Title	Demonstrate knowledge of cable harvesting equipment and systems		
Level	4	Credits	5

Purpose	This unit standard is intended for people employed as the head breaker-out, cable harvesting machine operators, or crew supervisors in a cable harvesting operation.
	People credited with this unit standard are able to: demonstrate knowledge of cable harvesting systems; describe cable yarders used in cable harvesting operations; compare cable harvesting systems; and demonstrate knowledge of rigging systems for a selected cable yarding machine operating on an existing worksite.

Classification	Forestry > Forest Harvesting Operations

Available grade	Achieved

Guidance Information

- 1 This unit standard can be assessed against on-job or off-job. However, to meet the requirements of outcome 4, candidates must have access to a cable harvesting operation.
- 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 <u>https://worksafe.govt.nz/</u>. New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <u>https://www.nzfoa.org.nz</u>.

4 Definitions

Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice. *Rigging* refers to any of butt rigging, carriage and grapples.

Worksite procedures refers 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.

5 It is recommended that candidates seeking credit for this unit standard hold prior credit for Unit 6920, *Demonstrate knowledge of cable harvesting operations*.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of cable harvesting systems.

Performance criteria

- 1.1 Cable harvesting system terms are explained in accordance with accepted industry practice.
 - Range northbend, southbend, shotgun, slackline, scabbing, grapple yarding, mechanical slack pulling carriages, motorised carriages.
- 1.2 Cable harvesting systems are described, and their operating principles are explained, in accordance with accepted industry practice.
 - Range highlead system; skyline systems standing skyline, live skyline, running skyline.
- 1.3 The advantages and disadvantages of different systems and layouts are described in accordance with accepted industry practice.
 - Range highlead, standing skyline, live skyline, running skyline.

Outcome 2

Describe cable yarders used in cable harvesting operations.

Range leaning tower, standing tower, swing yarder.

Performance criteria

- 2.1 Cable yarders are described in terms of tower height, classes, and their suitability for a range of conditions.
 - Range includes but is not limited to make and model, tower configuration and height, advantages and disadvantages.

Outcome 3

Compare cable harvesting systems.

Range cable harvesting systems include – highlead, running skyline (scab), running skyline (MSP carriage), shotgun, northbend.

Performance criteria

- 3.1 The suitability and application of different cable harvesting systems are explained in accordance with accepted industry practice
 - Range machinery and equipment required, suitability of each system for terrain types, environmental considerations, capacity, setup time and cost, operational safety.

Outcome 4

Demonstrate knowledge of rigging systems for a selected cable yarding machine operating on an existing worksite.

Performance criteria

- 4.1 The yarding capabilities of the machine are explained in accordance with manufacturer's specifications and accepted industry practice.
- 4.2 The rigging system currently being used on the machine on the worksite is described.
- 4.3 An alternative rigging system for the machine, for the same harvesting operation, is identified and its advantages and disadvantages explained in accordance with manufacturer's specifications and worksite procedures.

Diama in the late	
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	8 December 2011	31 December 2017
Review	2	10 December 2015	N/A
Review	3	23 January 2020	N/A
Rollover	4	26 April 2024	N/A

Consent and Moderation Requirements (CMR) reference0173This 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 <u>qualifications@mukatangata.nz</u> if you wish to suggest changes to the content of this unit standard.