- trimming
- feeding plants and lawns
- planting and sowing
- spraying
- edging.

Gardening projects may include:

- creation of new beds
- refurbishment and replanting of existing beds
- landscaping
- planting
- removal of unsuitable plants
- moving plants and trees.

Appropriate equipment may include:

- hand tools and implements
- electrical tools and equipment
- earthmoving machinery
- lawn mowers, including hand-operated, petrol-operated, ride-on
- edgers
- rotary hoes
- hedge and tree/shrub trimmers
- leaf blasters and vacuums
- whipper snippers
- mulching machines.

Problems requiring specialist assistance may include:

- major breakdowns in plant and equipment
- rock blasting
- drilling
- servicing of specialist equipment
- tree removal or surgery.

Work report forms and other required documentation may include:

- job sheets
- maintenance books/sheets and schedules
- sign-off sheets
- requisitions and orders
- audits and reports.

Contractors may include:

- tradespeople such as tree surgeons, electricians, engineers, carpenters, plumbers, landscape architects, architects
- labourers
- gardeners
- lawn mowers.

Basic maintenance may include:

- cleaning of tools equipment
- sharpening blades and bits
- routine replacement of worn parts
- lubrication
- checking operation against manuals.

Quality requirements may include:

- standards and guidelines for external accreditation or certification
- enterprise standards and requirements
- audits and reports on quality and compliance.

Evidence Guide

Essential Knowledge and Skills to Be Assessed

The following skills and knowledge must be assessed as part of this unit:

- occupational health and safety/emergency procedures in relation to grounds maintenance
- technical procedures for commonly used equipment in grounds maintenance
- chemical usage in grounds maintenance
- basic gardening techniques
- basic plant knowledge
- environmental issues and legislation affecting grounds maintenance.
- principles of planned, preventative maintenance
- customer service skills.

Linkages to Other Units

There is a link between this unit and the following units and combined training and assessment may be appropriate:

- THTGTM01B Carry out general maintenance

Critical Aspects of Assessment

Evidence of the following is critical:

- ability to operate and use all equipment correctly and safely
- ability to perform a range of routine ground maintenance tasks within timeframes acceptable to the enterprise
- ability to document grounds maintenance
- ability to liaise with contractors
- knowledge of general procedures and requirements that apply to routine grounds maintenance work.

Context of Assessment and Resource Implications

Assessment must ensure:

- project or workplace activities that allow access to all equipment required for routine ground maintenance and completion of real grounds maintenance activities

- completion of ground maintenance activities within timeframes acceptable to the enterprise and which reflect standard workplace practice.

Assessment Methods

Assessment methods must be chosen to ensure that grounds maintenance skills can be practically demonstrated. Methods must include assessment of knowledge as well as assessment of practical skills.

The following examples are appropriate for this unit:

- direct observation of the candidate undertaking grounds maintenance activities
- evaluation of work completed by the candidate
- oral or written questions about selection, use and maintenance of tools and equipment; plants and chemicals
- review of portfolios of evidence and third party workplace reports of on-the-job performance by the candidate.

Key Competencies in this Unit

Key Competencies are an integral part of all workplace competencies. The table below describes those applicable to this unit. Trainers and assessors should ensure that they are addressed in training and assessment.

Level 1 = Perform Level 2 = Administer and Manage Level 3 = Design and Evaluate

Key Competencies	Level	Examples
Collecting, Organising and Analysing Information	1	Responding to instructions and requests for grounds maintenance Seeking out and reviewing information related to work activities Reading and following manuals, labels and instruction sheets.
Communicating Ideas and Information	1	Receiving, following and giving instructions to others Completing documentation
Planning and Organising Activities	1	Planning, organising and prioritising work tasks and responsibilities according to standard schedules and timeframes Making arrangements with specific customers, colleagues and departments or sections.
Working with Others and in Teams	1	Working co-operatively with colleagues in completing grounds maintenance activities Clarifying personal responsibilities
Using Mathematical Ideas and Techniques	1	Calculating quantities of chemicals required and dilution rates. Calculating numbers of plants required for a given area given growth rate and mature size.
Solving Problems	1	Dealing with hazards Assessing routine and non-routine cleaning and equipment maintenance.
Using Technology	1	Using maintenance equipment requiring adjustment and modulation.

