Title	**Perform validation of materials for microbiological testing in a primary products food processing operation**		
Level	**4**	**Credits**	**5**

Purpose	This unit standard is for experienced people who work in a laboratory, in a primary products food processing operation. People credited with this unit standard are able to: explain validation of materials; perform validation of materials; and interpret and report results of material validation tests used for microbiological testing, in a laboratory in a primary products food processing operation.

Classification	Primary Products Food Processing > Primary Products Food Processing - Operational Skills

Available grade	Achieved

Explanatory notes

1 Legislation and references relevant to this unit standard includes but is not limited to – Hazardous Substances and New Organisms Act 1996, Health and Safety in Employment Act 1992, Health and Safety in Employment Regulations 1995, Resource Management Act 1991, ISO/IEC 17025:2005/Cor1:2006 *General requirements for the competence of testing and calibration laboratories*, NZS/ISO 15189:2003 *Medical Laboratories – Particular requirements for quality and competence*, available at http://www.standards.co.nz.

2 Definitions
Organisational requirements – instructions to staff on policies and procedures which are documented in memo, electronic or manual format and are available in the workplace.
Primary products food processing operation – covers a meat processing, dairy processing, seafood or baking yeasts manufacturing operation.

3 *Validation of materials* includes but is not limited to – media validation, detergent residue test, water toxicity test;
evidence is required for all three tests.

Outcomes and evidence requirements

Outcome 1

Explain validation of materials used for microbiological testing in a laboratory in a primary products food processing operation.

Evidence requirements

1.1 The principle of the test is explained in terms of technology, reactions and the process involved.

1.2 Critical stages of the test are explained in terms of the process used at each stage.

1.3 Variables of the test are explained in terms of the process of eliminating variables.

Range variables include but are not limited to – equipment, apparatus, reagents, sample, technique, contamination, environment.

1.4 Quality assurance of the test is explained in terms of organisational requirements.

Range quality assurance includes but is not limited to – blanks, repeatability, duplicates, reproducibility.

Outcome 2

Perform validation of materials used for microbiological testing in a laboratory in a primary products food processing operation.

Evidence requirements

2.1 Samples and equipment are prepared in accordance with organisational requirements.

2.2 Tests are performed in accordance with agreed processes and procedures.

2.3 Tests are performed in a safe and aseptic manner in accordance with organisational requirements.

2.4 Tests are confirmed in accordance with organisational requirements.

2.5 Test equipment is cleaned and stored, and samples and waste are disposed of in accordance with organisational requirements.

Outcome 3

Interpret and report results of material validation tests used for microbiological testing in a laboratory in a primary products food processing operation.

Evidence requirements

3.1 Results are interpreted and reported in accordance with organisational requirements.

3.2 Any non-conformance is identified and corrective action taken in accordance with organisational requirements.

3.3 Abnormal test situations are analysed to identify the nature of the problem and reach a valid solution.

3.4 Abnormal test results are analysed to identify the nature of the problem and reach a valid solution.

Replacement information	This unit standard replaced unit standard 22000.

Planned review date	31 December 2020

Last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	17 September 2015	N/A

Consent and Moderation Requirements (CMR) reference	0033

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Please note
Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.