Ministry for Primary Industries
Manatū Ahu Matua

Animal Products Notice

Raw Milk for Sale to Consumers

Regulated Control Scheme

1 March 2016

Issued under the Animal Products Act 1999

New Zealand Government

TITLE

Animal Products Notice: Raw Milk for Sale to Consumers

COMMENCEMENT

This Animal Products Notice comes into force on 1 March 2016.

ISSUING AUTHORITY

This Animal Products Notice is issued under section 167(1)(g) and (o) of the Animal Products Act 1999 and sections 367(2)(a), 405(3) and 406(1)(w) and (x) of the Food Act 2014.

Dated at Wellington this 29th day of February 2016.

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Ministry for Primary Industries
(acting under delegated authority of the Director-General)

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Introduction

This introduction is not part of the Animal Products Notice, but is intended to indicate its general effect.

Purpose

The purpose of this Notice is to set out the specifications and requirements for the regulated control scheme for raw milk that is established by the Raw Milk for Sale to Consumers Regulations 2015.

To understand all the requirements of the regulated control scheme, it is essential to be familiar with both the Regulations and this Notice. Requirements of the scheme that are set out in Regulations are not generally repeated in this Notice. That means that many key requirements (such as the requirement for farm dairy operators supplying RCS raw milk to be registered and to sell only to final consumers) are found only in the Regulations. This Notice therefore needs to be read in the context of the Regulations as a whole.

Background

Most milk sold to consumers is pasteurised; that is, it is given a heat treatment equivalent to 72 ºC for 15 seconds in order to kill pathogens that could harm human health. The production and processing (including packaging and storage) of milk is regulated under the Animal Products Act 1999, typically through risk management programmes, and its sale, labelling and advertising is regulated under the Food Act 2014.

Raw milk that is sold to consumers without being pasteurised or otherwise treated carries particular risks. To minimise the impact of the microbiological hazards associated with raw milk, its production and processing is regulated through a regulated control scheme imposed by the Raw Milk for Sale to Consumers Regulations 2015. These Regulations are made under both the Animal Products Act 1999 and the Food Act 2014 and set out the main features of the regulated control scheme.

This Notice sets out further detailed specifications and requirements that must be complied with by all people involved in the production and processing (which includes the storage and transport) of RCS raw milk.

The requirements imposed for producing and processing RCS raw milk are higher in certain respects than those that apply to raw milk supplied for further processing. The main differences are as follows:

a) RCS raw milk must be maintained at a temperature at or below 6 ºC at all times between initial cooling and delivery to a consumer;
b) sufficient sampling and testing must be undertaken to confirm that RCS raw milk is being harvested and processed under hygienic conditions and that food safety standards are routinely met;
c) the frequency of sampling and testing for some microbiological parameters is performance based and recognises consistent conformance;
d) the maximum time from harvesting the milk through to delivery to, or receipt by, the consumer is 30 hours;
e) the use-by date for RCS raw milk is 4 days after the commencement of milking for the oldest milk in the lot;
f) the verification audit and raw milk farm dairy assessment frequencies are performance based rather than fixed.

Who should read this Animal Products Notice?

Everyone who the regulated control scheme applies to (as described in Regulation 10 of the Raw Milk for Sale to Consumers Regulations 2015) should read this Notice, namely:

a) farm dairy operators who produce and process RCS raw milk; and

b) depot operators and transport operators who store or transport RCS raw milk on behalf of farm dairy operators; and
c) people and agencies who carry out specialist functions in relation to RCS raw milk under the scheme, such as farm dairy assessors, recognised verifiers and animal product officers.

Why is this important?

Anyone who wants to produce, process, store or transport RCS milk must demonstrate conformance with this Notice and the Raw Milk for Sale to Consumers Regulations 2015. A registered farm dairy operator or depot operator who fails to comply may have their registration suspended or their registration may not be renewed.

In addition, a person who fails to comply with the requirements of this Notice may be committing an offence under the Animal Products Act 1999 or the Food Act 2014. The maximum penalties for applicable offences under the Animal Products Act 1999 and the Food Act 2014 is $20,000 for an individual and $100,000 for a body corporate. Infringements offences under the Food Act 2014 carry immediate penalties of up to $450.

Part 1: Requirements

1.1 Definitions

(1) In this Notice, unless the context otherwise requires:

Act means the Animal Products Act 1999

animal treatment means any veterinary medicine, drug, remedy, therapeutic preparation, prophylactic, biochemical substance or topical application (such as teat salves, teat sprays, drenches and pour-ons), that is manufactured, imported, advertised for sale or sold for any of the following purposes:

a) curing, diagnosing, treating, controlling or preventing any disease in animals;
b) testing any animal for a disease;
c) destroying or preventing parasites in or on animals;
d) maintaining or improving the health, condition or productivity of any animal;
e) capturing or immobilising any animal

assessor means a recognised RCS raw milk farm dairy assessor, as defined in the Regulations

bulk milk tank means an enclosed container, other than a transfer tank, that holds unpackaged milk

chilled compartment means a chilled compartment or unit used to contain RCS containers in a retail area or depot or while being transported by a transport operator

CIP system means a cleaning-in-place system used to clean all or any part of milking equipment

cleaning equipment means equipment, other than a CIP system, that is used in the cleaning of dairy premises or milking equipment

colostrum period means:

a) for heifers, within 6 days or 12 milkings (whichever is longer) of parturition; and
b) for all other milking animals, within 4 days or 8 milkings (whichever is longer) of parturition

conformance testing means a test referred to in clause 6.12 of the microbiological, compositional, physical or chemical status of a sample of milk intended to be supplied as RCS milk

critical non-conformance:

a) in relation to RMFD assessments and verification audits of farm dairies or depots, has the meaning in clause 7.1(1);
b) in relation to conformance testing, means a result that is classified under any table in clause 6.12 as a critical non-conformance

dairy premises means all and any of the following places at a farm dairy address, whether they are located together or are separated:

a) the farm dairy;
b) the packing area;
c) the general storage area;
d) the retail area (if any);
e) toilet and washing facilities provided for use by people at the farm dairy or packing area;
f) any other associated areas

dispensing device means equipment designed to enable retail customers to transfer milk from the device directly into the container that the customer uses to collect the milk; and a reference to a dispensing device includes a reference to any bulk milk tank or transfer tank that is in, or is to be incorporated into, a dispensing device

farm dairy has the meaning in the Act and (to avoid doubt) includes the milking area, milk storage area and general storage area

farm dairy operator means a registered farm dairy operator (as defined in the Regulations)

general storage area means any area used for storing consumables, equipment and supplies used in the harvesting or packing of milk, but not used for storing milk

main RCS milking herd means all milking animals in the RCS milking herd other than segregated animals

major non-conformance:

a) in relation to RMFD assessments and verification audits of farm dairies or depots, has the meaning in clause 7.1(2);
b) in relation to conformance testing, means a result that is classified under any table in clause 6.12 as a major non-conformance

milk has the same meaning as "raw milk" in the Regulations

milk-contact surface means any surface:

a) that is in, or may come into, direct contact with milk; or
b) from which liquids may drain, drip or be drawn into milk or onto surfaces with direct contact with milk (such as those parts of a cleaning system that carry cleaning solutions)