UTG NGS301 A Construct and Lay Pipelines

Descriptor: Construct and lay gas distribution pipelines

Element	Performance criteria
301.1 Prepare pipeline installation	301.1.1 Plans, specifications and other relevant information are received.
	301.1.2 Alignment of gas main is confirmed and the location of other services is received.
	301.1.3 Appropriate personnel are consulted to ensure the work requirement is identified in consultation with others involved on the work site.
	301.1.4 Materials necessary to complete the work are identified and obtained in accordance with SOPs.
	301.1.5 Tools and equipment needed to carry out the work are obtained in accordance with SOPs and checked for correct operation and safety.
301.2 Construct, lay and insert pipelines	301.2.1 Pipelines are constructed according to relevant SOPs and legislative requirements
	301.2.2 Pipelines for renewal are correctly identified.
	301.2.3 Pipelines are installed and/or inserted in accordance with SOPs and legislative requirements.
301.3 Complete work	301.3.1 Work is completed in accordance with SOPs.
	301.3.2 Final inspections are undertaken to ensure the work conforms with requirements.
	301.3.3 Work completion is notified in accordance with SOPs.

Range of Variables

Other services may include water; electricity; telecommunication; sewerage and stormwater authorities; other pipeline authorities

Appropriate personnel may include site manager; maintenance personnel; shift supervisor

Materials required for pipeline installation may include various pipes (eg. p.v.c, nylon, pe, cast iron); fittings; coating material; bedding materials; detecta tape; trace wire

Tools and equipment required for pipeline installation may include but is not limited to pneumatic tools and equipment; boring equipment; plastic fusion and solvent glue kits; welding plant equipment; various hand tools; trucks; slings; generators;

location equipment; electrofusion equipment; window cutter; steel plates; administrative equipment for documentation; lifting equipment

Safe working procedures in SOPs may include wearing personal protective equipment; controlling traffic; controlling access to the site; ensuring trenches are correctly shored; using welding screens; the availability of correct fire extinguishers; enterprise procedures and practices

Legislative requirements may include OH&S; environmental; traffic control

Evidence Guide

Critical aspects of evidence

Other service locations; pipeline constructing; jointing procedures; coating procedures to protect against corrosion; OH&S and environmental legislative requirements; plans are used to carry out work; data recording

Context of assessment

Assessment of competency, including attainment of relevant knowledge and skills may be made through practical demonstration in an actual work environment or simulation of such an environment. Assessment may be carried out by day or night, in varied weather conditions, but must adhere to defined safety and regulatory guidelines.

Specialised resources required for training and assessment

Availability of appropriate equipment to construct and lay pipelines; system which facilitates recording of trainees' profiles and progress; facilities for workplace or simulated environment assessment

Pre-requisites and co-requisite

This unit should be assessed in conjunction with or after competency has been demonstrated in Unit UTG NGS 001 A Apply Procedures in the Workplace, Unit UTG NGS 002 A Working With Others, Unit UTG NGS 003 A Plan and Organise Work Activities, Unit UTG NGS317 B - Use plans, drawings and specifications and Unit UTG NGS 318 A Use and maintain small plant, equipment and tools and carry-out minor mechanical maintenance

The co-requisites to this unit are Units UTG NGS 302 A Prepare, Excavate and Reinstat Site

Knowledge and Skills

The Evidence Guide is a set of guidelines which assist in the development of assessment instruments/tools to assess the competency of workers in the Gas Industry. This requires evidence of consistent achievement of the workplace outcomes covered by the unit.

