

**Field Primary Products Food Processing****Review of *Environmental Management, Quality and Process Improvements, Laboratory Methodology* unit standards**

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Dairy Manufacturing	Dairy Environmental Management	19327, 19328, 25674
	Dairy Quality and Process Improvements	21132
	Dairy Laboratory Methodology	4309, 4311, 4312, 4313, 4314, 8967, 21988, 21990, 21991, 21992, 21993, 21994, 21995, 21996, 21997, 21998, 21999, 22000, 22001, 22002, 22003, 22004, 22042 22044, 22444,

The Primary Industry Training Organisation has completed the review of the unit standards listed above.

**Date new versions published**

**September 2015**

**Planned review date**

**December 2020**

**Summary**

As a result of the Targeted Review of Qualifications process, Primary Industry Training Organisation (Primary ITO) has created 23 new unit standards to better reflect the requirements of the Graduate Profile Outcomes in the new Primary Products Food Processing qualifications. These new unit standards replace 29 existing unit standards.

**Main changes**

- New unit standards have been developed to meet the industry and qualification graduate profile outcome
- New unit standards replace existing unit standards in order to better reflect the unit standard outcomes and credits adjusted to reflect learning and assessment.

Category C unit standards will expire at the end of December 2018

## 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

### Primary Products Food Processing > Primary Products Food Processing

ID	Domain	Title	Level	Credit	Review Category
25674	Dairy Environmental Management	Explain environmental management of air discharges from drying plant and boilers on a dairy manufacturing site	4	8	C
<b>28626</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Explain environmental management of air discharges in a primary products food processing operation</b>	<b>5</b>	<b>3</b>	<b>New</b>
21132	Dairy Quality and Process Improvement	Participate in an audit process for a dairy processing operation	4	8	C
<b>28622</b>	<b>Primary Products Food Processing – Core Skills</b>	<b>Participate in a quality audit in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>
<b>28623</b>	<b>Primary Products Food Processing – Core Skills</b>	<b>Compare product compliance to written specifications for market requirements in a primary products food processing operation</b>	<b>3</b>	<b>3</b>	<b>New</b>
19328	Dairy Environmental Management	Explain land-based wastewater treatment systems used in the dairy industry	3	8	C
<b>29124</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Demonstrate knowledge of land based treatment systems in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>
19327	Dairy Environmental Management	Explain application and operation of biological wastewater treatment systems in the dairy industry	4	12	C
<b>29125</b>	<b>Primary Products Food Processing – Core Skills</b>	<b>Explain biological wastewater treatment systems in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>

ID	Domain	Title	Level	Credit	Review Category
4309	Dairy Laboratory Methodology	Apply laboratory fundamentals in the New Zealand dairy industry laboratory	3	3	C
<b>28665</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Apply laboratory fundamentals in a primary products food processing operation</b>	<b>3</b>	<b>10</b>	<b>New</b>
4311	Dairy Laboratory Methodology	Apply microbiological fundamentals in the New Zealand dairy industry laboratory	3	6	C
<b>28666</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Apply microbiological fundamentals used in a laboratory in a primary products food processing operation</b>	<b>3</b>	<b>5</b>	<b>New</b>
4312	Dairy Laboratory Methodology	Apply chemistry fundamentals in the New Zealand dairy industry laboratory	3	5	C
<b>28667</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Apply chemistry fundamentals used in a laboratory in a primary products food processing operation</b>	<b>3</b>	<b>5</b>	<b>New</b>
4313	Dairy Laboratory Methodology	Operate rapid analytical instruments in the New Zealand dairy industry	3	4	C
<b>28668</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Operate rapid analytical laboratory instruments in a primary products food processing operation</b>	<b>3</b>	<b>5</b>	<b>New</b>
21990	Dairy Laboratory Methodology	Use handheld instruments in a dairy industry laboratory	4	3	C
<b>28669</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Use handheld laboratory instruments in a primary products food processing operation</b>	<b>3</b>	<b>5</b>	<b>New</b>
21988	Dairy Laboratory Methodology	Calibrate and maintain laboratory test equipment in the dairy industry	4	8	C
<b>28670</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Calibrate and maintain laboratory test equipment in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>