milking area means the part of a farm dairy where milking animals are milked, whether on a temporary or permanent basis

milking equipment means all of the following (and, to avoid doubt, does not include chilled compartments):

a) milking machines and any other mechanised equipment used in the harvesting or packing of milk and any CIP system used to clean them;
b) bulk milk tanks and transfer tanks and any CIP system used to clean them;
c) all other non-mechanised equipment used in the harvesting or packing of milk

milking yard means any yard, race or other construction in or around the milking area that is associated with the activity of harvesting milk

milk storage area means the part of a farm dairy where milk is stored after milking and from which milking animals are excluded; and the milk storage area may also be used as a packing area and retail area

minor non-conformance has the meaning in clause 7.1(3)

non-conforming milk has the same meaning as "non-conforming raw milk" has in the Regulations; and milk that is deemed to be non-conforming is described in clause 6.10

non-contact surface means a surface that is not a milk-contact surface

packing area means an area used for packing milk produced at a farm dairy into RCS containers or a dispensing device

pest means any bird, vermin or insect

RCS container means a package that is, or is intended to be, filled with RCS milk and is labelled by the farm dairy operator who produced the milk

RCS milk means RCS raw milk (as defined in the Regulations) that is or has been packaged (whether into RCS containers or a dispensing device) for supply to a final consumer

RCS milking herd means all animals that are, or are intended to be, milked for the purpose of supplying RCS milk

Regulations means the Raw Milk for Sale to Consumers Regulations 2015; and a reference to a numbered Regulation is a reference to the provision of that number in the Regulations

restricted veterinary medicine means a veterinary medicine that is registered under the Agricultural Compounds and Veterinary Medicines Act 1997 with conditions restricting its sale, purchase, or use, and requiring an authorisation for purchase and use

retail area means any part of a farm dairy address area that is open to the public for the purpose of collecting RCS milk

RMFD assessment means a raw milk farm dairy assessment as required by Regulation 71

sand trap includes stone trap

segregated animal means an animal that is segregated from the main RCS milking herd, in accordance with clause 5.3, and is therefore not to be milked with the main RCS milking herd

sell-by time, in relation to a lot of RCS milk, means the latest time when the milk is permitted by Regulation 66 to be provided or delivered to a final consumer (see clause 6.9)

Tb status means the status applied to a herd under the Tb Plan

transfer tank means an enclosed container that holds unpackaged milk and that is used solely to transport milk

verifier means a responsible verifier, as defined in the Regulations

veterinary medicine has the meaning given in the Agricultural Compounds and Veterinary Medicines Act 1997

withholding period means, in relation to an animal treatment, the period identified in clause 5.11 within which milk from an animal treated with that animal treatment must be withheld from supply for human consumption.

(2) Any term or expression defined in the Act or the Food Act 2014, or in any regulations made under those Acts, that is used but not defined in this Notice has the same meaning as in those Acts or regulations (as the case may be).

1.2 Records

(1) Any records that a farm dairy operator, depot operator or transport operator is required by this Notice to keep must be:

a) kept (whether in hard copy or electronically) for at least 4 years; and
b) complete, accurate and of sufficient quality; and
c) appropriately stored and readily accessible; and
d) available for inspection as required by the Director-General and any other person who is entitled (under the Acts, the Regulations, or this Notice) to have access to those records.

1.3 Application to hand-milking

(1) This Notice applies where milking animals are milked by hand in the same way that it applies to milking animals are milked by machine. Any rules that cannot be applied to a hand-milking situation (such as provisions that relate to milking machines) can be ignored.

1.4 Critical measurements

(1) For the purpose of the Regulations, the following are critical measurements:

a) the temperature inside bulk milk tanks;
b) the temperature inside chilled compartments;
c) the measurements on alternate instruments used to measure clarity instead of turbidity.

Part 2: Premises

2.1 Location

(1) All parts of dairy premises must be sited in places that are unlikely to be subject to flooding, objectionable odours, smoke, dust or other contaminants.

(2) Dairy premises must not be located in places from which wastes, either liquid or solid, cannot be removed.

2.2 Water supply

(1) Dairy premises must have an adequate supply of hot and cold water of the appropriate quality for cleaning and milk cooling.

(2) Dairy premises must be designed so that effluent, wastewater and water recovered from the farm dairy effluent system cannot be used for any purpose on dairy premises.

(3) There must be a sufficient number of hose points around the dairy premises to enable cleaning of all parts of the premises with water.

2.3 General design and construction

(1) Dairy premises must be designed so that the milking area is separated from the milking yard, milk storage area, general storage area and any packing or retail areas.

(2) All parts of dairy premises must be designed and constructed so as to:

a) minimise opportunities for pests to enter or remain; and
b) minimise the accumulation of dirt; and
c) be easy to clean; and
d) provide sufficient working space to minimise the risk of contaminating milk.

(3) All parts of dairy premises must be soundly built of durable materials.

2.4 Floors

(1) The floors at dairy premises, other than in a discrete retail area, must:

a) be made of concrete (or some similar impervious material that is easy to clean); and
b) be non-slip, whether wet or dry; and
c) be uniformly graded so that water cannot pool; and
d) be easy to clean after every milking; and
e) have a fall to allow drainage to a drainage point connected to the effluent system.

2.5 Internal surfaces

(1) The surface of internal walls, ceilings and under-roof areas of dairy premises, other than in a discrete retail area, must be:

a) impervious to moisture; and
b) easy to clean; and
c) resistant to the build-up of condensation, mould and the accumulation of dirt; and
d) resistant to chemicals likely to be used at the dairy premises; and

e) non-toxic; and
f) resistant to chipping, flaking, delamination, shrinkage and abrasion; and
g) easy to repair.

(2) If product lines, service lines, ducting, trunking, or any similar thing passes through walls, ceilings, or floors in the milk storage area or packing area the resulting holes must be flashed and sealed.

2.6 Rubber matting

(1) Rubber matting may only be fitted at milking yards and milking areas:

a) over concrete; and
b) if it is designed to allow drainage underneath the matting and allow flushing with water underneath it; and
c) if within the milking area, only in the following:

i) immediate traffic areas (such as the bail and exit area on rotary platforms);
ii) the pit floor in herringbone dairies;
iii) milk harvester positions in rotary dairies.

(2) Fitted rubber matting must:

a) lie flat; and
b) have no gaps between the seams; and
c) have no trip hazards.

(3) If rubber matting is fitted at dairy premises, the farm dairy operator must ensure that:

a) the farm dairy operator and the assessor have access to installation and management instructions for the rubber matting provided by the supplier; and
b) there is no build-up of material under the matting and no opportunity for build-up; and
c) the rubber matting does not result in offensive odours.

(4) If a milking yard is fitted with rubber matting, storm water diversion from the effluent system must not be installed.

(5) This clause does not apply to rubber matting fitted in a discrete retail area.

2.7 Windows and doors

(1) Windows and doors at the dairy premises must be designed and constructed:

a) to resist the accumulation of dirt and condensation; and
b) be easy to clean.

(2) If windows or doors have insect-proof screens, the screens must be removable and cleanable.