An employee working at this level is required to identify appropriate pipeline materials; adhere to Australian Standards; identify reticulation systems and use plans and specifications; understand the characteristics and operation capabilities and limitations of tools and equipment; operate tools and equipment within their capabilities and limitations; demonstrate an awareness of the various fittings required; document incident following procedures including those required for minor incidents, fire safety & first aid; prepare work site; communicate information to members of the public, the team, and other parties such as communications, water and electricity suppliers; analyse information to solve problems; follow OH&S and environmental legislative requirements

Key Competencies

Utilisation of the Key Competencies in the performance of this unit

Level of utilisation of Key Competencies (1 - perform; 2 - administer; 3 - design)

Key Competency	Level
Communicating ideas & information	2
Collecting, analysing & organising information	1
Planning and organising activities	1
Working with others in a team	2
Using mathematical ideas and techniques	1
Solving problems	2
Using technology	1

BSBFLM305B**Support operational plan****Unit Descriptor**

This unit specifies the outcomes required to provide support for operational practices and procedures within the organisation's productivity and profitability plans. This includes contributing to the operational plan, assisting in recruiting employees and acquiring resources, and monitoring and adjusting operational performance.

Competency Field

Business management services

Domain

Frontline management

Application of the Competency

This unit replaces BSBFLM305A Support operational plan.

Frontline managers are actively engaged in planning activities to achieve the measurable, stated objectives of the team and the organisation. This key role is carried out to provide safe, efficient and effective products and services to customer satisfaction within the organisation's productivity and profitability plans.

At this level, work will normally be carried out within known routines, methods and procedures, and may also involve a number of complex or non-routine activities that require some discretion and judgement.

This unit is related to BSBFLM405B Implement operational plan. Consider co-assessment with BSBFLM303B Contribute to effective workplace relationships, BSBFLM306B Provide workplace information and resourcing plans, BSBFLM312A Contribute to team effectiveness, BSBCMN311A Maintain workplace safety and BSBFLM309B Support continuous improvement systems and processes.

Element**Performance Criteria**

Elements define the critical outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

1. Contribute to implementation of operational plan

- 1.1 Details of *resource requirements* are collected, recorded and reported to *relevant personnel*
- 1.2 Support of *operational plan* contributes to the achievement of the organisation's performance and business plan
- 1.3 *Key performance indicators* are identified and used to measure own and work team's performance
- 1.4 *Contingency planning* is undertaken as required
- 1.5 The development and presentation of proposals for resource requirements is supported as required

- | | |
|--|---|
| 2. Assist in recruiting employees and acquiring resources | <p>2.1 Assistance with employee recruitment and/or induction within <i>the organisation's policies and practices</i> is provided as required</p> <p>2.2 Physical resources and services are acquired according to the organisation's policies, practices and procedures and in consultation with relevant personnel</p> |
| 3. Support operations | <p>3.1 <i>Performance systems and processes</i> are identified and used to assess progress in achieving team plans and targets</p> <p>3.2 Short-term budgets, targets and performance results are identified and compared to actual productivity and performance</p> <p>3.3 Unsatisfactory performance is identified and reported to relevant personnel, to enable action to be taken to rectify the situation</p> <p>3.4 Coaching is provided to support individuals and teams to use resources effectively, economically and safely</p> <p>3.5 <i>Consultation processes</i> for the development and/or variation of the operational plan are supported as required</p> <p>3.6 Recommendations for variation to operational plans are presented to relevant personnel</p> <p>3.7 <i>Systems, procedures and records</i> associated with performance are followed in accordance with the organisation's requirements</p> |

Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

Legislation, codes and national standards relevant to the workplace may include:

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety (OHS) and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

OHS considerations may include:

- provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs
- consideration of OHS requirements in the planning process
- inclusion of OHS key performance indicators (KPIs)
- participation in the regular update of OHS systems and procedures
- dissemination of organisation's procedures for dealing with hazardous events

Resource requirements may include:

- supply of resources
- stock requirements and requisitions
- purchasing or ordering of goods

Relevant personnel may include:

- managers
- supervisors
- other employees
- colleagues and specialist resource managers
- OHS committees and other people with specialist responsibilities
- unions/employee groups

