

Perform dogging operations

Code OHSCER218A

Workplace Health and Safety Queensland is moving to a new learning and assessment system for certificates to work in prescribed occupations. Learning and assessment will now be conducted in the Vocational Education and Training (VET) sector in which units of competency set out the knowledge and skills needed to demonstrate competent performance in a prescribed occupation.

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CODE: OHSCER218A

TITLE: Perform dogging operations

DESCRIPTOR: This unit of competency covers the functions required to competently perform dogging operations to meet minimum training and assessment standards for the purposes of certification. This unit has been developed in accordance with the licensing and assessment requirements of (NOHSC:1006 [2001])

The scope of work is to demonstrate competence in the application of slinging techniques, selection and inspection of lifting gear, direction of the crane/hoist operator in the movement of the load including when the load is out of view of the operator.

ELEMENT	PERFORMANCE CRITERIA
1.0 Plan and prepare work	
1.1 Plan job	1.1.1 Potential <i>hazards</i> associated with the use of cranes and other load moving equipment is identified and measures to eliminate or control these hazards are planned. 1.1.2 <i>Site</i> information is obtained as necessary. 1.1.3 Potential <i>hazards</i> are identified. 1.1.4 Optimum prevention/control measures are selected. 1.1.5 Adequate site access and egress are identified. 1.1.6 Co-ordination requirements with other site <i>personnel</i> are determined. 1.1.7 Determine or confirm appropriate mass and dimensions of load. 1.1.8 Appropriate loadshifting <i>equipment</i> is identified. 1.1.9 Check for appropriate approvals for <i>work</i> and for persons. 1.1.10 The job method and sequence is developed to include <i>hazard</i> prevention control measures and safety procedures. 1.1.11 The job feasibility and schedule are checked with the client, and other persons as necessary. 1.1.12 The job plan is developed to include hazard prevention/control measures and to applicable Australian Standards, codes of practice, advisory standards and to equipment manufacturer's specifications.

ELEMENT	PERFORMANCE CRITERIA
1.1 Plan job	1.1.13 The existence of appropriate instructions from the load designer is checked. The designer is consulted for appropriate instructions for more complex load movement tasks where written instructions are not provided.
1.2 Select and inspect material and tools	1.2.1 Appropriate <i>lifting</i> gear is inspected and damaged or worn items are labelled and rejected. 1.2.2 Select and assemble sets or <i>lifting</i> gear to Australian Standards and codes of practice where appropriate. 1.2.3 Where appropriate, safe working load is calculated to Australian Standards.
2.0 Complete dogging work	
2.1 Move loads	2.1.1 Load moving is performed in accordance with planned hazard prevention and control measures, to acceptable safe work practices and appropriate Australian Standards, codes of practice, guides and manufacturer's specifications. 2.1.2 <i>Lifting</i> gear is connected to load to manufacturer's specifications, guides and Australian Standards as appropriate. 2.1.3 Connect load to movement device with appropriate techniques using appropriate <i>equipment</i> . 2.1.4 Appropriate <i>communication</i> and <i>signal methods</i> are used to co-ordinate the load movement with safety and signals. Signals are given both within sight and out of sight of equipment operator. 2.1.5 The load is moved with due regard for load centre of gravity, access, obstacles, wind conditions and final resting position(s). 2.1.6 Any specifications given by the designer relative to the load are followed. 2.1.7 The stability of the load is ensured throughout the load movement procedure.

Range Statement

The range of variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The assessment must determine that there is sufficient skill and knowledge for the operator to take the licence and operate in a new workplace. The assessment must be adjustable but prescriptive to ensure transferability.

What may be involved in routine pre-operational checks?

Pre-operational checks is to include but not be limited to:

- worksite inspection
- equipment defect identification
- assessment of conditions and hazards
- determination of work requirements.

What could appropriate *equipment* include?

Equipment includes, but is not limited to:

- slings
- ropes
- shackles
- eye bolts
- spreader beams and bars
- brick cages
- personnel in working cages
- kibbles
- rubbish bins
- rescue cages.

Sling types are to include but not be limited to:

- chain
- flexible steel wire rope
- natural or synthetic fibre.

Lifting devices are to include but not be limited to:

- tags
- lifting clutches
- shackles
- snatch blocks
- I bolts
- equalising sheaves
- collared I bolts
- turn buckles
- rigging screws
- lifting equipment.