2.8 Required minimum distances

(1) The milking area, milk storage area, packing area and retail area must all be located at least 45 m away from the following:

a) effluent ponds;
b) offal holes;
c) silage, baleage;
d) pigs;
e) dead animals;
f) sand traps intended to hold a volume greater than 7.5 m^3 at any time;

g) drainage pads of effluent solids storage bunkers intended to hold a volume more than 5 m³ at any time;
h) loafing barns, feeding pads, standoff pads and housing used for cattle or buffalo (unless they have an impervious cleanable floor connected to the dairy premises' effluent system);
i) dairy sumps with a capacity greater than 100,000 L;
j) recycled water storage in a fully enclosed tank with a maximum capacity greater than 30,000 L;
k) recycled water storage not in a fully enclosed tank.

(2) The milking area, milk storage area, packing area and retail area must all be located at least 20 m away from the following:

a) dog housing;
b) poultry, ostrich or emu housing;
c) housing for offspring of milking animals aged 0 to 3 months;
d) hay barns and hay;
e) fertiliser bins and storage;
f) supplementary feed storage (unless the feed silo is at least 10 m from any bulk milk tank, is on a concrete pad, fully enclosed, connected to the farm dairy by an auger, and protected from pest activity);
g) bulk fuel storage;
h) storage places and designated mixing areas for chemicals not approved for use at dairy premises;
i) dairy effluent sumps with a capacity between 22,500 L and 100,000 L;
j) recycled water storage in a fully enclosed tank with a maximum capacity of 30,000 L;
k) loafing barns, feeding pads, standoff pads and housing for cattle or buffalo that have an impervious cleanable floor connected to the dairy premises' effluent system.

(3) Buildings that are not used for or associated with farm dairy activities must not be located within 20 m of the milking area, milk storage area, or packing area unless in the professional judgement of the assessor, the building and associated activities pose no risk to the production and processing of milk.

(4) The milking area, milk storage area, packing area and retail area must all be located at least 10 m away from the following:

a) dairy effluent sumps with up to 22,500 L capacity;
b) sand traps intended to hold a volume not exceeding 7.5 m³ at any time;
c) drainage pads or effluent solids storage bunkers intended to hold a volume not exceeding 5 m³ at any time;
d) sewage sumps and septic tanks.

2.9 Drains

(1) All open drains must be made of concrete (or some similar impervious material that is easy to clean).

(2) All concreted areas in and around a farm dairy must fall to a drainage point connected to the dairy effluent system.

(3) Drains must be big enough to cope with the total effluent flow and must be designed and constructed so that they are easily cleaned.

(4) The fall in the drains to the drainage point must provide for effective drainage.

(5) Drains from the main sump to the effluent disposal point must be fully enclosed and impervious to moisture.

(6) If drainage is discharged from a milking pit by either a venturi or a pump, a recess must be provided in the floor. The sides and bottom of this recess must be finished to a smooth surface and sealed to prevent seepage.

2.10 Yards and races

(1) All yards must be made of concrete (or some similar impervious material that is easy to clean).

(2) All races must be made of concrete (or some similar impervious material that is easy to clean) for a distance of 10 m to the milking area and milk storage area.

(3) Yards and races must be free-draining and easy to clean after each milking.

(4) Run-off from yards and races must not pond within 45 m of the farm dairy.

(5) Kerbing around yards must be at least 150 mm above the surface of the yard, except at the yard entrance and bail, where it can be reduced to 50 mm.

2.11 Milking areas

(1) Milking areas must:

a) be easy to clean after each milking; and
b) have effective drainage; and
c) have sufficient lighting to enable animal health and milk quality to be observed; and
d) have sufficient working space to minimise the risk of milk contamination during milking.

(2) Milking areas must be designed and constructed to:

a) minimise opportunities for birds to perch; and
b) ensure that people are able to have clean hands, footwear and clothing before entering any other part of the dairy premises.

(3) All lights within 5 m of a CIP tub, must be:

a) of a shatter-proof design or be screened with shatter-proof coverings; and
b) easy to clean; and
c) designed so that dust cannot accumulate on the upper surfaces of fittings.

(4) Rubber matting must not be used in a milking area except in:

a) the immediate traffic areas (such as the bail and exit area on rotary platforms); and
b) the pit floor in herringbone dairies; and
c) the milk harvester positions in rotary dairies.

2.12 Milk storage areas

(1) A milk storage area may be used as a packing area, a retail area or both.

(2) If a milk storage area is used as a packing area or a retail area, the area must meet all the requirements of a milk storage area and also all the requirements of a packing area and retail area, as appropriate.

(3) Milk storage areas must only be used as a storage place (unless they are also used as a packing area or retail area), and as a place to filter and cool milk.

(4) The only things that may be stored in a milk storage area are:

a) bulk milk tanks and transfer tanks; and
b) equipment used for any of the following:

i) milking;
ii) milk cooling or filtering;
iii) cleaning the dairy premises or equipment.

(5) Milk storage areas must have adequate lighting, and the lights must be:

a) of a shatter-proof design or be screened with shatter-proof coverings; and
b) easy to clean.

(6) Clauses 2.12(6)-(10) do not apply to milk storage areas that comprise only a bulk milk tank located outdoors.

(7) Milk storage areas must be in an enclosed room, separate from the milking area, with doors that can shut.

(8) Roller doors used in milk storage areas must have capped ends that prevent birds nesting.

(9) Lights and other fittings must be designed to minimise the accumulation of dust and soil on upper surfaces and to minimise the opportunity for nesting.

(10) Milk storage areas must have ventilation that:

a) allows the interior of the room to dry out; and
b) enables efficient operation of any refrigeration unit in the milk storage area.

(11) All bulk milk tanks in a milk storage area must be set back from the main doorway.

2.13 General storage areas

(1) Only consumables, equipment and supplies used in connection with the harvesting and packing of milk may be stored in the general storage area.

(2) Any consumables, equipment or supplies used in connection with the harvesting and packing of milk that are not stored in the milk storage area (such as animal treatments) must be stored in the general storage area.

(3) Fuel must not be stored in the general storage area or anywhere else at dairy premises.

2.14 Storage facilities

(1) Storage cupboards and shelves in any storage area must be set above the floor to enable cleaning beneath them.

2.15 Toilets and handwashing facilities

(1) Any toilet in dairy premises must have a hand basin (with soap and running water) in or adjacent to it.

(2) Toilets in dairy premises must be in a room that is separate from the milking area, the milk storage area and the packing area, and the room must have:

a) a door that closes (and is preferably self-closing); and
b) a ceiling; and
c) adequate ventilation.

(3) Handwashing facilities (with soap and running water) must be available in or near the milking area and the packing area.

(4) Toilets and hand basins at a farm dairy address must be connected to a toilet drainage system, and discharge from the toilet must not enter the farm dairy effluent system.

2.16 Packing areas

(1) A packing area may be in the milk storage area or separated from it.

(2) Every packing area must be in an enclosed room, separate from the milking area, with doors that can shut.

2.17 Retail areas

(1) Retail areas must be separated from other parts of the dairy premises in such a way that members of the public using the retail area do not enter the other parts of the dairy premises, unless the retail area is also a milk storage area or packing area.