Operational plan may include:

- tactical plans developed by the department or section to detail product and service performance
- organisational plans

Key performance indicators may refer to:

- measures for monitoring or evaluating the efficiency or effectiveness of a system, and which may be used to demonstrate accountability and identify areas for improvements

Contingency planning may refer to:

- rental, hire purchase or alternative means of procurement of required materials, equipment and stock
- contracting out or outsourcing human resource and other functions or tasks
- restructuring of organisation to reduce labour costs
- strategies for reducing costs, wastage, stock or consumables
- diversification of outcomes
- recycling and re-use
- finding cheaper or lower quality raw materials and consumables
- seeking further funding
- increasing sales or production
- risk identification, assessment and management processes

	<ul style="list-style-type: none"> • succession planning
<i>The organisation's policies and practices may include:</i>	<ul style="list-style-type: none"> • those organisational guidelines which govern and prescribe operational functions, such as the acquisition and management of human and physical resources • Standard Operating Procedures • undocumented practices in line with organisational operations • organisational culture
<i>Performance systems and processes may be:</i>	<ul style="list-style-type: none"> • formal or informal processes within the organisation, such as: <ul style="list-style-type: none"> - Key Performance Indicators (KPIs) - specified work outcomes - individual and team work plans - feedback arrangements • informal systems used in the place of existing organisation-wide systems
<i>Consultation processes may refer to:</i>	<ul style="list-style-type: none"> • meetings, interviews, brainstorming sessions, email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual operational plans • mechanisms used to provide feedback to the work team in relation to outcomes of consultation
<i>Systems, procedures and records may include:</i>	<ul style="list-style-type: none"> • individual and team performance plans • organisational policies and procedures relative to performance • databases and other recording mechanisms

Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to support an operational plan. This will include monitoring and adjusting operational performance, producing short-term plans for the department or section, planning and acquiring resources and providing reports on performance as required.

Specific Evidence Requirements

- **Required knowledge and understanding include:**
 - relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination
 - general understanding of the principles and techniques of:
 - short-term operational scheduling
 - physical resources and services acquisition procedures and/or systems
 - budget and performance figures interpretation
 - performance monitoring within defined job role
 - performance reporting
 - problem identification and resolution
 - alternative approaches to improving resource usage and eliminating resource inefficiencies and waste within defined job role
 - support for individuals and teams who have difficulty in performing to the required standard
- **Required skills and attributes include:**
 - ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
 - functional literacy skills to access and use workplace information
 - skills to:
 - maintain a safe workplace and environment
 - access and use feedback to improve operational performance
 - prepare recommendations to improve operations
 - access and use established systems and processes
 - coaching and mentoring skills to provide support to colleagues
- **Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
 Level (2) represents the competence to manage tasks
 Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

The bulleted points provide examples of how the key competencies can be applied for this unit.

-
- Communicating ideas and information (2)
 - sharing information with members of the work team about implementing and monitoring the operational plan
 - Collecting, analysing and organising information (2)
 - acquiring information for monitoring and reporting purposes
 - Planning and organising activities (2)
 - assisting in planning resource acquisition and usage including human resources, risk management and contingency planning
 - Working in a team (2)
 - achieving planning outcomes, especially in regard to team effectiveness
 - Using mathematical ideas and techniques (1)
 - carrying out calculations associated with resource usage
 - analysing and monitoring budget and financial plans
 - Solving problems (2)
 - monitoring and implementing risk management procedures and contingency plans
 - addressing unsatisfactory performance in all areas of the operation
 - Using technology (1)
 - assisting in the management of information to achieve planned outcomes
 - Innovation skills (2)
 - creating innovative methods to achieve planned outcomes
 - **Products that could be used as evidence include:**
 - documentation produced while working with the operational plan, such as:
 - suggestions for variations to the operational plan
 - rosters and staff allocation
 - short-term resource acquisition planning
 - actions taken to address day-to-day resource shortfalls
 - monitoring of financial plans and budgets
 - contingency planning
 - risk management plans
 - learning and development plans for team members
 - materials developed for coaching
 - induction programs conducted
 - actions taken to acknowledge poor, unsafe or excellent performance
 - actions taken to address issues and problems within work team
 - suggestions and input into management decisions related to the operational plan
 - records of people management lessons learned
 - **Processes that could be**
 - how resource allocation has been managed

