

## Field      Manufacturing

### Review of *Pulp Making* and *Wood Preparation* unit standards

Subfield	Domain	ID
Wood Fibre Manufacturing	Pulp Making	3543, 3547, 3551, 3552, 3553, 3555, 3559, 21484, 21485, 21486, 21487, 21488, 22983
Wood Handling and Distribution	Wood Preparation	3544

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 in this application that are being used 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 four unit standards have been amended. Paper has been removed in unit standard 3543 since this is only a pulp manufacturing process. Titles of unit standards 21487, 21488, and 22983 have been aligned with the content of the standards.
- 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.

- Range statements have been amended to soft range statements due to the different plant, equipment and resources available in each industry setting.
- 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.
- Relevant standards with the Range 'lock-out' have been changed to 'lock-out or tag-out'.
- Credit value of unit standard 22983 has been reduced from 20 to 15 to reflect actual time for learning and assessment. Outcome 3 performance criteria have been amended to help with clarity of understanding and expectations.
- Expired unit standard 3544 has been reinstated and reclassified to Wood Fibre Manufacturing > Pulp Making. This unit standard is important to train wash wood chip operators in the pulp making industry.

**The last date for assessment of the most recent superseded version 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.**

#### **Impact on existing organisations with consent to assess**

<b>Current consent for</b>			<b>Consent extended to</b>		
<b>Nature of consent</b>	<b>Classification or ID</b>	<b>Level</b>	<b>Nature of consent</b>	<b>Classification or ID</b>	<b>Level</b>
Wood Handling and Distribution	Subfield	5, 7	3544	Standard	3
Wood Preparation	Domain	1-7	3544	Standard	3

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

All changes are in **bold**.

<b>Key to review category</b>	
<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 Making**

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Review Category</b>
3543	Pressure refine wood fibre for pulp and paper production <b>Pressure refine wood fibre for pulp production</b>	4	20	B
3547	Bleach kraft pulp in wood pulp manufacturing	4	30	B
3551	Flash dry wood pulp	4	20	B
3552	Form and press flash dried wood pulp	4	10	B
3553	Form bales from wood pulp sheet	3	10	B
3555	Digest wood chips	5	30	B
3559	Delignify wood pulp with oxygen	4	10	B
21484	Bleach mechanical wood pulp in wood pulp manufacturing	4	10	B

ID	Title	Level	Credit	Review Category
21485	Atmospherically refine pulp	4	10	B
21486	Wash wood pulp	4	5	B
21487	Empty and restart a continuous digester in a pulp manufacturing operation <b>Empty and restart a continuous digester in pulp manufacturing</b>	5	30	B
21488	Empty and restart a kraft bleach plant in a pulp manufacturing operation <b>Empty and restart a kraft bleach plant in pulp manufacturing</b>	5	30	B
22983	Troubleshoot pulp making operations <b>Troubleshoot a pulp manufacturing operation</b>	4	20 15	B

Manufacturing > Wood Handling and Distribution > Wood Preparation  
 Manufacturing > **Wood Fibre Manufacturing > Pulp Making**

ID	Title	Level	Credit	Review Category
3544	Wash wood chips for further processing	3	3	Reinstate