(2) If a retail area is in a milk storage area or packing area, the area must meet all the requirements of a retail area and also all the requirements of a milk storage area or packing area, as appropriate.

(3) If the retail area is a discrete area, it must:

a) be separate from the milking area; and
b) provide shelter from the environment for chilled compartments that hold RCS containers or any dispensing device.

(4) Chilled compartments in a retail area must comply with clause 9.4(2) and (3).

2.18 Bulk milk tanks

(1) Bulk milk tanks must be located in an enclosed room or, if outdoors, must be protected from the environment.

(2) Bulk milk tanks must be installed in accordance with the manufacturer's instructions concerning the number, size and spacing of supporting legs where appropriate.

(3) In any enclosed space containing a bulk milk tank, all sources of ventilation (such as windows) must be fitted with screens to prevent access by pests.

(4) There must be sufficient clearance around every fixed bulk milk tank to allow for cleaning around its circumference, with the following minimum distances:

a) between wall and bulk milk tank: 0.5 m;
b) between ceiling and bulk milk container: 1 m.

(5) A fixed bulk milk tank must not be sited flush with the floor.

(6) Beneath the outlet of every fixed bulk milk tank greater than a 400 L capacity there must be a drainage basin that drains to the dairy effluent system.

2.19 Sumps

(1) All sumps must be made of concrete (or some similar impervious material that is easy to clean).

(2) Drains, sumps and traps must be big enough to cope with the total effluent flow, and be designed and constructed so that they are easy to clean.

(3) No sumps may be located within 10 m of the milking area, the milk storage area, the packing area and the retail area.

(4) Sumps between 10 m and 20 m of the milking area, the milk storage area, the packing area and the retail area must not:

a) exceed 22,500 L in capacity; and
b) have a footprint of more than 4 m in diameter; and
c) have a surface area of more than 12.5 m^2.

(5) Sumps between 20 m and 45 m from any part of the farm dairy must not:

a) exceed 100,000 L in capacity; and
b) have a footprint of more than 7 m in diameter; and
c) have a surface area of more than 38.4 m^2; and
d) be used as the primary effluent storage facility.

2.20 Sand traps

(1) All sand trap drains must be made of concrete (or some similar impervious material that is easy to clean).

(2) Sand traps must be big enough to cope with the total effluent flow, and must be designed and constructed so that they are easy to clean.

(3) Sand traps must:

a) have a capacity not exceeding 7.5 m^3; and
b) be designed to retain sand and stones with a minimum of effluent solids.

(4) Sand traps less than 45 m from any part of the farm dairy other than milking yards must not be used to store more than 5 m^3 of sand trap cleanings or de-watering solids.

(5) Drainage pads and solids storage bunkers associated with sand traps must be constructed so that stored cleanings are effectively contained and any liquid drains back into the effluent system.

2.21 Changes to premises

(1) A farm dairy operator must not do any of the following unless the change is carried out in a manner that, in the opinion of the assessor, ensures that the fitness for intended purpose is not compromised during and after the change:

a) make significant structural alterations to any part of the dairy premises;
b) add new buildings within 45 m of the milking area, milk storage area or any packing or retail area;
c) change (other than repair) any effluent storage or disposal system, or sump that is within 45 m of the milking area, milk storage area, or any packing or retail area.

(2) Within one month after completing the change, the assessor must review it, to check whether it is acceptable and report the result of the review to the verifier.

Part 3: Equipment

3.1 General design, fabrication and installation

(1) Milking equipment and cleaning equipment at farm dairies and packing areas must be designed, fabricated, installed and used in such a way that:

a) materials and substances coming into contact with milk, whether directly (such as milk-contact surfaces) or indirectly (such as water and cleaning agents) do not contaminate milk or cause it to deteriorate; and
b) milk is protected from external contamination; and
c) while milk is being harvested and packaged, damage to it is minimised.

(2) Milking equipment must comply with Schedule A – Milking Equipment Specifications and be designed, fabricated and installed so that:

a) it can be effectively cleaned either manually or by a CIP system; and
b) condensation and other liquids drain from it; and
c) all parts of it can be readily disassembled for monitoring and cleaning; and
d) the operation and cleaning of the equipment does not result in corrosion or permanent distortion of the equipment.

(3) Hoses and pipework must not rest on the ground unless the ends are securely connected or capped.

3.2 Enabling inspection of milking equipment

(1) All milk-contact surfaces in milking equipment must be able to be inspected.

(2) System accessories (such as milk meters and cup removers) must be accessible for inspection and be readily disassembled.

(3) Mechanised milking equipment must have inspection points at the following places:

a) the couplings in pipelines;
b) the outlet of each cleaning circuit;
c) where cleaning problems might be expected;
d) at every high and every low point of the piping networks.

(4) In addition, a milking machine must have inspection points:

a) in every milkline, at the point furthest from the receiving can (if it has one); and
b) at every high and every low point of its piping networks.

3.3 Installation of milking equipment

(1) Static equipment must be supported so that it remains in alignment and position and does not drain onto other equipment.

(2) If static equipment is supported on legs, the legs must either have rounded ends or be sealed to the floor.

(3) There must be sufficient space between the floor and the bottom of the equipment to allow the floor below to be cleaned.

3.4 Refrigeration

(1) All mechanised milking equipment beyond the cooler in a milking machine must be designed and operated to enable the milk to be held at the temperatures required by the Regulations.

3.5 Materials for milk-contact surfaces

(1) The materials used for milk-contact surfaces must not (when installed) release substances that are toxic or that will taint the milk or render it unfit for human consumption at any time during routine use.

(2) Materials used for milk-contact surfaces must not, when used as intended, suffer chemical or physical changes that are liable to adversely affect the quality of the milk or the function of the component they form a part of.

(3) Materials used for milk-contact surfaces must be:

a) resistant to water and water vapour; and
b) impervious to water (other than filter element materials); and
c) resistant to milk; and
d) resistant to maintenance compounds; and
e) resistant to the regular cleaning and sanitising procedures used on milk-contact surfaces; and
f) resistant to physical damage such as chipping, flaking, de-lamination, abrasion, machinery vibration and impacts likely to be encountered in its intended use; and
g) resistant to extreme temperature fluctuations of at least -20 ºC to 100 ºC; and
h) free-rinsing, so that cleaning chemicals wash off easily; and
i) resistant to corrosion.

(4) The following substances must not be used in any milk-contact surface:

a) chemicals listed in the MPI Register of Restricted Chemicals that have no provision for use;
b) chemicals listed as SVHC (substances of very high concern) in the European Chemicals Agency SVHC candidate list of Regulation (EC) No 1907/2006 – Registration, Evaluation and Authorisation of Chemicals (commonly referred to as the REACH standard).

(5) The following materials are acceptable as or in milk-contact surfaces:

a) food-grade materials, as identified in any recognised register of food grade materials (such as plastics that comply with the 3A Sanitary Standards, or the US Government Code of Federal Regulations, Title 21, “Food and Drugs” Parts 170-199);
b) stainless steel tube that meets the manufacturing requirements of Australian Standard AS 1528.1 or equivalent.