-
- used as evidence include:**
- how work was allocated within the work team and the rationale used for such allocations
 - how financial plans and budgets were formulated at operational level
 - how the operational plan was managed
 - how team members were guided and supported in performing their role including induction process for new team members
 - how individual learning and development pathways were developed
 - how performance management system was implemented within work team
 - how problems and issues within the work team were addressed
 - how input and advice was provided to management in relation to human resource management of the work team
 - how own people management processes were reviewed and evaluated, and improvements identified, reported and acted upon
- **Resource implications for assessment include:**
- access by the learner and trainer to appropriate documentation and resources normally used in the workplace
- **Validity and sufficiency of evidence requires:**
- that this unit can be assessed in the workplace or in a closely simulated work environment
 - that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment
 - that examples of actions taken by the candidate to support the operational plan are provided
- **Integrated competency assessment means:**
- that this unit should be assessed with other frontline management units taken as part of this qualification as applicable to the candidate's leadership role in a work team, and as part of an integrated assessment activity

BSBFLM312A**Contribute to team effectiveness****Unit Descriptor**

This specifies the outcomes required to by frontline managers to contribute to the effectiveness of the work team. It involves planning with the team to meet expected outcomes, developing team cohesion, participating in and facilitating the work team, and communicating with the management of the organisation.

Competency Field

Business management services

Domain

Frontline management

Application of the Competency

This unit replaces BSBFLM302A Support leadership in the workplace and BSBFLM304A Participate in work teams, which have been combined to create this unit.

Frontline managers have a key role in developing efficient and effective work teams within the context of the organisation. They play a prominent part in motivating, mentoring, coaching and developing team cohesion by providing leadership for the team and forming the bridge between the management of the organisation and the team members.

At this level, work will normally be carried out within known routines, methods and procedures, and may also involve a number of complex or non-routine activities that require some discretion and judgement.

This unit is related to BSBFLM412A Promote team effectiveness.

Element**Performance Criteria**

Elements define the critical outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

4. Contribute to team outcomes

- 1.1 *Team purpose, roles, responsibilities, goals, plans and objectives* are identified in consultation with team members
- 1.2 Team members are supported in meeting expected outcomes

5. Support team cohesion

- 2.1 Team members are encouraged to participate in the planning, decision making and operational aspects of the work team to their level of responsibility
- 2.2 Team members are encouraged and supported to take responsibility for their own work and to assist each other in undertaking required roles and responsibilities
- 2.3 *Feedback* is provided to team members to encourage, value and reward team members' efforts and contributions

- | | | |
|---------------------------------------|-----|---|
| | 2.4 | Issues, concerns and problems identified by team members are addressed or referred to <i>relevant persons</i> as required |
| 6. Participate in work team | 3.1 | Team members are actively encouraged and supported to participate in team activities and communication processes and to take <i>responsibility for their actions</i> |
| | 3.2 | The team is given support to identify and resolve problems which impede its performance |
| | 3.3 | Own contribution to work team serves as a role model for others and enhances the organisation's image within the work team, the organisation and with clients/customers |
| 7. Communicate with management | 4.1 | <i>Communication</i> with line manager/management is kept open at all times |
| | 4.2 | Information from line manager/management is communicated to the team |
| | 4.3 | <i>Unresolved issues</i> are communicated to line manager/management and are followed up to ensure action is taken in response to these matters |

Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

Legislation, codes and national standards relevant to the workplace may include:

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety (OHS) and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

OHS considerations may include:

- provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs
- training of all employees in health and safety procedures
- participation in the regular update of OHS systems and procedures
- changes to work practices, procedures and the working environment which impact on OHS

