

<b>Title</b>	<b>Fell and clear hazardous trees</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>15</b>

<b>Purpose</b>	People credited with this unit standard are able to: prepare for felling or clearing hazardous trees; assess the specific risks associated with hazardous trees; describe techniques for clearing and felling trees in specific situations, and demonstrate techniques for felling or clearing hazardous trees.
----------------	---

<b>Classification</b>	Forestry > Tree Felling
-----------------------	-------------------------

<b>Available grade</b>	Achieved
------------------------	----------

<b>Prerequisites</b>	Unit 17766, <i>Fell trees safely using a chainsaw</i> , or demonstrate equivalent knowledge and skills.
----------------------	---

---

## Guidance Information

- 1 The term 'hazardous trees' refers to trees which, because of physical damage, butt, stem or crown rot, malformation, growth characteristics, or specific characteristics of the tree species, constitute a serious risk to the worker. It is the objective of this unit standard that people who demonstrate competence are able to fell and/or clear such trees safely or make decisions to take alternative measures.
- 2 Definitions
 

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

*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.

*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.

---

## Outcomes and performance criteria

### Outcome 1

Prepare for felling and clearing hazardous trees.

**Performance criteria**

- 1.1 PPE is selected and worn in accordance with accepted industry practice.
- 1.2 Equipment required for felling and clearing hazardous trees meets the requirements of accepted industry practice.
- Range felling aids, driving tool, first aid equipment, fuel and oil containers, fire suppression equipment, means of communication, felling signs.
- 1.3 The use of additional equipment to fell and clear hazardous trees is explained in accordance with accepted industry practice.
- Range may include but is not limited to – additional wedges, tree jacks, driving maul, axe, second chainsaw, strops and/or ropes, winch and/or machine for pulling or pushing.
- 1.4 Chainsaw is selected to meet the requirements of the task in accordance with accepted industry practice.
- Range adequate power and bar length, safety features.
- 1.5 The role of additional personnel when felling and clearing hazardous trees is explained in accordance with accepted industry practice.
- Range assistant, observer.

**Outcome 2**

Assess the specific risks associated with hazardous trees.

**Performance criteria**

- 2.1 Risks which may affect felling or clearing the tree are assessed, and control methods for each are determined in accordance with accepted industry practice.
- Range risks to be assessed are within a minimum of two tree lengths of tree(s) to be felled.
- 2.2 The risks associated with specific types of hazardous trees are described.
- Range may include but is not limited to – trees with overhead hazards, malformed trees, trees with specific growth characteristics, tree species prone to splitting, slabbing or barber-chairing, trees under heavy tension or compression, weather impact, rot, spars.
- 2.3 The way that stem and decay is recognised before and during cutting is described.

2.4 The limitations of alternative back-cut techniques for felling various types of hazardous trees are explained.

2.5 The total risks posed by the identified hazardous tree are assessed and a decision is made on action to fell, clear, or to make alternative arrangements in accordance with accepted industry practice.

Range action may include but is not limited to – seek machine assistance, seek additional skilled assistance, leave as is and isolate.

### Outcome 3

Describe techniques for clearing and felling trees in specific situations.

#### Performance criteria

3.1 Alternative scarfing techniques are described in accordance with accepted industry practice.

Range scarf required for felling a heavy forward leaning tree and a spar.

3.2 The action required to manage a tree that has sat back during felling is described in accordance with accepted industry practice.

3.3 The process to safely bring a hung-up tree to the ground using posting is described in accordance with accepted industry practice.

Range one of – posting, brushing, rolling.

### Outcome 4

Demonstrate techniques for felling and clearing hazardous trees.

#### Performance criteria

4.1 Alternative back-cut techniques for felling trees are demonstrated in accordance with accepted industry practice.

Range may include but not limited to – quarter cut, split level, bore and release back-cuts, bore cutting through the scarf, angled bore cut.

4.2 Techniques for managing trees with heavy tension and compression are demonstrated in accordance with accepted industry practice.

Range may include but is not limited to – two step cut, three step cut.

4.3 Multiple wedge use is demonstrated in accordance with accepted industry practice.

Range two wedges, three wedges, double lifting.

- 4.4 Planning for and carrying out the felling and clearing of hazardous trees is demonstrated for a range of situations in accordance with accepted industry practice.

Range situations may include but are not limited to – clearing downed trees, cutting root plates, trees with overhead hazards e.g. dead or broken tops, malformed trees e.g. large multi leaders, heavy flanging or buttressing, heavy butt sweep, butt decay, spars, species prone to splitting or slabbing, trees under heavy tension and/or compression; a minimum of three different situations is required.

<b>Planned review date</b>	31 December 2028
----------------------------	------------------

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 March 2015	N/A
Review	2	26 March 2020	N/A
Rollover	3	26 April 2024	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0173
--	------

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.