Types of cranes may include but not be limited to:

- fixed cranes
- tower cranes
- hydraulic mobile cranes
- lattice boom mobile cranes
- slewing cranes
- non slewing cranes
- gantry cranes.

What slinging methods could be used?

Load slinging methods are to include but not be limited to:

- straight sling
- adjustable sling
- reeved sling
- inclined sling.

What *hazards* may be encountered in the workplace?

Hazards in the workplace may include but not be limited to:

- overhead power lines
- trees
- overhead service lines such as steam, gas, water, telephone
- underground services
- uneven and/or unstable ground
- allowable floor loading as appropriate
- other workers and persons
- surrounding buildings
- vessels/structures equipment
- hazardous materials
- corrosive substances
- barricades
- explosive materials
- electrical hazards
- inadequate lighting
- radio interference.

Environmental requirements are to include but are not limited to:

- waste management
- noise
- dust
- vibration
- sedimentation control
- clean-up management.

What needs to be considered for personal/public safety?

Considerations need to include but not limited to:

- legislative requirements
- gantries
- barricades
- hoardings
- lights
- signs
- witches hats
- road/half road closes.

Site/non-site *personnel* are safeguarded (protected) by a variety of measures including:

- the erection of barricades
- posting of signs consistent with principles of the hierarchy of control.

Appropriate equipment is selected to ensure personnel safety and protection.

What *site/occupational health and safety* requirements may be relevant to this standard?

Occupational health and safety requirements are to include but not be limited to:

- be in accordance with legislation/regulation/codes of practice/advisory standards
- organisational safety policies and procedures and safety plan
- 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
- weather conditions.

Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice/advisory standards and workplace policies and practices.

Safe operating procedures are to include but not be limited to:

- conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits)
- lighting
- earth leakage boxes
- trips hazards
- working with dangerous materials
- working in confined spaces
- surrounding structures
- restricted access barriers
- working at heights.

Emergency procedures related to equipment operation are to include but not be limited to:

- emergency shutdown and stopping
- extinguishing equipment fires
- organisational first aid requirements
- evacuation.

What permits may be relevant to this standard?

Permit may include but not be limited to:

- footpath closures
- road closures
- traffic requirements
- confined spaces
- rail
- local government
- utility providers
- permits from service providers
- local authorities
- industry specific requirements.

What work area may be relevant to this standard?

Work areas may include but not be limited to:

- factories
- wharfs
- ships
- warehouses
- manufacturing plants
- building sites
- road construction
- demolition sites
- quarries
- mine sites.

What personal protective *equipment* may be relevant to this standard?

This may include but not be limited to:

- boots
- hat/hard hat
- overalls
- gloves
- protective eyewear
- hearing protection
- respirator or face mask
- sun protection
- task specific personal protective equipment
- fall protection.

Who are site/non-site *personnel*?

Non site personnel may include but not be limited to:

- members of the public
- visitors to the site
- delivery driver.

Site personnel may include but not be limited to:

- employees
- contractors
- management
- students.

What records may need to be kept or updated?

Records may include but not be limited to sling maintenance records.

What are appropriate *communication* and *signal methods*?

Communication and signal methods include but not be limited to:

- stop
- raise
- lower
- slew left and bottom
- luff: boom up and down
- extend boom and extract boom

Communications are to include:

- hand signals
- whistle signals and radio communications
- fault reporting
- mobile phones
- site specific instructions
- written instructions
- plans or instructions related to job/task
- two way radio.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

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.

Competence in this standard requires evidence of the ability to undertaking dogging operations without damage or injury to property or people. It requires the ability to plan job, select and inspect material and tools and move loads.

What **critical aspects** of evidence are required to demonstrate competency in this unit?

- Location, interpretation and application of relevant information, standards and specifications.
- Compliance with the site safety plan and occupational health and safety legislation/regulations/codes of practice/advisory standards 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.
- 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:
 - rigid heavy loads to 2/3 capacity to crane
 - luff movements, trolley in trolley out, slew right and slew left, winch up and down in combination
 - a flexible load with a minimum of 3 lifting points
 - using had signals and whistle from minimum radius to maximum radius.

What **specific knowledge** is needed to achieve the performance criteria?