Team purpose, roles, responsibilities, goals, plans and objectives may include:

- goals for individuals and the work team
- expected outcomes and outputs
- individual and team performance plans and Key Performance Indicators (KPIs)
- action plans, business plans and operational plans linked to strategic plans
- OHS responsibilities

Feedback may refer to:

- communication of ideas and thoughts which focus on specific tasks, outcomes, decisions, issues or behaviours
- formal/informal gatherings between team members where there is discussion on work-related matters

Relevant persons may include:

- frontline manager's direct superior or other management representatives
- colleagues
- designated personnel e.g. safety officer

Responsibility for their actions may involve:

- individuals and teams
- individual and joint actions

Communication may include:

- verbal, written or electronic communication
- face-to-face
- formal/informal interaction

Line manager/management may refer to:

- frontline manager's direct superior or other management representatives

Unresolved issues may include:

- issues, concerns and tensions
- problems related to work roles and responsibilities
- grievances and complaints
- any matters affecting workplace relationships and team cohesion

Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to show that they are able to demonstrate leadership in contributing to team plans, in leading and facilitating teamwork and in actively communicating with management. They must also provide evidence that teamwork is actively promoted, supported and encouraged within the work team; and that their own performance serves as a role model for others and enhances the organisation's image within the work team, the organisation and with clients/customers.

Specific Evidence Requirements**- Required knowledge and understanding includes:**

- relevant legislation from all levels of government that affects business operation, especially in regard to occupational health and safety and environmental issues, equal opportunity, industrial relations and anti-discrimination
- organisational policies and procedures
- organisational goals, objectives and plans at both tactical and strategic levels
- organisational structure including organisational chart
- learning and development options available within and through organisation
- a general understanding of the principles and techniques of:
 - group dynamics and processes
 - motivation
 - planning
 - negotiation
 - individual behaviour and difference

- Required skills and attributes include:

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- communication skills, including listening
- basic training skills, including mentoring and coaching
- planning and organising skills
- problem solving skills
- attributes:
 - empathic
 - communicative
 - self aware
 - supportive
 - trusting
 - open
 - flexible
 - accommodating
 - initiating
 - loyal
 - fair
 - adaptable

- **Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
 Level (2) represents the competence to manage tasks
 Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

The bulleted points provide examples of how the key competencies can be applied for this unit.

 - Communicating ideas and information (2)
 - communicating verbally to lead a team, including negotiating, training, participating in meetings, questioning and discussing
 - communicating in writing, including report writing
 - Collecting, analysing and organising information (1)
 - managing information flow to and from line manager/management
 - Planning and organising activities (2)
 - planning for own work and that of team members
 - Working in a team (2)
 - working with team members and providing leadership to team
 - working with line manager/management to represent team interests
 - Using mathematical ideas and techniques (1)
 - using calculation skills associated with data manipulation relevant to work of team, including financial data
 - Solving problems (2)
 - applying problem solving skills as required to address problems arising in leading team
 - Using technology (1)
 - using word processing packages, spreadsheets, databases, and other packages to produce written correspondence and reports related to operations and leadership of the team
 - understanding assistive technologies, as necessary
 - Innovation skills (1)
 - developing an innovative approach to the support of team effectiveness
- **Products that could be used as evidence include:**
 - documentation produced from working in a team, such as:
 - reports
 - minutes or records of meetings
 - work journals or diaries
 - learning and development plans developed with team members
 - records of actions taken to address issues raised by team members

- **Processes that could be used as evidence include:**
 - how communication process has been managed and examples of how consultations have taken place
 - examples of how team members have been supported and encouraged to meet expected outcomes
 - examples of processes which have been developed to facilitate team cohesion
 - how performance plan was communicated to team
 - how team members were guided and supported in performing their role including induction process for new team members
 - how performance management system was implemented within work team
 - how problems and issues within the work team were addressed
 - how input and advice was provided to management in relation to human resource management of the work team
- **Resource implications for assessment include:**
 - access by the learner and trainer to appropriate documentation and resources normally used in the workplace
- **Validity and sufficiency of evidence requires:**
 - that this unit can be assessed in the workplace or in a closely simulated work environment
 - that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment
 - that examples of actions taken by candidate to contribute to team effectiveness are provided
- **Integrated competency assessment means:**
 - that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's role in a work team, and as part of an integrated assessment activity

... End ...