(6) If rubber, rubber-like or plastic materials forming milk-contact surfaces are bonded to a base material, the bond must remain continuously and mechanically sound under intended conditions of use.

3.6 Finish of milk-contact surfaces

(1) Milk-contact surfaces must be finished to an Ra value of no more than 1 μm.

(2) Milk-contact surfaces must be smooth and free from cracks and crevices and, as far as practicable, be free from imperfections such as pits, folds, and crevices.

3.7 Materials for non-contact surfaces of milking equipment

(1) This clause applies to the non-contact surface of milking equipment and cleaning equipment.

(2) Any material that is suitable for use as a milk-contact surface is suitable as a non-contact surface.

(3) The non-contact surfaces of milking equipment must be made of material that:

a) does not release toxic substances when completed or installed; and
b) is easy to clean; and
c) is resistant to chipping, flaking and de-lamination (which means that fibreglass is not suitable); and
d) is able to withstand water; and
e) is able to resist heat under normal operating conditions; and
f) is resistant to abrasion, machinery vibration and impact likely to be encountered during intended use; and
g) is resistant to the pressure and stress likely to be encountered during intended use.

(4) If fibres are used in any screening surfaces or flexible connectors, they must be fabricated to minimize the loss of fibres.

3.8 Supplier to demonstrate suitability of surfaces

(1) The supplier and installer of milking equipment must be able to demonstrate that all milk-contact surfaces and non-contact surfaces of the equipment:

a) are safe and suitable; and
b) will not adversely affect the milk or milking equipment; and
c) will not contribute to the deterioration of milk.

3.9 Water heating

(1) Every farm dairy operator must ensure that water heaters at the dairy premises are capable of providing sufficient hot water to the required cleaning temperature specified in the farm dairy operator's cleaning plan.

(2) The minimum quantity of hot water required is 10 L per set of cups and 2 % of the bulk milk container volume with a minimum volume for bulk milk containers of 120 L.

(3) If water is heated using a heat recovery system, the system must be designed to ensure that, if there is a fault in the system, water in the system cannot be adversely affected.

(4) Water heaters must be made of materials that do not release toxic substances into the water.

3.10 Identification of equipment

(1) Milking equipment and cleaning equipment used at dairy premises must be readily identifiable as either milking equipment or cleaning equipment.

(2) Rubberware must be identified by a brand applied by the manufacturer.

3.11 Consumable equipment

(1) Consumable equipment such as air filters and rubberware must be replaced:

a) when there are signs of deterioration or loss of efficiency; and
b) in any case, at the end of their expected service life.

3.12 Testing milking machines

(1) Milking machines must be tested:

a) by a registered milking machine tester who has a current practising certificate; and
b) at least once each season, or at the frequency specified in writing by the registered tester; and
c) against the New Zealand Milking and Pumping Trade Association Inc "Milking Machine Testing Standards Manual".

(2) Any serious issues identified during testing must be rectified as soon as practicable.

3.13 Changes to equipment

(1) A farm dairy operator must not change or extend a milking machine or install a new milking machine, unless:

a) the farm dairy operator obtains advice from the relevant milking machine company before making the change; and
b) the change is carried out in a manner that, in the opinion of the assessor, ensures that the fitness for intended purpose is not compromised during and after the change.

(2) Within one month after completing the change, the assessor must review it, to check whether it is acceptable, and report the result of the review to the verifier.

Part 4: Operation, cleaning and maintenance

4.1 Operation of farm dairy

(1) A farm dairy must only be used for the purposes of milking, breeding, veterinary treatment and animal husbandry, and if it includes a packing area or retail area, for processing and supplying of RCS milk.

4.2 Use of milking equipment

(1) Milking equipment must only be used in connection with harvesting, storing, packing, dispensing or transferring of milk.

4.3 Maintenance

(1) All dairy premises and milking equipment must be maintained in a good state of repair and sound working condition.

(2) Premises and equipment must be regularly checked and any problems found must be remedied without delay.

4.4 Cleaning system

(1) Every farm dairy operator must have and comply with a documented cleaning programme that sets out:

a) how the dairy premises and surrounding areas are to be cleaned and kept tidy; and
b) how the milking equipment is to be cleaned.

(2) The cleaning programme must identify any areas or equipment that require manual cleaning.

(3) The current cleaning programme for milking equipment must be dated and at all times be available at the dairy premises.

4.5 Water

(1) Water must meet the quality standards specified in the Ministry of Health Drinking-water Standards for New Zealand 2005 (Revised 2008), and be tested in accordance with Schedule B – Water Testing, if it is used:

a) to clean, sanitise or rinse milking equipment and RCS containers; or
b) to clean teats; or
c) for handwashing.

(2) Effluent, wastewater and water recovered from the farm dairy effluent system must not be used for any purpose in or near the dairy premises.

4.6 Use and storage of maintenance compounds

(1) Maintenance compounds must be used and stored:

a) in accordance with the instructions on the label and any conditions of their approval; and
b) in a way that minimizes carry over or contact with milk; and

c) in a manner that minimizes the risk of contamination of milking animals, feed, milk-contact surfaces or the water supply.

(2) Separate measuring equipment must be used for acid and alkaline detergents.

(3) If the label of the container of any maintenance compound is illegible, the container and its contents must be removed from the dairy premises and disposed of.

(4) A maintenance compound that has passed its expiry date must not be used or remain at dairy premises.

(5) The containers of maintenance compounds may be reused only if:

a) the container is reused to hold more of the original compound; and
b) the label on the container remains legible; and
c) the expiry date of the new batch is written on the container.

4.7 Other chemicals not to be used at dairy premises

(1) In this clause, "non-approved chemical" means any agricultural compound (such as a herbicide or pesticide) or other chemical (such as a fragrance) that is not:

a) a maintenance compound approved as required by Regulation 43; or
b) an animal treatment; or
c) feed or other oral nutritional compounds.

(2) Non-approved chemicals must not be used:

a) at dairy premises; or
b) with any milking equipment or other equipment used at dairy premises; or
c) with any equipment that comes into contact with any water supply for the dairy premises.

(3) Non-approved chemicals must not be mixed:

a) within 20 m of dairy premises; or
b) within 45 m of any water supply (or any lesser distance as agreed by an assessor).

(4) Non-approved chemicals used at a farm dairy address may only be mixed if they are on a designated chemical mixing area that is at least 45 m from the dairy premises and any farm dairy water supply source (or within 20 m if sufficiently protected, as determined by an assessor).

(5) Non-approved chemicals must not be stored at dairy premises and, if stored at a farm dairy address, must:

a) be stored in a separate building that is at least 20 m from the dairy premises; and
b) must not be stored with approved maintenance compounds, animal treatments, feed or other oral nutritional compounds.

(6) Non-approved chemicals must not be prepared using any equipment that is used in the dairy premises or used in connection with any water supply used for the dairy premises.

(7) The equipment and utensils used in the designated chemical mixing area for mixing non-approved chemicals must be clearly distinguishable from all milking and other equipment used for farm dairy or packing purposes, for instance by being colour-coded.

(8) The containers of non-approved chemicals must be clearly labelled at all times and must not be re-used for any other purpose.

