

**Field      Manufacturing****Review of *Manufacturing* unit standards**

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Dairy Manufacturing	Dairy Environmental Management	16312
	Dairy Product Safety and Risk Management	18405
Dairy Processing	Milk Processing	4304, 4826, 4829, 4835, 16302, 19977, 19984, 28608, 28981, 31931
	Milk Products	4305-4307, 4830-4833, 28605, 28610
Primary Products Food Processing	Primary Products Food Processing - Core Skills	28639

The Primary ITO has completed the review of the unit standards listed above.

**Date new versions published****March 2021****Planned review date****December 2025****Summary**

As a result of the review of New Zealand Certificate in Dairy Processing (Level 3) with optional strand in Automated Cleaning, and Heat Treatment [Ref: 2562], the Primary ITO reviewed Level 3 unit standards to better reflect the requirements of the updated qualification graduate outcomes.

Consultation was carried out in October 2020 where consent to assess holders had the opportunity to give comment on the email sent asking for feedback to amendments. This feedback was addressed where appropriate.

**Main changes**

- 22 unit standards were reviewed and updated to better reflect current industry requirements and the current template.
- Seven new unit standards were developed to meet learning gaps for Level 3 dairy processing operators.
- Guidance information and performance criteria were amended to ensure unit standards' content remained fit for purpose.
- Titles were updated for some unit standards to better reflect outcomes.
- Unit standard 16312 was designated expiring without replacement due to low usage.
- Unit standard 18405 was reclassified into the *Primary Products Food Processing - Core Skills* domain.

**The Category D unit standard will expire at the end of December 2022**

**The last date for assessment of superseded versions of Category B unit standards is December 2023**

## Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Subfield	Dairy Manufacturing	4-8	Standard	18405	3
Domain	Dairy Product Safety and Risk Management	4	Standard	18405	3

## 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 &gt; Dairy Manufacturing &gt; Dairy Environmental Management

ID	Title	Level	Credit	Review Category
16312	Explain foot and mouth disease controls in the processing of milk in the dairy industry	3	4	D

## Manufacturing &gt; Dairy Manufacturing &gt; Dairy Product Safety and Risk Management

Manufacturing > **Primary Products Food Processing > Primary Products Food Processing - Core Skills**

ID	Title	Level	Credit	Review Category
18405	Comply with a product safety programme in the dairy industry <b>Comply with a product safety programme for product processing in the dairy industry</b>	3	4	B

## Manufacturing &gt; Dairy Processing &gt; Milk Processing

ID	Title	Level	Credit	Review Category
4304	Demonstrate knowledge of the manufacture of ultra-heat treated (UHT) products in a dairy processing operation <b>Describe the manufacture of ultra-heat treated products in a dairy processing operation</b>	3	5	B
4826	Demonstrate knowledge of the composition of milk and the chemical and physical changes during dairy product processing <b>Describe the composition of, and chemical and physical changes to, milk during dairy processing</b>	3	5	B
4829	Demonstrate knowledge of heat transfer and heat treatment in a dairy processing operation <b>Describe heat transfer and heat treatment in a dairy processing operation</b>	3	5	B

ID	Title	Level	Credit	Review Category
4835	Demonstrate knowledge of product packaging and palletizing processes of dairy products <b>Describe product packaging and palletizing processes of dairy products</b>	3	5	B
16302	Demonstrate knowledge of the prevention and control of foreign matter contamination of dairy products <b>Describe the prevention and control of foreign matter contamination of dairy products</b>	3	5	B
19977	Comply with aseptic sampling techniques in a dairy processing operation <b>Comply with sampling techniques in a dairy processing operation</b>	3	5	B
19984	Conduct a titration of a clean-in-place solution in a dairy processing operation	3	5	B
28608	Demonstrate knowledge of a milk treatment process in a dairy processing operation <b>Describe the milk treatment process in a dairy processing operation</b>	3	5	B
28981	Demonstrate knowledge of the risks, testing and control of microorganisms in a dairy processing operation <b>Describe the risks, testing and control of microorganisms in a dairy processing operation</b>	3	5	B
31931	Describe the processing of nutritional products in a dairy processing operation <b>Describe the processing, cleaning, sanitising and packaging of nutritional products in a dairy processing operation</b>	3	5	B

## Manufacturing &gt; Dairy Processing &gt; Milk Products

ID	Title	Level	Credit	Review Category
4305	Demonstrate knowledge of the manufacture of cultured dairy products and dairy desserts in a dairy processing operation <b>Describe the manufacture of cultured dairy products and dairy desserts in a dairy processing operation</b>	3	5	B
4306	Demonstrate knowledge of processed cheese manufacturing <b>Describe processed cheese manufacturing</b>	3	5	B
4307	Demonstrate knowledge of the manufacture of frozen milk products in a dairy processing operation <b>Describe the manufacture of frozen milk products in a dairy processing operation</b>	3	5	B
4830	Demonstrate knowledge of cream products processing in a dairy processing operation <b>Describe cream products processing in a dairy processing operation</b>	3	5	B
4831	Demonstrate knowledge of evaporation and spray drying of dairy products in a dairy processing operation <b>Describe evaporation and spray drying of dairy products in a dairy processing operation</b>	3	5	B

ID	Title	Level	Credit	Review Category
4832	Demonstrate knowledge of casein processing in a dairy processing operation <b>Describe casein processing in a dairy processing operation</b>	3	5	B
4833	Demonstrate knowledge of cheese making <b>Describe cheese making in a dairy processing operation</b>	3	5	B
28605	Demonstrate knowledge of ethanol processing in a dairy processing operation <b>Describe ethanol distillation and alcohol fermentation in a dairy processing operation</b>	3	5	B
28610	Demonstrate knowledge of membrane separation processing in a dairy processing operation <b>Describe membrane separation processing in a dairy processing operation</b>	3	5	B
32350	<b>Describe the manufacture of consumer beverages in a dairy processing operation</b>	3	5	New
32355	<b>Describe the reconstitution of dairy products using a wet-mix process in a dairy processing operation</b>	3	5	New

Manufacturing > Primary Products Food Processing > Primary Products Food Processing - Core Skills

ID	Title	Level	Credit	Review Category
28639	Demonstrate knowledge of clean-in-place processes in a primary products food processing operation <b>Describe clean-in-place processes in a primary products food processing operation</b>	3	5	B
32351	<b>Carry out dairy processing activities to meet operating standards in a dairy processing context</b>	3	5	New
32352	<b>Describe environmental cleaning hazards, processes, and consumables' handling in a dairy processing context</b>	3	5	New
32353	<b>Describe process improvement in a dairy processing operation</b>	3	5	New
32354	<b>Describe sustainability and practices that improve sustainability in a dairy processing context</b>	3	5	New
32515	<b>Describe controls of risk organisms in the transportation of dairy products in the dairy industry</b>	3	5	New