

<b>Title</b>	<b>Demonstrate knowledge of the log loading process</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	<p>This unit standard is intended for people employed in a log loading or associated role in a forestry operation.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of loading areas in landing operations; describe landing surface damages, the causes and prevention or minimisation methods; explain documentation requirements for logs leaving the site; demonstrate knowledge of machines used for loading logs in a forest situation; log loading and unloading; and split loads.</p>
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<b>Classification</b>	Forestry > Machine Operations - Forestry
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation relevant to this unit standard includes the Health and Safety at Work (HSW) Act 2015; the Resource Management (National Environmental Standards for Plantation Forestry) Amendment Regulations 2018; and any subsequent amendments.
- 2 References  
*Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations*, December 2012, available from <https://worksafe.govt.nz/>.  
 New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <https://www.nzfoa.org.nz>.
- 3 Definitions  
*Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.  
*Worksite procedures* refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.
- 4 Assessment information  
 All activities and evidence must meet worksite procedures and accepted industry practice.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of loading areas in landing operations.

#### Performance criteria

- 1.1 Requirements for functional loading areas are explained.
- Range stack placement, log transport access, load-out area, stack configurations, log processing areas, debris.
- 1.2 Effects of poorly planned loading areas on an operation are explained.

### Outcome 2

Describe landing surface damages, the causes and prevention or minimisation methods.

#### Performance criteria

- 2.1 Ways in which the surface of the landing can be damaged, and reasons why it is important to protect the surface of the landing, are described.
- 2.2 Ways to prevent or minimise damage to the landing surface are described.
- Range may include but is not limited to – drainage, machine operation, waste, layout, bearers, machinery type, maintenance.

### Outcome 3

Explain documentation requirements for logs leaving the site.

#### Performance criteria

- 3.1 Purposes of log delivery dockets are explained.
- Range loader operator, transport operator, weighbridge operator, forest owner, customer, contractor.
- 3.2 Loader operator's responsibilities in relation to log delivery dockets are explained.
- 3.3 The importance of accurate log marking before logs leave a landing is explained.

**Outcome 4**

Demonstrate knowledge of machines used for loading logs in a forest situation.

Range any three of – wheeled front end loader, tracked knuckle boom loader, 'Bell' type grapple loader, vehicle mounted hydraulic loader (self-loader), wheeled excavator.

**Performance criteria**

- 4.1 Machines are described in terms of mobility, lifting capability, and reach.
- 4.2 Situations for use of each machine type are explained in terms of operational capability.
- 4.3 Differences in loading capability and versatility between machine types are explained.  
  
Range manoeuvrability, payload, required landing size.
- 4.4 Safety features of machines are explained.

**Outcome 5**

Demonstrate knowledge of log loading and unloading.

**Performance criteria**

- 5.1 Hazards and associated risks specific to log loading and unloading are described.
- 5.2 The procedure for loading and unloading a logging truck is described.
- 5.3 The requirements of accepted forestry industry practice and worksite procedures relating to the loading and unloading of logs are described.  
  
Range loading requirements include but are not limited to – overhang, short logs, static rollover threshold, overlapping logs, crowning load correctly, height restrictions, loading zone.
- 5.4 Log stack rotation requirements for an operation are described.
- 5.5 The number of truck loads in two stacks is estimated.  
  
Range visual, piece count.
- 5.6 Loading regulations relating to truck loads are described.

**Outcome 6**

Demonstrate knowledge of split loads.

**Performance criteria**

6.1 Situations when it would be appropriate to use split loads are explained.

6.2 Issues associated with stock clean up and relocating of stock are explained.

Range distance travelled, load security, log grades, standard of roading, slope.

<b>Planned review date</b>	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	8 November 1996	31 December 2012
Revision	2	19 June 1998	31 December 2012
Review	3	5 December 2000	31 December 2012
Review	4	22 May 2008	31 December 2016
Review	5	19 March 2015	N/A
Review	6	25 June 2020	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0173
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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 Competenz [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.