4.8 Substances prohibited anywhere in or around dairy premises

(1) The following must not be used in or around dairy premises, animals in an RCS milking herd, or any grazing (whether at the farm dairy address or elsewhere), feed or water used by milking animals:

a) aldrin;
b) chlordane;
c) chlordecone;
d) DDT, DDE, and DDD (also known as TDE);
e) dieldrin;
f) endosulfan and its isomers;
g) endrin;
h) heptachlor;
i) hexabromobiphenyl (hexabromodiphenyl ether and heptabromodiphenyl ether);
j) alpha-hexachlorocyclohexane (α-HCH) or beta-hexachlorocyclohexane (β-HCH);
k) hexachlorobenzene (HCB or BHC);
l) lindane;
m) mirex;
n) pentachlorobenzene;
o) perfluorooctane sulfonic acid (or its salts);
p) perfluorooctane sulfonyl fluoride;
q) polychlorinated biphenyls (PCB);
r) polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/PCDF);
s) tetrabromodiphenyl ether and pentabromodiphenyl ether;
t) texaphene.

4.9 Thermometers

(1) Non-glass thermometers must be available at dairy premises to check the temperature of hot water used for cleaning.

(2) Glass thermometers must not be used or stored at dairy premises.

4.10 Presentation of dairy premises and surrounding areas

(1) Dairy premises and the surrounding areas must at all times be well presented and maintained, and must be kept:

a) tidy (for instance, free from rank growth and litter); and
b) free from visual dirt and contamination by malodourous substances; and
c) in good repair; and
d) free from pests; and
e) free from ponded water.

4.11 Cleaning farm dairies and packing areas

(1) Farm dairies must be cleaned after every milking.

(2) Discrete packing areas must be cleaned after every use.

4.12 Concrete cleaning

(1) All concrete at dairy premises must be regularly cleaned and kept free from algal growth.

(2) If a water blaster or high pressure hose is used to clean concrete anywhere near mechanised milking equipment, the equipment must be fully closed and sealed before the hose is used, and at the completion of cleaning the outside of the equipment must be cleaned from top to bottom.

4.13 Effluent

(1) Effluent flows must be kept free from blockages and must run away from the dairy premises.

(2) Milking animals must be kept away from where effluent runs or is stored.

4.14 Pest management

(1) Every farm dairy operator must have and operate a documented pest management system that:

a) ensures that pests do not contaminate the milk; and
b) controls the use of pesticides around the dairy premises.

4.15 Rodent baits

(1) Rodent baits must not be laid in a milk storage area, packing area or retail area.

(2) Where rodent baits are laid elsewhere at a farm dairy address, they must be in a bait station or some other device that minimizes the risk of poison being spread.

(3) Bait stations must not be accessible to milking animals.

4.16 Dead animals and offal holes

(1) Dead animals must not be left within 45 m of any part of the dairy premises or any water supply.

(2) Offal holes must be adequately covered to reduce odour and the spread of pathogens.

(3) Offal holes must not intercept the groundwater table.

4.17 Cleaning process for mechanised milking equipment

(1) This clause applies to mechanised milking equipment other than CIP systems and airlines.

(2) Milking equipment must be cleaned after every milking by being:

a) immediately rinsed with cold water; then
b) cleaned with hot water and detergent, and sanitized; then
c) drained to remove excess cleaning solution; then
d) rinsed and drained (but this step need not immediately follow draining, and may instead take place immediately before the next milking).

(3) Milking equipment must be given a hot alkali wash:

a) at least weekly; and
b) whenever the results in Table 6.12A or Table 6.12B indicate that remedial action is required.

(4) When milking equipment is drained, excess water must not be flushed into any bulk milk tanks.

(5) All milklines and delivery lines must be drained between milkings.

(6) If the mechanised milking equipment is opened or dismantled for maintenance or inspection, it must be sanitized, drained, rinsed and drained before the next milking.

(7) The external surfaces of mechanised milking equipment must be kept visually clean.

4.18 Bulk milk tank cleaning

(1) After a bulk milk tank has been completely emptied, it must be cleaned and sanitised before any new milk is put in to it.

(2) Agitators must (if possible) run during the wash cycle of any CIP system used in a bulk milk tank.

(3) Any CIP system must be deactivated before the start of milking, so that CIP solutions do not contaminate milk.

(4) Bulk milk tanks that have been cleaned must be protected from contamination once they have been cleaned.

(5) Protective gear must be worn at all times by anyone manually cleaning a bulk milk tank.

4.19 Cleaning dispensing device

(1) A farm dairy operator who uses a dispensing device must have and comply with documented procedures for cleaning the dispensing device, and must keep a record of what procedures are applied, and when.

(2) The procedures must include, at a minimum:

a) the frequency of cleaning; and
b) the maintenance compounds used; and
c) the strength and temperature of cleaning solutions used.

(3) The area around a dispensing device must be kept clean at all times.

4.20 Filter socks

(1) Filter socks must be fitted at all times during milking and during the cleaning of the inline milk filtering system.

(2) Single use filter socks must not be re-used and must be disposed of after use.

(3) Disposable filter socks must also be replaced after milk from animals under treatment has gone through the milking machine.

4.21 Cooler cleaning and monitoring

(1) Milk coolers must be dismantled and cleaned periodically by a suitably qualified person.

(2) Farm dairy operators must monitor the performance of their milk cooling equipment to confirm whether it is achieving the outcomes required by Regulation 49(2)(b)-(d), at least:

a) about the time of expected peak milk production; and
b) in February of each year.

(3) Each performance check must cover at least 2 consecutive milkings, and records must be kept of the following:

a) the temperature of milk in each bulk milk tank immediately before the start of milking (if there is any);
b) the time that milking starts;
c) the time that milking is complete;
d) the temperature of the milk in each bulk milk tank at the completion of milking;
e) the time when the milk reaches the required temperature.

(4) Temperature measurements and recording may be taken using:

a) an electronic monitoring system; or
b) a chart recorder; or
c) a "tiny tag" or similar temperature logging device; or
d) manual measurements using a non-glass electronic thermometer; or
e) any other equivalent method.

(5) If the milk cooling performance is not achieving the outcomes required by Regulation 49(2)(b)-(d):

a) the milk must be withheld; and
b) remedial action must be taken; and
c) monitoring checks must be repeated until conformance is confirmed.

4.22 Non CIP-system cleaning equipment

(1) In addition to any CIP system, every farm dairy operator must ensure that there is sufficient cleaning equipment for manually cleaning all other milking equipment, including the exterior of mechanised milking equipment.

(2) Cleaning equipment such as buckets and brushes must be kept off the floor in a clean area, and be hung by the handle.

(3) Brushes must be stored with the bristles facing out.

(4) Wash tubs must be able to be fully drained and be installed at a height that enables the floor underneath to be cleaned.

4.23 Rubberware

(1) Rubberware must be replaced according to the manufacturer's recommendations and must be replaced earlier if there is evidence of significant wear.

(2) A list of all rubberware used in dairy premises must be kept at the dairy premises.

(3) A farm dairy operator must keep a record of all changes of rubberware.

4.24 RCS containers

(1) RCS containers may be:

a) new packages; or
b) reused packages.

