

<b>Title</b>	<b>Demonstrate knowledge of, and prepare land for forest establishment using an excavator and slash raking attachment</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>20</b>

<b>Purpose</b>	<p>This unit standard is intended for people employed in a mechanised land preparation role in a forestry operation.</p> <p>People credited with this unit standard are able to: plan a slash raking operation using an excavator and attachment, demonstrate knowledge of excavators and attachments used for slash raking, prepare land for forest establishment using an excavator and slash raking attachment and explain quality control requirements for an excavator slash raking operation.</p>
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<b>Classification</b>	Forestry > Machine Operations - Forestry
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 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.
- 2 References  
*Approved Code of Practice (ACOP) for Safety and Health in Forestry Operations*, December 2012, available from [www.worksafe.govt.nz](http://www.worksafe.govt.nz).  
 New Zealand Forest Owners Association, *Forest Practice Guides* (2019), and any subsequent amendments, available from <https://www.nzfoa.org.nz>.
- 3 Definitions  
*Accepted industry practice* refers to 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.  
*Slash raking* refers to the accumulation of harvesting slash into rows. It is also referred to as line raking or root raking.  
*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.

#### 4 Assessment information

This unit standard must be assessed on-job.

All activities and evidence must be carried out in accordance with accepted industry practice and worksite procedures.

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## Outcomes and performance criteria

### Outcome 1

Plan a slash raking operation using an excavator and attachment.

#### Performance criteria

1.1 Excavator capability is described in accordance with the manufacturer's recommendations.

Range slope, ground conditions.

1.2 Area is assessed in accordance with job prescription.

Range may include – identifying start point, identifying work direction, waterways, boundaries, setback requirements, hazards and risks.

1.3 Planning requirements for work areas are explained.

Range may include but is not limited to – hazard identification and risk management, concurrent operations running in neighbouring blocks, other machines operating in the same block, ground conditions, environmental considerations, signage, historic sites.

1.4 Slash raking operation is planned in accordance with the job prescription.

Range may include but is not limited to – windrow spacing, windrow width, windrow height, windrow direction, soil disturbance, setbacks, reinstatement of water controls, native boundaries, waterways, archaeological sites.

### Outcome 2

Demonstrate knowledge of excavators and attachments used for slash raking.

#### Performance criteria

2.1 Components of the slash raking attachment are identified and their function explained in accordance with manufacturer's specifications.

Range coupling, tines.

2.2 Safety features on the excavator and slash raking attachment are identified and their function explained in accordance with manufacturer’s specifications.

Range may include but is not limited to – operator protection structures, seat belts (or other safety restraint), fire systems, handrails, steps, lockout system, warning systems; evidence of six is required.

**Outcome 3**

Prepare land for forest establishment using an excavator and slash raking attachment.

**Performance criteria**

3.1 The risks specific to land preparation using an excavator and slash raking attachment are assessed and controlled.

3.2 Machine and operator capability are continually assessed as work progresses and adjusted where required.

3.3 Slash raking attachment is connected to excavator in accordance with manufacturer’s recommendations.

3.4 Machine and attachment are operated in a smooth and controlled manner.

3.5 Communication is maintained between worksite personnel to ensure job prescription requirements are met.

3.6 Environmental considerations are managed in accordance with the job prescription.

Range may include – reinstatement of water controls, native boundaries, waterways, archaeological sites.

**Outcome 4**

Explain quality control requirements for an excavator slash raking operation.

**Performance criteria**

4.1 The quality control requirements of an excavator slash raking operation are explained in accordance with the job prescription.

4.2 Outcomes of the quality control activity are explained in terms of compliant and non-compliant outcomes.

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<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	27 August 2020	N/A
Rollover	2	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](mailto:qualifications@mukatangata.nz) if you wish to suggest changes to the content of this unit standard.