| | | | |
|---|---|---|---|
| **Title** | **Apply environmental management to harvesting trees** | | |
| **Level** | **4** | **Credits** | **10** |

| | |
|---|---|
| **Purpose** | This unit standard is intended for people employed in a forestry operation and is designed for crew personnel who are experienced enough to work autonomously and are able to undertake supervision duties for new crew members.<br><br>People credited with this unit standard are able to: demonstrate knowledge of strategies used to avoid or minimise common causes of harm to the environment during forest harvesting operations, identify environmental management requirements for, and apply environmental management practices to a specified forest harvesting operation. |

| | |
|---|---|
| **Classification** | Forestry > Forest Operations Advanced |

| | |
|---|---|
| **Available grade** | Achieved |

**Guidance Information**

1 A current and post-operational inspection should be undertaken to check that environmental management requirements and standards have been met.

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 the Heritage New Zealand Pouhere Taonga Act 2014, 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 (NB – these guidelines support the NES-PF and have replaced the New Zealand Environmental Code of Practice for Plantation Forestry referenced in the unit, which is now out of date).

4 Definitions
*Environmentally sensitive sites* – sites of historic or cultural significance, protected wildlife habitat, protected bush.
*Job prescription* refers to any written instructions for the operation and may include maps, harvest plans or cut plans.
*PCBU* – refers to a person conducting a business or undertaking, as defined in the Health and Safety at Work Act 2015.


© New Zealand Qualifications Authority 2020

*Riparian area* – land adjacent to a waterway.
*Waterway* – any stream, river, lake, swamp or wetland.
*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 authority requirements.

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of strategies used to avoid or minimise common causes of harm to the environment during forest harvesting operations.

### Performance criteria

1.1 Strategies to minimise environmental damage during machine servicing in forests are described in accordance with worksite procedures and relevant environmental standards.

Range fuel and oil storage, disposal of empty containers, fuel dispensing and oil changes, machinery wash-down.

1.2 Strategies to minimise environmental damage during tree felling, log extraction and machinery operation are described in accordance with relevant environmental standards.

Range waterways and riparian areas, adjacent properties, physical structures, environmentally sensitive sites.

1.3 Strategies to avoid environmental damage from logging debris and slash are described in accordance with relevant environmental standards.

Range ‘birds nests’, debris in water courses and water bodies, debris on adjacent properties.

1.4 Strategies to avoid transportation of weeds and pests when moving machinery from site to site are explained in accordance with relevant environmental standards.

1.5 Strategies to minimise environmental damage from water run-off are described in accordance with relevant environmental standards.

Range erosion, sedimentation.

1.6 Worksite procedures to monitor the environmental effects of forest harvesting, and ensure environmental protection standards are being met, are described.

Range field checks, documentation and procedures.


© New Zealand Qualifications Authority 2020

**Outcome 2**

Identify the environmental management requirements for a specified forest harvesting operation.

**Performance criteria**

2.1 Features of the environment which require protection are identified from a site inspection and the operation plans.

Range may include but not limited to – adjacent properties, physical structures, environmentally sensitive sites, waterways and riparian areas, native reserves, archaeological sites, endangered species habitat.

2.2 Aspects of the operation which may harm the environment are identified in accordance with the job prescription and operational plan.

2.3 The plans in place to avoid or minimise harm to the environment from the operation are described prior to commencing the operation in accordance with the operation plan, job prescription, and relevant environmental standards.

**Outcome 3**

Apply environmental management practices to a specified forest harvesting operation.

**Performance criteria**

3.1 Environmental requirements and strategies to protect the environment are communicated to other workers involved in the specified operation, before starting work.

3.2 Work is carried out in accordance with worksite procedures to minimise or avoid damage to the environment.

3.3 Any activities outside the job prescription or operational plan that could adversely affect the environment are checked with the employer or PCBU before work commences.

| | |
|---|---|
| **Planned review date** | 31 December 2024 |


© New Zealand Qualifications Authority 2020

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

| Process | Version | Date | Last Date for Assessment |
|---|---|---|---|
| Registration | 1 | 8 November 1996 | 31 December 2012 |
| Revision | 2 | 19 June 1998 | 31 December 2012 |
| Review | 3 | 5 December 2000 | 31 December 2012 |
| Review | 4 | 22 May 2008 | 31 December 2016 |
| Review | 5 | 19 March 2015 | 31 December 2017 |
| Review | 6 | 10 December 2015 | 31 December 2017 |
| Revision | 7 | 20 October 2016 | N/A |
| Review | 8 | 27 February 2020 | 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 Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.


© New Zealand Qualifications Authority 2020