Title	Demonstrate knowledge of risks to on-farm milk quality and assist with implementing solutions to milk quality problems		
Level	3	Credits	10

Purpose	This unit standard is intended for people who are working on a dairy farm.	
	People credited with this unit standard are able to: describe the nutritional value of milk as a food, and the associated consequences of on-farm milk quality supply issues; describe milk contaminate requirements in relation to on-farm milk supply; demonstrate knowledge of milk quality testing, grading and on-farm milk quality information; assist with implementing, and review solutions to on-farm milk quality problems; and identify, and use antibiotics to treat mastitis.	

Classification	Agriculture > On-farm Milk Quality	
Available grade	Achieved	

Guidance Information

- 1 Legislation and regulations relevant to this unit standard include but are not limited to:
 - Health and Safety at Work Act 2015;
 - Animal Products Act 1999
 - Animal Welfare Act 1999;
 - Health Act 1956;
 - Food Act 1981;
 - Agricultural Compounds and Veterinary Medicines Act 1997;
 - Resource Management Act 1991;
 - Hazardous Substances and New Organisms Act 1996.

2 References

NZCP-1, Code of Practice for the Design and Operation of Farm Dairies, Ministry of Primacy Industries, ISBN 0-908946-00-7.

DPC 2: Animal Products (Dairy) Approved Criteria for Farm Dairies, referred to as DPC: 2.

Available from the Ministry of Primary Industries website, http://www.mpi.govt.nz.

3 Definitions

MRS T refers to mark, record, separate and treat.

On-farm quality management procedures refer to the documented procedures for farm dairy hygiene practices, which must meet legislative and dairy company

requirements. On-farm quality management procedures are available from all dairy companies.

RMT refers to rapid mastitis test.

Workplace procedures refer to the verbal or written instructions to staff on procedures for animal health, welfare, and management.

Outcomes and performance criteria

Outcome 1

Describe the nutritional value of milk as a food, and the associated consequences of onfarm milk quality supply issues.

Performance criteria

- 1.1 Describe the nutritional value of milk as food for human consumption.
- 1.2 Describe the consequences of on-farm milk quality supply issues from a global, national and on-farm perspective.

Outcome 2

Describe milk contaminate requirements in relation to on-farm milk supply.

Performance criteria

2.1 Describe contaminates that can influence on-farm milk quality.

Range contaminates include but are not limited to – cow, land, dairy

feeding, milk harvesting, other activities;

evidence of one from each contaminate source.

- 2.2 Describe agrichemical withholding period in terms of on-farm milk quality.
- 2.3 Describe agrichemical storage requirements for a farm dairy.

Outcome 3

Demonstrate knowledge of milk quality testing, grading and on-farm milk quality information.

Performance criteria

3.1 Identify and describe the purpose of milk quality tests.

Range must include – bactoscan, thermoduric, coliform, inhibitory

substances, sediment, senses, freezing point, somatic cell count (SCC), colostrum, temperature, aflatoxic, DDE/DDT residue,

detergent residue.

3.2 Describe the grading system used to assess milk quality.

Interpret on-farm milk quality information provided by a dairy processing company to identify milk quality problems.

Outcome 4

Assist with implementing, and review solutions to on-farm milk quality problems.

Range at least four solutions are required.

Performance criteria

- 4.1 Identify a solution for each milk quality problem.
- 4.2 Assist with implementing each solution in accordance with workplace procedures.
- 4.3 Review effectiveness of the implemented solution after an agreed period.

Outcome 5

Identify, and use antibiotics to treat mastitis.

Performance criteria

- 5.1 Identify subclinical mastitis using somatic cell count information and the RMT.
- 5.2 Identify clinical mastitis in accordance with workplace procedures and treat by applying MRS T principles.
- 5.3 Apply antibiotic treatment according to label and veterinarian instructions.
- 5.4 Comply with label instructions in terms of antibiotic withholding period.
- 5.5 Store antibiotics in accordance with on-farm quality management procedures.

Replacement information This unit standard replaced unit standard 23791.
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Planned review date	31 December 2024
Flailileu leview date	31 December 2024

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	16 July 2015	31 December 2022
Review	2	27 February 2020	N/A

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Consent and Moderation Requirements (CMR) reference	0052
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This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

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.