BCGDO3001B Perform dogging	
Unit Descriptor	This unit specifies the competency required to undertake basic dogging work, both in sight and out of sight of the crane operator, for the purpose of shifting loads mechanically. The unit includes selecting sling types and sizes and maintaining the stability of the load.

ELEMENT	PERFORMANCE CRITERIA
1. Plan and Prepare	<p>1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied</p> <p>1.2 Safety requirements are followed in accordance with safety plans and policies</p> <p>1.3 Signage/barricade requirements are identified and implemented</p> <p>1.4 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 prior to commencement</p> <p>1.5 Material quantity requirements are calculated in accordance with plans and/or specifications</p> <p>1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use</p> <p>1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied</p>
2. Select dogging equipment	<p>2.1 Resources, materials and equipment are selected and inspected for compliance with job specifications</p> <p>2.2 Job sequencing schedule is communicated with team members and others to ensure co-ordination</p> <p>2.3 Load mass is calculated and confirmed using load charts and standard calculations</p> <p>2.4 Load in slings and equipment are calculated to suit job requirements</p>
3. Sling loads	<p>3.1 Lifting devices are assembled/erected for the movement of load</p> <p>3.2 Loads are slung to crane ready for lifting</p> <p>3.3 Protective packing is applied to the load</p>
4. Shift loads	<p>4.1 Loads is shifted ensuring stability in compliance with work method statement</p> <p>4.2 Load is directed to landing position using communications in compliance with Australian Standards and recognised work practices</p> <p>4.3 Load is landed in required position on packing or bearers</p>
5. Remove dogging equipment	<p>5.1 Load shifting equipment is dismantled and inspected for wear and log book and site records completed to company requirements</p>

6. Clean up	<p>6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification</p> <p>6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices</p> <p>6.3 Work completion procedures are applied and relevant personnel notified that work is finished</p>
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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. Add any 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.

Unit scope	<ul style="list-style-type: none"> • Planning and preparation is to include but not be limited to worksite inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements • Communications are to include hand signals, whistle signals and radio communications • Calculations are to include but not be limited to load charts, standard calculations, delivery dockets, load share, pre-cast compliance charts and safe working loads • Sling types are to include but not be limited to chain, flexible steel wire rope, natural or synthetic fibre • Load slinging methods are to include but not be limited to straight sling, adjustable sling, reeved sling and inclined sling • Lifting devices are to include but not be limited to tags, lifting clutches, shackles, snatch blocks, eye bolts and may include equalizing sheaves, collared eye bolts, turn buckles, rigging screws and lifting lugs • Types of cranes may include but not be limited to fixed cranes, tower cranes, hydraulic mobile cranes, lattice boom mobile cranes and slewing cranes • Materials are considered equipment and vice versa
Safety (OH&S)	<ul style="list-style-type: none"> • OH&S requirements are to be in accordance with legislation/regulations/codes of practice, 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, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be

	<p>limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public</p> <ul style="list-style-type: none"> Emergency procedures related to this unit are to include but may not be limited to emergency stopping, extinguishing fires, organisational first aid requirements and evacuation
Environmental requirements	Environmental requirements are to include but are not limited to waste management, noise, vibration and clean-up management.
Quality requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers' specifications where specified.
Statutory/regulatory authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice.
Tools and equipment	Tools and equipment are to include but not be limited to brick cages, personnel cages, kibbles, rubbish bins, spreader bars and beams and rescue cages.
Communications	<ul style="list-style-type: none"> Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local co-ordination 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, memos, material safety data sheets (MSDS), diagrams or sketches Safe work procedures related to performing dogging Regulatory/legislative requirements pertaining to performing dogging Engineers' design specifications/manufacturers' specifications and instructions where specified Organisation work specifications and requirements Instructions issued by authorised organisational or external personnel Relevant Australian Standards