(2) All surfaces that come into contact with milk in an RCS container must be made entirely of material that is suitable as a milk-contact surface.

(3) RCS containers must be designed and made to minimise the possibility of leakage.

(4) Before being filled with milk, every reused RCS container and lid must rinsed, cleaned and dried.

(5) The cleaning process must ensure that there is no trace remaining of milk, chemical residue or any other potentially contaminating substance left on the inner surface of the RCS container.

(6) Any old label or mark on a reused container must be removed or obliterated before the RCS container is offered for sale with new milk in it, unless:

a) the RCS container was previously used to sell RCS milk; and
b) when updated with a new use-by date and lot information, the label complies with Part 8 of this Notice.

4.25 Self-monitoring assessments

(1) A farm dairy operator must ensure that the self-monitoring assessment required by Regulation 72(1) is carried out at least once a month.

(2) The self-monitoring assessments must do all of the following:

a) check the following for conformance with the Regulations and this Notice:

i) all buildings and structures forming the dairy premises;
ii) the effluent management system and any associated structures;
iii) the areas surrounding the dairy premises;
iv) maintenance compounds stored at the dairy premises (for example, by checking the integrity of containers and whether expired);
v) any vehicles and associated chilled compartments used by transport operators transporting RCS containers; and

b) check the cleanliness of all milking equipment, and in particular:

i) the interior and exterior of all bulk milk tanks; and
ii) milklines; and
iii) clusters; and
iv) the receiver and air systems; and

c) ensure that all test results, records and returns that are required to be kept are complete and accessible.

4.26 Annual review

(1) A farm dairy operator must carry out an annual review of the operation and effectiveness of the following:

a) all procedures, systems and plans required by this Notice; and
b) the testing of milk and water.

Part 5: Animal care

5.1 Identification of animals in RCS milking herd

(1) A farm dairy operator must implement a system for uniquely identifying each animal in the RCS milking herd at the farm dairy.

5.2 Records about individual animals in RCS milking herd

(1) The farm dairy operator must keep records of which animal is in the RCS milking herd at any time.

(2) For the purposes of Regulation 85(4)(i), the records must show the following, for each animal in the RCS milking herd:

a) its animal identifier;
b) whether an animal status declaration form for the animal has been received;
c) when the animal first entered the RCS milking herd;
d) if the animal is segregated from the main RCS milking herd, when and why and, if it is returned, when;
e) if the animal is removed from the RCS milking herd for a reason other than segregation, when and why and, if it is returned, when;
f) when and what injuries, diseases or conditions are detected, and whether the animal is treated or not;
g) if the animal is seen by a veterinarian, the date and the veterinarian's name;
h) the name, dose and withholding period of any animal treatment administered to the animal;
i) the date, time and method of administration of each administration of an animal treatment to the animal.

5.3 Segregated animals

(1) A milking animal must be segregated from, and not milked with, the main RCS milking herd in the following circumstances:

a) the animal does not appear outwardly healthy, or has clinical signs of illness or disease;
b) the animal is, or is suspected of, suffering from an injury (such as to any part of the udder) or disease or condition capable of contaminating milk;
c) during the withholding period of any animal treatment administered to the animal;
d) while the animal is in its colostrum period;
e) if a veterinarian instructs that the animal be segregated or isolated.

(2) Without limiting clause 5.3(1)(b), an animal with any of the following symptoms must be segregated:

a) diarrhoea with depression and dehydration;
b) weight loss and emaciation of non-nutritional origin;
c) sudden and unexplained drop in production;
d) non-metabolic nervous diseases;
e) fever, including those associated with retained foetal membranes and parturition difficulty;
f) infection of the genital tract with discharge, resulting in udder contamination.

(3) Farm dairy operators must have and comply with a documented procedure, consistent with this Notice, for managing the segregation of animals from the main RCS milking herd.

(4) Segregated animals must be visibly distinguishable from any other animal in the RCS milking herd (for instance, by being marked with paint or a band).

(5) When an animal that has been segregated is returned to the main RCS milking herd, all marks of segregation must be removed.

(6) Segregated animals need not be physically separated from other milking animals, unless the reason for segregation means that the animal should be isolated from other milking animals.

(7) If health problems with a segregated animal persists, the farm dairy operator must obtain veterinary advice.

5.4 Control of Tb

(1) All bovine and cervine herds at the farm dairy address must:

a) have a Tb status of C5 or higher; and
b) only come into contact with cattle, buffalo, and deer from herds that have a Tb status of C5 or higher

(2) Any milking animal shown to be Tb positive:

a) is considered to be diagnosed immediately after the animal is confirmed to be a Tb reactor, or when directed to slaughter by a veterinarian or person authorised under the Tb Plan; and
b) must immediately be segregated, isolated and not milked in the farm dairy.

(3) If goats in the milking herd come into contact with cattle, buffalo, or deer at any time, then the cattle, buffalo, and deer herds must have a Tb status of C5 or higher.

(4) Milking animals must be segregated and isolated if they are first test positive to a Tb test but not yet confirmed to be a Tb reactor and have not been directed to slaughter by a veterinarian or person authorised under the Tb Plan.

(5) Milking animals shown to be first test positive under clause 5.4(4) may only return to the RCS milking herd if they are confirmed to be Tb negative.

5.5 Control of mastitis

(1) A farm dairy operator must have and comply with a mastitis management plan that documents the routine and periodic steps taken to monitor for mastitis in the RCS milking herd.

(2) Monitoring for mastitis must include the following:

a) observations of animal behaviour, particularly indications of udder discomfort or resistance to milking;
b) observation of the teats and udder for injury or damage, heat, or swelling;
c) inspection of the milk filter.

5.6 Other diseases

(1) Any milking animal showing clinical signs, or having a diagnosis confirmed by a veterinarian, of infectious diseases communicable to humans through milk must be treated as diseased and therefore be segregated.

(2) Infectious diseases communicable to humans include the following:

a) brucellosis;
b) campylobacteriosis;
c) leptospirosis;
d) listeriosis;
e) salmonellosis;
f) Tb;

g) yersiniosis.

(3) Goats with caprine arthritis encephalitis must be culled from the milking herd.

(4) Milking cows suffering from enzootic bovine leucosis must be culled from the milking herd and go directly to slaughter.

5.7 Animal treatments

(1) The only animal treatments that may be administered to milking animals in an RCS milking herd are those registered under the Agricultural Compounds and Veterinary Medicines Act 1997 for use on milking animals, or exempt under that Act from the requirement to be registered.

(2) If an animal treatment is administered (unless clause 5.7(3) applies), it must be administered:

a) in accordance with the instructions on the label and any conditions of approval; and
b) before the expiry date of the treatment; and
c) in a way that minimizes carry over or contact with milk.

(3) An off-label use of an animal treatment may be administered only if a veterinarian has given written approval for that use; and any approval is a record that must be retained by the farm dairy operator.

