

<b>Title</b>	<b>Select and thin plantation trees, over 200mm stump diameter, to waste</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	<p>This unit standard is intended for people employed in a thinning role in a commercial forestry operation.</p> <p>People credited with this unit standard are able to: prepare to thin plantation trees, over 200mm stump diameter, to waste; and select and thin plantation trees, over 200mm stump diameter, to waste using a chainsaw and felling aids.</p>
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<b>Classification</b>	Forestry > Forest Silvicultural Operations
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<b>Available grade</b>	Achieved
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<b>Prerequisites</b>	Unit 17763, <i>Demonstrate knowledge of tree felling</i> , or demonstrate equivalent knowledge and skills.
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### Guidance Information

- 1 This unit standard must be assessed against on-job.
- 2 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.
- 3 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>.
- 4 Trees to be felled to waste in late thinning operations are typically smaller than trees in clear felling operations but may be larger than the 200mm diameter which requires the use of basic tree felling cuts under the requirements of accepted industry practice. Felling techniques in waste thinning operations are subject to all safety requirements prescribed in the ACOP, but not necessarily the felling techniques of a commercial harvesting operation.

## 5 Definitions

*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.

*Cull trees* – trees selected to be felled as part of the thinning operation.

*Job prescription* refers to any written instructions for the operation and may include maps, harvest plans or cut plans.

*PPE* – personal protective equipment as required for the task in accordance with accepted industry practice and worksite procedures. This may include but is not limited to high-visibility clothing, protective clothing, gloves, face and eye protection, safety helmet, approved footwear, chaps, hearing protection, and safety devices.

## Outcomes and performance criteria

### Outcome 1

Prepare to thin plantation trees, over 200mm stump diameter, to waste.

### Performance criteria

- 1.1 Chainsaw and equipment are checked for suitability and safety in accordance with accepted industry practice.
- Range includes – chainsaw safety features, chainsaw size, bar length, felling aids, PPE, fuel and oil containers, first aid requirements; may include – road signs, fire extinguisher.
- 1.2 Job prescription requirements are identified and explained in terms of operational requirements.
- Range residual stocking, access, selection of cull trees, safety requirements, hazards, boundaries, environmental.
- 1.3 The risks specific to thinning plantation trees, over 200mm stump diameter, to waste are assessed and controlled in accordance with accepted industry practice.
- 1.4 The reason for on-going risk management is explained in accordance with accepted industry practice.
- 1.5 Factors that may alter risks or introduce new risks are described in accordance with accepted industry practice.
- Range evidence of three factors is required.
- 1.6 The requirements for a minimum number of workers in a thin to waste operation are stated in accordance with accepted industry practice.
- 1.7 The emergency response procedures are identified and described in accordance with worksite procedures.

## Outcome 2

Select and thin plantation trees, over 200mm stump diameter, to waste using a chainsaw and felling aids.

### Performance criteria

- 2.1 Cull trees are selected in accordance with the job prescription and to complement the tree selection of other workers in accordance with accepted industry practice.
- 2.2 Cull trees are selected based on tree characteristics and position, in accordance with accepted industry practice and the job prescription.
- 2.3 Selected cull trees are assessed individually for risks and felling direction in accordance with accepted industry practice.
- Range branching, double leaders, broken tops, excessive lean, dead branches, surrounding hindrance, potential for hang-ups.
- 2.4 Vegetation is cleared around base of trees to be felled, trees are limbed to allow access, and escape routes planned and prepared in accordance with accepted industry practice.
- Range may include but is not limited to – safer side of tree, 45 degree angle (or as close as practicable) to the rear of the fall direction, clearance, distance from stump.
- 2.5 Cull trees are felled using conventional felling techniques and alternative back-cutting techniques in accordance with accepted industry practice.
- Range includes but is not limited to – conventional scarf and back-cut, split level cut or quarter cut, bore and release back-cut.
- 2.6 Cull trees are directionally felled to avoid damage to crop trees in accordance with accepted industry practice.
- 2.7 The requirements of the operation are met in accordance with the job prescription.
- Range stocking, spacing, stump height, trees cut from stump, environmental requirements, damage to residual crop.
- 2.8 Hang-ups are brought down in accordance with accepted industry practice.
- Range may include – posting, brushing, driving.
- 2.9 Felling aids are used to assist felling for individual trees in accordance with accepted industry practice.
- Range wedges and suitable driving tool.

- 2.10 The use of a wedge to fell trees against the lean is demonstrated in accordance with accepted industry practice.
- 2.11 Own thinning work is assessed for quality as work progresses to ensure compliance with the job prescription.
- Range includes but is not limited to – stump height, stump quality, safe felling cuts.
- 2.12 Work method and work pattern suit the needs of the particular operation in accordance with accepted industry practice and job prescription requirements.
- Range techniques, equipment, ergonomics, use of terrain, contour, tree lean, wind, environmental requirements, other workers.
- 2.13 Communication with other crew members ensures thinning requirements are met in accordance with the job prescription.

<b>Planned review date</b>	31 December 2028
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	5 December 2000	31 December 2017
Review	2	22 May 2008	31 December 2017
Revision	3	16 July 2010	31 December 2017
Review	4	19 March 2015	N/A
Review	5	23 April 2020	N/A
Rollover	6	26 April 2024	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 Muka Tangata - People, Food and Fibre Workforce Development Council [qualifications@mukatangata.nz](mailto:qualifications@mukatangata.nz) if you wish to suggest changes to the content of this unit standard.