

## Field      Manufacturing

### Review of *Pulp and Paper Manufacturing Skills* unit standards

Subfield	Domain	ID
Wood Fibre Manufacturing	Pulp and Paper Manufacturing Skills	3509-3511, 3513, 3514, 3517-3519, 3524, 3572, 3596, 3597, 10833, 10834, 15827, 15829, 15831-15833, 21489, 21490, 21491

Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council has completed the review of the unit standards listed above.

**Date new versions published**

**November 2023**

**Planned review date**

**December 2028**

### Summary

Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council initiated a combined review of the qualification New Zealand Certificate in Pulp and Paper Manufacturing Level 4 [Ref: 2320] and unit standards in the Paper Making, Pulp and Paper Chemical Plant, Pulp and Paper Manufacturing, Pulp and Paper Technology, Pulp Making domains. This review was triggered by the regular 5-year review cycle. The Technical Advisory Group (TAG) consisted of industry and provider representatives who have consent to assess. TAG meetings occurred between May 2022 and June 2023.

The unit standards were updated in line with current industry practices, standards, acts and regulations. This was done in consultation with industry representatives and providers with consent to assess during many online TAG meetings.

Unit standards that have little or no usage in the past five years or more have been due to low staff turnover across the Pulp and Paper Manufacturing Industry, however industry analysis has identified that 30% of staff are expected to leave the workforce over the next three years due to retirement and it is anticipated these standards will be needed to upskill the replacement workforce.

### Main changes

- Standard setting body has been updated from Competenz to Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council.
- Guidance information and document formatting have been updated to meet current NZQA requirements.
- Wording has been simplified across the suite of unit standards in response to industry stakeholder request for use of clear direct language.
- Titles of 11 unit standards have been amended from 'pulp *and* paper' to 'pulp *or* paper' since work-based learners are working in either a pulp or paper manufacturing site, but not both.
- Title of unit standard 3517 has been amended to pulp bale making 'unit' rather than a 'process' which is more accurate.
- Title of unit standard 21489 has been amended to align with the outcomes.
- Title of unit standard 21491 has been amended to remove paper since this standard is not used in paper production. Performance criterion 3.4 has been removed since it is already covered in unit standard 3510.
- Prerequisites listed in unit standards 21489 and 21490 have been removed as these are not essential to achieve these standards.

- Prerequisite listed in unit standard 3513 has been moved as recommend for entry in Guidance information since unit standard 3514 is not essential to achieve unit standard 3513.
- Relevant standards with Outcome 1 'Explain' have been amended to 'Demonstrate knowledge of' to align with the performance criteria.
- Performance criteria and range statements have been updated where relevant to reflect the level, outcomes and current pulp and paper industry practises.
- Relevant standards which include the performance criteria 'Preventative maintenance and cleaning' was reworded to "Essential care and housekeeping requirements" since the term 'maintenance' was incorrectly interpreted as undergoing maintenance checks in a maintenance schedule which are not the operators' duties.
- Performance criteria 1.4 and 3.1 in previous version of unit standard 3510 have been moved to outcome 2.
- Range statements in unit standards 3513, 3514, 3517-3519, 3524, 3572, 3596, 3597, 10833, 15833, 21489, and 21490 have been amended to soft range statements due to the different plant, equipment and resources available in each industry setting.
- Relevant standards with the Range 'lock-out' have been changed to 'lock-out or tag-out'.
- Unit standard 3511 has been designated as expiring as its content is covered in unit standard 3510.
- Unit standard 10834 has been designated expiring as bark burner systems have been replaced by boiler systems.

### Category D unit standards will expire at the end of December 2025

The last date for assessment of the most recent superseded versions of Category B unit standards is 31 December 2025.

The last date of assessment for earlier superseded versions of Category B unit standards is 31 December 2024

### Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
<b>A</b>	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
<b>B</b>	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
<b>C</b>	Major changes that necessitate the registration of a replacement standard with a new ID
<b>D</b>	Standard will expire and not be replaced

### Manufacturing > Wood Fibre Manufacturing > Pulp and Paper Making Skills

ID	Title	Level	Credit	Review Category
3509	Clean furnish	4	5	B
3510	Test in-process pulp and chemicals as a pulp and paper manufacturing plant operator <b>Test in-process pulp and chemicals as a pulp or paper manufacturing plant operator</b>	3	5	B
3511	Laboratory test pulp, paper, and chemical products	4	10	D
3513	Run machine clothing in pulp and paper manufacturing <b>Run machine clothing in pulp or paper manufacturing</b>	4	10	B

ID	Title	Level	Credit	Review Category
3514	Assist with changing machine clothing in pulp and paper manufacturing <b>Assist with changing machine clothing in pulp or paper manufacturing</b>	3	5	B
3517	Operate a pulp bale unit making process <b>Operate a pulp bale making unit</b>	3	5	B
3518	Control a pulp storage system in the pulp and paper manufacturing industry <b>Control a pulp storage system in the pulp or paper manufacturing industry</b>	4	5	B
3519	Press wet pulp and paper webs in the pulp and paper manufacturing industry <b>Press wet pulp and paper webs in the pulp or paper manufacturing industry</b>	4	10	B
3524	Blend furnish	4	5	B
3572	Dewater wood pulp using twin wire	4	10	B
3596	Control a pulp or paper machine broke system	4	5	B
3597	Operate white water systems for pulp and paper manufacturing <b>Operate a white water system for pulp or paper manufacturing</b>	4	10	B
10833	Operate pulp and paper mill auxiliary equipment <b>Operate pulp or paper mill auxiliary equipment</b>	3	5	B
10834	Operate bark burner systems	4	10	D
15827	Prepare and monitor chemical additives in the pulp and paper industry <b>Prepare and monitor chemical additives in the pulp or paper industry</b>	4	5	B
15829	Screen furnish	4	5	B
15831	Dewater furnish at high consistency	4	5	B
15832	Reclaim wood pulp fibre at low consistency for pulp and paper manufacturing <b>Reclaim wood pulp fibre at low consistency for pulp or paper manufacturing</b>	3	5	B
15833	Form wood pulp web for wood pulp manufacturing using a fourdrinier former	4	20	B
21489	Press wet pulp and paper webs using an extended nip press <b>Operate an extended nip press to press wet pulp or paper webs</b>	4	5	B
21490	Operate multi-cylinders to dry pulp and paper webs <b>Operate multi-cylinders to dry pulp or paper webs</b>	4	10	B
21491	Dry pulp and paper webs using air drying <b>Dry pulp webs using air drying process</b>	4	10	B