- Operating principles and operating methods.
- Legislative requirements with regard to licensing.
- Dogging techniques and equipment
- Loadshifting processes and procedures.
- Principles of the safe removal of obstacles and hazards from the workplace.
- The hierarchy of hazard control measures with elimination of substitution, isolation and engineering control measures being selected before safe work practices and personal protective equipment.
- Workplace communication procedures.
- Demonstrate safe and environmentally responsible workplace practices.
- Electrical hazards
- Load masses

What **specific skills** are needed to achieve the performance criteria?

- Readily familiarise self with local conditions.
- Demonstrate emergency operating procedures.
- Read and interpret site planning, manufacturers' specifications, work and maintenance plans and material safety data sheets.
- Comprehend and apply task instructions.
- This work may include deciding on a method to move loads and communicating these ideas to supervisor.
- Working with other plant operators and personnel to move and place loads.
- Asses weight of load

- Calculate and determine crane capabilities
- Selection of slings and signalling
- Ability to work at heights
- Emergency situations
- Determine mass of irregular shaped loads.
- Able to listen and understand job requirement.
- Understand written documents for job processes.
- Understand tables and figures for job procedures.
- Understand interrelationship among workplace processes and procedures in the English language.
- Understand and interpret signals and instructions in the English language.
- Hand/eye co-ordination.

What **methods of** assessment should apply?

- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge.
- Assessment must include as a minimum the achievement of competence to the standard established in the NOHSC assessment instrument. Additional requirements may need to be achieved to comply with the AQTF including key competencies.
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge.
- Assessment must be applied in a real work environment or replicated industrial workplace.

In what **context** should the assessment occur?

- The application of competency is to be assessed in the workplace or replicated industrial workplace.
- Assessment is to occur using standard and authorised work practices including safety equipment and environmental constraints.
- Assessment of essential underpinning knowledge, other than the confirmatory questions, will usually be conducted in an off-site context.
- Assessment is to comply with relevant regulatory requirements including specific Australian Standards.

What are the **specific resource requirements** for this unit?

- Workplace location or replicated work facility in accordance with the OHS instrument relating to the OHS jurisdiction.
- Tools and equipment appropriate to loadshifting
- Specifications and work instructions
- Appropriate dogging equipment
- Communication equipment (radios) (where applicable)
- Occupational Health and Safety Certification Training and Assessment Delivery Guide
- Occupational health and safety assessment instruments
- Occupational health and safety authority learner guide
- Occupational health and safety authority trainer guide.

What key competencies should be applied to this unit of competency?

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question is the number in brackets indicates the level to which the key competency needs to be demonstrated where:

0 = not required

1 = perform the process

2 = perform and administer the process

3 = performance, administer and design the process

<p>1. How can communication of ideas and information be applied)</p>	<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 style="text-align: right;">Level 1</p>
<p>2. How can information be collected, analysed and organised?</p>	<p>Collect, organize, 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.</p> <p style="text-align: right;">Level 1</p>
<p>3. How can activities be planned and organised?</p>	<p>Conduct activities associated with performing dogging, including the coordination and use of equipment, materials and tools to avoid backtracking and rework.</p> <p style="text-align: right;">Level 1</p>
<p>4. How can team work be applied?</p>	<p>Work with others and in a team by recognising dependencies and using co-operate approaches to optimize satisfaction and productivity.</p> <p style="text-align: right;">Level 1</p>
<p>5. How can the use of mathematical ideas and techniques be applied?</p>	<p>Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks.</p> <p style="text-align: right;">Level 1</p>
<p>6. How can problem solving skills be applied?</p>	<p>Problem solving skills would be required to apply slinging techniques including the selection and/or inspection of lifting gear, or the directing of a crane/hoist operator in the movement of a load when the load is out of the operator's view.</p> <p>The exercising of judgement in relation to the suitability and condition of lifting gear, and the method of slinging, by consideration of the nature of the load, its mass and its centre of gravity.</p> <p style="text-align: right;">Level 1</p>
<p>7. How can the use of technology be applied?</p>	<p>Use workplace technology related to performing dogging including the use of calculators, the use of communication devices and the reporting/recording of results.</p> <p style="text-align: right;">Level 1</p>

Are there any other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with the other units of competency relevant to the job function.

There is essential information about assessing this competency standard for the consistent performance and where and how it may be assessed in the Assessment Guideline developed by the National Occupational Health and Safety Commission. All users of this competency standard must have access to this guideline.