

Title	Describe log handling for port and shipping operations		
Level	3	Credits	4

Purpose	People credited with this unit standard are able to describe log handling operations and hazards in port areas and on vessels, and precautions for working on board a vessel during log handling operations.
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Classification	Stevedoring and Ports Industry > Cargo Operations
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Available grade	Achieved
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Guidance Information

- Legislative and regulatory requirements relevant to this unit standard include – Health and Safety at Work Act 2015;
Approved Code of Practice for Operator Protective Structures on Self-propelled Mobile Mechanical Plant, available at [Protective structures on self-propelled mobile mechanical plant | WorkSafe](#);
Approved Code of Practice for Health and Safety in Port Operations, available at [Health and safety in port operations | WorkSafe](#);
New Zealand Port and Harbour Marine Safety Code, available at [New Zealand Port and Harbour Marine Safety Code - Maritime NZ](#).
- Any new, amended or replacement Acts, regulations, Rules, standards, codes of practice, or Waka Kotahi NZ Transport Agency requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with company requirements, legislative requirements and regulatory requirements.
- Definitions
Company requirements refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions and legislative requirements.
An *excavator* is a hydraulic excavator fitted with a bucket or a grapple and/or push plate.
A *forked loader* is a four wheeled rubber tyred articulated machine equipped with loading forks.
A *log stacker* is a large rubber tyred machine equipped with loading forks capable of lifting large loads.

Regulatory requirements refer to regulations set by but not limited to the New Zealand Customs Service, Ministry for Primary Industries and WorkSafe New Zealand.

Outcomes and performance criteria

Outcome 1

Describe log handling operations and hazards in port areas and on vessels.

Performance criteria

- 1.1 The operations involved in the handling of logs in port areas and on vessels are described.
- Range seven of the following operations – log scaling, unloading trucks, unloading trains, loading cradles, stacking logs, debarking operations, quality control checks, transferring logs to marshalling area, stowage on vessels, discharging logs.
- 1.2 The role of machinery used for log handling in port areas and on vessels is described.
- Range machinery may include – forklifts, log stackers, excavators, vessel's cranes, vessel's grapple, butting machines, shuttle trucks; five types of machinery are required.
- 1.3 Hazards associated with log handling operations in port areas and on vessels are described.
- Range losing control of logs, log breakage during handling, exposure to toxic fumes, walking on slippery logs, loss of control of heave, machine instability, swinging wires, machine slipping on hatch lid, other machines in the work area, high noise levels, climbing or descending hatch ladders, unexpected machine movements, unexpected personnel movement.
- 1.4 The potential impact of log handling in port and surrounding areas is described.
- Range bark, resins, dust, mud, slurry, lights, noise.
- 1.5 Protective equipment to be used by personnel for port operations is described.
- Range head protection, eye protection, hand protection, air filtering devices, high visibility clothing, reflectorised vests, safety footwear.
- 1.6 Procedures for dealing with emergencies in port areas and on vessels are described.
- Range injury, fire, one other type of emergency.

1.7 Terms associated with log handling operations in port areas are described.

Range may include – roll-over protective structure (ROPS), cabin operator protective structure (COPS), falling object protective structure (FOPS), operator protective structure (OPS), hydraulic lockout, critical safety device, bookends, bunk, berth, apron, heave, wires, cranston, boots, hold, hatch, hatch lid, hatch ladder, coaming, side deck, square (in the hold), the cranewell, wings, under-runs, under the gear, away from the gear, stanchion, stanchion ladder, port side, starboard side, sea side, wharf side, safety huddle, stow, coming in, halfway, bring it in, lifting lugs, sounding port, pilot access point, list, lot number, mark off, final lashing, hog lashing, standby, signals, communications loop, tank top, crane’s cradle, block tie down; twenty terms are required.

Outcome 2

Describe precautions for working on board a vessel during log handling operations.

Performance criteria

2.1 The procedures to communicate with the stevedore foreperson are described.

Range steps in the procedure relate to – hatch designation, radio channel, stow plan, ventilation of the hold.

2.2 The three-point contact method of ascending and descending hatch ladders is described.

2.3 Precautions to avoid hazards when moving around the vessel are described.

Range gangways, ladders, obstacles; and three other types of hazard.

2.4 Precautions to take when walking over slippery logs on board the vessel are described.

Range precautions relate to – foot protection, log stability, slope.

2.5 Radio communication procedures to ensure safety of personnel on board the vessel are described.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 January 2002	31 December 2023
Review	2	27 October 2006	31 December 2023
Rollover and Revision	3	17 September 2015	31 December 2023
Review	4	24 February 2022	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.