ID	Domain	Title	Level	Credit	Review Category
4314	Dairy Laboratory Methodology	Identify and describe sensory evaluation components and methods for the dairy industry	3	2	C
8967	Dairy Laboratory Methodology	Explain and apply sensory evaluation methods used within the dairy industry	4	8	C
<b>28671</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Apply sensory evaluation methods in a laboratory in a primary products food processing operation.</b>	<b>4</b>	<b>10</b>	<b>New</b>
21991	Dairy Laboratory Methodology	Perform common detection testing for bacteria in the dairy industry	4	6	C
21993	Dairy Laboratory Methodology	Perform environmental testing for micro-organisms in the dairy industry	4	5	C
21998	Dairy Laboratory Methodology	Perform special detection testing for bacteria in the dairy industry	4	6	C
<b>28673</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Carry out detection testing in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>
22002	Dairy Laboratory Methodology	Perform fat tests in the dairy industry	4	8	C
22044	Dairy Laboratory Methodology	Perform functional tests in the dairy industry	4	6	C
22444	Dairy Laboratory Methodology	Perform protein tests in the dairy industry	4	12	C
<b>28674</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Carry out product testing in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>20</b>	<b>New</b>
21992	Dairy Laboratory Methodology	Perform culture maintenance for microbiological testing in the dairy industry	4	5	C
21994	Dairy Laboratory Methodology	Prepare culture media for microbiological testing in the dairy industry	4	6	C
<b>28675</b>	<b>Primary Product Food Processing – Operational Skills</b>	<b>Carry out culture preparation in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>
<b>29126</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Operate environmental systems equipment in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>

ID	Domain	Title	Level	Credit	Review Category
22001	Dairy Laboratory Methodology	Prepare chemical solutions in a dairy industry laboratory	4	3	C
29127	<b>Primary Products Food Processing – Operational Skills</b>	<b>Prepare chemical solutions in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>
22000	Dairy Laboratory Methodology	Explain and perform validation of materials for microbiological testing in the dairy industry	4	5	C
29128	<b>Primary Products Food Processing – Operational Skills</b>	<b>Perform validation of materials for microbiological testing in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>
21999	Dairy Laboratory Methodology	Perform microbiological testing of starter cultures in the dairy industry	4	7	C
29129	<b>Primary Products Food Processing – Operational Skills</b>	<b>Perform microbiological testing of starter cultures in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>
22042	Dairy Laboratory Methodology	Perform advanced biochemical and/or microbiological tests in the dairy industry	4	6	C
29130	<b>Primary Products Food Processing – Operational Skills</b>	<b>Perform advanced biochemical and microbiological tests in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>
22004	Dairy Laboratory Methodology	Use infrared technology for analysis in the dairy industry	4	10	C
29131	<b>Primary Products Food Processing – Operational Skills</b>	<b>Use infrared technology for analysis in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>
22003	Dairy Laboratory Methodology	Perform High Performance Liquid Chromatography (HPLC) analyses in the dairy industry	5	16	C
29132	<b>Primary Products Food Processing – Operational Skills</b>	<b>Perform High Performance Liquid Chromatography (HPLC) analyses in a primary products food processing operation</b>	<b>4</b>	<b>5</b>	<b>New</b>

ID	Domain	Title	Level	Credit	Review Category
21995	Dairy Laboratory Methodology	Perform routine microbiological counts in the dairy industry	4	6	C
21996	Dairy Laboratory Methodology	Prepare samples for microbiological tests in the dairy laboratory	4	6	C
21997	Dairy Laboratory Methodology	Perform special microbiological counts in the dairy industry	4	7	C
<b>29133</b>	<b>Primary Products Food Processing – Operational Skills</b>	<b>Carry out microbiological tests in a laboratory in a primary products food processing operation</b>	<b>4</b>	<b>10</b>	<b>New</b>