

<b>Title</b>	<b>Plan, prepare for, and carry out line shifts in a cable harvesting operation</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>12</b>

<b>Purpose</b>	<p>This unit standard is intended for people employed in a cable harvesting operation who are responsible for all line shifts.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the factors to be considered when planning and carrying out a line shift in a cable harvesting operation; identify risks associated with establishing a first yarding line, and subsequent line shifts; and explain their management.; plan a line shift; prepare tail-hold stumps and pre-set a line shift; carry out a line shift; and evaluate the effectiveness of a line shift.</p>
----------------	--

<b>Classification</b>	Forestry > Forest Harvesting Operations
-----------------------	---

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

<b>Prerequisites</b>	Unit 23411, <i>Operate a chainsaw and carry out basic chainsaw maintenance in a commercial forestry situation</i> , or demonstrate equivalent knowledge and skills.
----------------------	---

## Guidance Information

- 1 Assessment against this unit standard must involve carrying out at least three line shifts.
- 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 Definitions  
*Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.  
*Job prescription* refers to any written instructions for the operation and may include maps, harvest plans or cut plans.

*Strawline* refers to a light cable used to haul heavier cables during the setup of a cable harvesting operation, and may be wire, or synthetic, or an accepted alternative material.

*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

Demonstrate knowledge of the factors to be considered when planning and carrying out a line shift in a cable harvesting operation.

#### Performance criteria

- |     |   |
|-----|---|
| 1.1 | Requirements for first line set-up prior to commencement of work are explained in accordance with worksite procedures.  |
|     | Range        faller's instruction, equipment, timing.   |
| 1.2 | Scheduling requirements for carrying out a line shift are described in accordance with accepted industry practice and worksite procedures.  |
|     | Range        allowance for clean-up time, minimising non-productive time, system efficiency.  |
| 1.3 | Options for extraction direction, and set-up procedures, are explained in accordance with worksite procedures.  |
|     | Range        job prescription, proximity to felling, lay of the felled trees, slope and ground conditions, system being used, environmental constraints, forest owner requirements.   |
| 1.4 | Equipment required to set-up a line is described by name and function in accordance with accepted industry practice.  |
|     | Range        may include but is not limited to – blocks, tail-hold stumps, block strops, chainsaw, shackles, strawline, tailrope, mobile tail-hold, skyline extensions, chainsaw powered winches, pass chain, strawline hook. |
| 1.5 | The criteria for selecting tail-hold stumps are explained in accordance with the accepted industry practice.  |
| 1.6 | Options for anchoring the backline when suitable tail-hold stumps are not available are explained in accordance with accepted industry practice.  |

- 1.7 Methods for securing stumps, and factors affecting the choice of each method, are explained.
- Range may include – single stump anchor, wrap and go back, twister, bridal block, ratchet tie back.
- 1.8 Reasons for pre-setting a line shift are explained in accordance with accepted industry practice.
- 1.9 The procedure for carrying out a line shift is explained in accordance with accepted industry practice and worksite procedures.

## Outcome 2

Identify risks associated with establishing a first yarding line, and subsequent line shifts; and explain their management.

### Performance criteria

- 2.1 The risks specific to establishing a first yarding line and subsequent line shifts are identified, and methods to control them are explained in accordance with accepted industry practice.
- Range evidence of four risks and a control method for each is required.

## Outcome 3

Plan a line shift.

### Performance criteria

- 3.1 Line shift is scheduled to minimise lost time and production disruptions.
- 3.2 Location for the next yarding line is determined in accordance with accepted industry practice and worksite procedures.
- Range felling pattern, system efficiency, tail-hold suitability.
- 3.3 Proximity of felling operation is checked in accordance with accepted industry practice.
- 3.4 Equipment needed is determined and delivery organised in accordance with worksite procedures.
- 3.5 Equipment is assembled and checked in preparation for the line shift in accordance with worksite procedures.
- Range block maintenance, strop size and length, shackle size, condition of all wire ropes and rigging equipment.

3.6 Tail-hold stumps are selected in accordance with accepted industry practice and worksite procedures.

Range height, location, security, size, age, alternatives.

#### **Outcome 4**

Prepare tail-hold stumps and pre-set a line shift.

#### **Performance criteria**

4.1 Tail-hold stumps are prepared for use in accordance with accepted industry practice and worksite procedures.

Range may include but is not limited to – trees felled, stumps notched, tied back (if required).

4.2 Means of attaching wire ropes to tail-hold stumps are pre-set in accordance with accepted industry practice and worksite procedures.

Range may include but is not limited to – blocks, skyline extensions, strawline sections.

#### **Outcome 5**

Carry out a line shift.

#### **Performance criteria**

5.1 Personnel are organised and instructed to carry out a line shift in accordance with worksite procedures.

5.2 Location of all personnel is checked before the line shift commences in accordance with worksite procedures.

Range may include but is not limited to – clear of bight, out of wire rope swing or recoil range in the event of failure, communication lines working.

5.3 The line shift is carried out in accordance with accepted industry practice and worksite procedures.

Range may include but is not limited to – slack signalled, connected to new block, strawline, pass chain, chainsaw-powered winch, by hand.

5.4 Location of personnel, harvesting machines, and wire ropes in relation to proposed yarding line is checked before tight-lining, in accordance with accepted industry practice.

- 5.5 Security of anchors and location of wire ropes are checked during tight-lining in accordance with accepted industry practice and worksite procedures.

Range friction, binds, obstructions, anchor movement.

- 5.6 Tail-hold stump security is rechecked under load in accordance with worksite procedures.

## Outcome 6

Evaluate the effectiveness of a line shift.

### Performance criteria

- 6.1 Line shift is evaluated and its effectiveness in meeting the requirements of the job prescription is determined.

Range may include but is not limited to – speed to effect change, choice of location to minimise damage, safety and choice of tail-hold stumps.

<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	28 January 1995	31 December 2012
Review	2	8 November 1996	31 December 2012
Revision	3	19 June 1998	31 December 2012
Review	4	5 December 2000	31 December 2012
Review	5	22 May 2008	31 December 2012
Review	6	8 December 2011	31 December 2017
Review	7	10 December 2015	N/A
Review	8	23 January 2020	N/A
Rollover	9	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.