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement

and the Assessment Guidelines for the Training Package.	
Critical aspects of evidence required to demonstrate competency in this unit	<ul style="list-style-type: none"> • Location, interpretation and application of relevant information, standards and specifications • Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations • Compliance with organisational policies and procedures including quality requirements • Safe and effective operational use of tools and equipment • Communication and working effectively and safely with others • As a minimum, read tags, sling, load, direct and land loads in conjunction with a slewing mobile crane with a telescopic boom and a winch, out of sight for: <ul style="list-style-type: none"> ○ rigid heavy loads to 2/3 capacity of the crane • luff movements, boom retract and boom extend, slew right and slew left, winch up and down in combination • a flexible load with a minimum of 3 lifting points • using hand signals and whistle from minimum radius to maximum radius
Relationship to other units	<p>Pre-requisite units are:</p> <ul style="list-style-type: none"> • BCGCM1001B - Follow OH&S policies and procedures <p>Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.</p>
Specific knowledge required to achieve the performance criteria	<p>A knowledge of:</p> <ul style="list-style-type: none"> • Workplace and equipment safety requirements • Quality requirements • General Construction terminology • Plant, tools and equipment types, characteristics, uses and limitations • Dogging techniques • Dogging equipment • Processes for the calculation of material requirements • Material Safety Data Sheets • Plans, drawings and specifications • Materials handling, storage and environmentally friendly waste management • Relevant acts, regulations and codes of practice • Designs and functions of lifting equipment • Crane operations and limitations • Signalling methods and communications • Safe working load tags • Log books • Weather and ground considerations • Safe working at heights and fall arrest • Elevated work platforms • JSA's/Safe work method statements
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

	<ul style="list-style-type: none"> • Assessment is to occur using 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 requirements including specified Australian Standards
Methods of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General 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 and it must also reinforce the integration of key competencies • 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	<p>The following resources should be made available:</p> <ul style="list-style-type: none"> • workplace location or simulated workplace • hand and power tools, plant and equipment appropriate to performing dogging • realistic activities covering the mandatory task requirements • specifications and work instructions

Key Competencies

Key Competency	Examples of Application	Performance Level
How can information be collected, analysed and organised?	Examples of how the Key Competencies apply in this unit are not provided	2
How are ideas and information communicated within this competency?	Examples of how the Key Competencies apply in this unit are not provided	2
How are activities planned and organised?	Examples of how the Key Competencies apply in this unit are not provided	2
How are problem solving skills	Examples of how the Key Competencies	1

applied?	apply in this unit are not provided	
How are mathematical ideas and techniques used?	Examples of how the Key Competencies apply in this unit are not provided	2
How is use of technology applied?	Examples of how the Key Competencies apply in this unit are not provided	1
How is team work used within this competency?	Examples of how the Key Competencies apply in this unit are not provided	1

Specific key competencies, underpinning and employability skills required to achieve the performance criteria

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

- Level 1 relates to working effectively within set conditions and processes;
- Level 2 relates to the management or facilitation of conditions or processes; and
- Level 3 relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit?

The candidate will need to:

Collect, analyse and organise information

Collect, organise, interpret and understand the information required for performing dogging, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions **Level 2**

Communicate ideas and information

Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes **Level 2**

Plan and organise activities

Conduct activities associated with performing dogging, including the co-ordination and use of equipment, materials and tools to avoid backtracking and rework **Level 2**

Work with others and in a team

Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity **Level 1**

Solve problems

Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage **Level 1**

Use mathematical ideas and techniques

Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks **Level 2**

Use technology

Use workplace technology related to performing dogging, including the use of calculators, the use of communication devices and the reporting/recording of results **Level 1**

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