Title	**Carry out line shifts in a cable harvesting operation using mobile tail-holds**		
Level	**4**	**Credits**	**15**

Purpose	This unit standard is intended for people employed in a cable harvesting operation who are responsible for carrying out line shifts using a mobile tail-hold. People credited with this unit standard are able to: demonstrate knowledge of requirements for the use of mobile tail-holds in a cable harvesting operation; demonstrate knowledge of risks associated with using tail-holds machines in cable harvesting operations; carry out line shifts using mobile tail-holds in a cable harvesting operation; and carry out general tail-hold machine operator responsibilities.

Classification	Forestry > Forest Harvesting Operations

Available grade	Achieved

Prerequisites	Unit 6936, *Operate a tracked machine in a forestry situation*, or Unit 6935, *Operate an excavator based tracked machine in a forestry situation*; or demonstrate equivalent knowledge and skills.

Guidance Information

1 Assessment against this unit standard must involve carrying out at least three line shifts using a tail-hold machine.

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.

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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 requirements for the use of mobile tail-holds in a cable harvesting operation.

Performance criteria

1.1 Types of machines suitable for use as mobile tail-holds are described in accordance with accepted industry practice.

Range excavator, tractor.

1.2 Advantages of mobile tail-holds are explained in accordance accepted industry practice.

Range ease of line shift, flexibility of anchor location, minimising line shift times.

1.3 Disadvantages of mobile tail-holds are explained in accordance with accepted industry practice.

Range cost of idling a machine, limited suitable terrain, security of mobile tail-hold anchoring, maintenance, environmental disturbance.

1.4 Recommended methods of attaching working ropes to mobile tail-hold machines are explained in accordance with accepted industry practice.

Range skyline attachment, tailrope block location, shackles.

Outcome 2

Demonstrate knowledge of risks associated with using tail-hold machines in cable harvesting operations.

Performance criteria

2.1 Effects of mechanical failure of the anchor point on the tail-hold machine are described in accordance with accepted industry practice.

Range unexpected wire rope movement, falling carriage, shackle or block movement, tower failure.

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2.2 The risk of tail-hold machine instability is explained in accordance with accepted industry practice.

Range tail-hold machine toppling into work area, working ropes unexpectedly going slack, falling carriage, debris being dislodged, tower failure.

2.3 Causes of loss of control when moving a tail-hold machine are explained in accordance with accepted industry practice.

Range may include but is not limited to – tension at right angle to machine, unstable soil, excessive tension, communication failure.

2.4 The risks specific to shifting a tail-hold machine with spiked safety boots are identified, and methods to control them are explained in accordance with accepted industry practice.

Outcome 3

Carry out line shifts using mobile tail-holds in a cable harvesting operation.

Performance criteria

3.1 The new location for the tail-hold machine and the route of travel are determined and checked in accordance with worksite procedures.

3.2 Means of communication with machine operator is established and checked in accordance with the accepted industry practice and worksite procedures.

3.3 The location of other personnel, in proximity to working ropes, is checked in accordance with worksite procedures, before working ropes are moved.

3.4 Terrain is negotiated in accordance with accepted industry practice.

3.5 Tension in working ropes being moved is constantly monitored and adjusted in accordance with worksite procedures.

3.6 The tail-hold machine is secured at the new location in accordance with accepted industry practice.

Range machine alignment, resistance, stability of ground.

3.7 Tight-lining is signalled when personnel are clear of the tail-hold machine and the ropes being tensioned, in accordance with accepted industry practice.

3.8 Tail-hold machine security is maintained during tight-lining in accordance with accepted industry practice.

3.9 Tail-hold machine security is assessed and additional measures are taken as required to ensure security in accordance with accepted industry practice.

Range may include – digging in, relocation, anchoring.

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3.10 Final position is checked with machine operator and breaker-outs in accordance with worksite procedures.

Range within guyline spacing, in line with wood, working ropes clear.

Outcome 4

Carry out general tail-hold machine operator responsibilities.

Performance criteria

4.1 Operator and engine compartments are cleared of debris and loose equipment in accordance with worksite procedures.

4.2 Fire extinguishers are checked to meet operational requirements in accordance with worksite procedures.

Range charged, suitable, secured, within servicing requirements.

4.3 Daily maintenance of the tail-hold machine is performed in accordance with the manufacturer's requirements and worksite procedures.

Planned review date	31 December 2028

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	5 December 2000	31 December 2012
Review	2	22 May 2008	31 December 2012
Review	3	8 December 2011	31 December 2017
Review	4	10 December 2015	N/A
Review	5	23 January 2020	N/A
Rollover	6	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference	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 if you wish to suggest changes to the content of this unit standard.

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