5.8 Prohibited treatments

(1) Without limiting clause 5.7, milking animals must not be exposed to the following compounds:

a) choloramphenical;
b) nitrofurans;
c) hormonal growth promotants;
d) 17β-oestradiol and its esters;
e) nitroimidazone class of compounds (such as metronidazone and ronidazole);
f) arsenilic acid;
g) chloroform;
h) chlorpromazine;
i) colchichine;
j) dapsone;
k) nandrolone;
l) phenylbutazone;
m) stanozolol;
n) beta sympathomimetic agents (cimetarol, salbutamol);
o) thyreostatic compounds (methyl thiouracil, phenyl thiouracil, propyl thiouracil).

(2) Milking animals must not be administered any compound that is not intended to provide a benefit to the milking animal.

5.9 Restricted veterinary medicines

(1) A farm dairy operator may not buy, hold or use a restricted veterinary medicine unless he or she holds a veterinary authorisation from a veterinarian who is identified in a notice of recognition issued under section 44N of the Agricultural Compounds and Veterinary Medicines Act 1997.

(2) All veterinary authorisations, whether in hard or electronic form, must be retained as a record by the farm dairy operator.

(3) A veterinary authorisation is not required for restricted veterinary medicines administered by a veterinarian (but the treatment records must be completed).

5.10 Storage of animal treatments

(1) Farm dairy operators must ensure that all animal treatments are stored and used in a manner that minimizes the risk of contaminating animal feed, milk, milk-contact surfaces or the water supply.

(2) Restricted veterinary medicines must be securely stored in a room, cupboard, or container that can only be accessed by or with permission from the farm dairy operator or the primary contact person referred to in Regulation 30.

(3) Animal treatments must be discarded once expired.

(4) The containers of animal treatments must maintain their original label.

(5) If the label of the container of any animal treatment is illegible, the container and its contents must be removed from the dairy premises and disposed of.

(6) The containers of animal treatments may be reused only if:

a) the container is reused to hold more of the original treatment; and
b) the label on the container remains legible; and
c) the expiry date of the new batch is written on the container.

(7) Used needles must be placed in sharps containers for disposal.

5.11 Withholding periods

(1) The withholding period of an animal treatment is:

a) if the period is specified on the label of the treatment, that period or any alternative approved by the Director General or a veterinarian; and
b) if the period is not specified, 6 hours or any alternative approved by the Director General or a veterinarian.

(2) If multiple treatments are prescribed for, or administered to, an animal to treat the same condition at the same time, the withholding period of the animal treatment is:

a) a period determined by a veterinarian; or
b) if no period is determined, 35 days.

5.12 Stock water

(1) Drinking water for milking animals must:

a) be of a quality that minimises water-borne disease transmission; and
b) be free of offensive odour; and
c) be free of chemicals of a kind and level that could result in contamination of milk.

(2) Milking animals' access to unsuitable water (such as waterways and dams intended for irrigation) must be restricted.

5.13 Application of agricultural compounds to land

(1) If pasture is sprayed with an agricultural compound:

a) the spraying must be done in accordance with the label instructions and after the paddock has been grazed; and
b) a record must be kept of what was used and when; and
c) milking animals must not graze the pasture until the manufacturer's recommended period has elapsed.

(2) After applying fertiliser to pasture, milking animals must not graze the pasture until sufficient rain or irrigation water has fallen to flush the fertiliser into the soil.

(3) A farm dairy operator must record any application of an agricultural compound to land used for grazing or producing feed for milking animals at the farm dairy address.

5.14 Application of effluent and other waste applied to land

(1) A farm dairy operator must not apply effluent to the surface of land producing feed for RCS milking animals unless:

a) the farm dairy operator has and complies with a documented plan; and
b) the plan ensures that there is sufficient time between the application and either grazing by RCS milking animals or harvesting of feed for RCS milking animals to protect the animals from hazards present in the effluent.

(2) The following must not be applied to land used for grazing milking animals, or for producing feed intended for milking animals, or anywhere on or near farm dairy premises:

a) human waste; or
b) meat processing waste; or
c) industrial waste (such as waste from tanneries, mining and petrochemical exploration).

(3) If milking animals are exposed to land on which effluent has been applied (whether in breach of this clause or for any other reason (such as flooding)), the animals must be segregated and their milk withheld until an assessor says they can return to the main RCS milking herd.

5.15 Contaminated land

(1) Milking animals must not be able to access land that is contaminated.

(2) Land that is likely to be contaminated includes land that has been used as or for a chemical or industrial waste dump, timber treatment or gun club activity.

5.16 Housing

(1) If milking animals are housed, the farm operator must ensure that:

a) the housing pens, bedding and associated things are designed, maintained and operated to minimise pests, contamination of feed, soiling or trampling of udders and teats and exposure of milking animals to pathogens; and
b) the facilities are properly and frequently cleaned; and
c) there is an adequate airflow; and
d) regular observations are made for disease, injury, discomfort or distress; and
e) animals are removed immediately when identified as suffering, or possibly suffering, from disease, injury, discomfort or distress, and may only be returned once the condition has improved; and
f) animals are removed when and in accordance with any instruction from a veterinarian or person appointed under the Act or the Biosecurity Act 1993.

(2) Holding yards, feeding yards, loafing yards, wintering yards or pads, and access ways must be operated and maintained to avoid soiling of udders and teats.

5.17 Feed for milking animals

(1) Animals in an RCS milking herd must never be fed:

a) feed containing ruminant protein (such as blood or bone from ruminant animals); or
b) feed at a level that is likely to cause or result in milk tainting, or contamination of the milk with any chemical residue, contaminant or toxin; or
c) feed waste, silage sludge, poor quality silage or mouldy or spoiled feed.

(2) Copra or nut products must not form more than 5 % of the daily feed of milking animals in an RCS milking herd.

(3) If fodder crops, plant waste or plants other than pasture are used to feed milking animals, the farm dairy operator must have and comply with a written procedure to minimise the risk of milk tainting.

(4) Purchased feed may be used only if it is delivered with documentation identifying the following:

a) what the feed is;
b) where the feed came from, with sufficient detail to trace it back to its supplier;
c) confirmation that it is suitable for feeding to dairy animals.

(5) Feed documentation, whether in a hard copy of electronic form, must be retained as a record by the farm dairy operator.

5.18 Feed storage

(1) Feed other than hay, straw or silage must not be stored directly on the ground, but must be in a silo or over concrete or a sheet that is impervious to moisture (such as polyethylene).

(2) All feed must be stored:

a) at least 20 m from the farm dairy (except as provided in clause 5.18(6)); and
b) at least 3 m from the edge of the farm roadway; and
c) not in a place where liquid can run into the feed pile; and
d) not in a place where liquid can run off from the feed pile to contaminate water.

(3) Feed must be stored so that it remains cool and dry and free from pests.

(4) Feed that is no longer fit for purpose must not be fed to milking animals.

(5) Feed storage areas must not be made of materials that are likely to contaminate or taint the feed.

(6) Feed containing grain, palm kernel extract or similar dried products may be stored within 20 m of, but at least 10 m from, any bulk milk tank if the feed is stored in:

a) a feed silo situated on concrete; or
b) a covered concrete bunker.

Part 6: Milking and milk quality

6.1 Milking procedures

(1) The milking of an RCS milking herd must follow the following sequence:

a) the main RCS milking herd is milked; then
b) the delivery line to the bulk milk tank used for RCS milk is disconnected; then
c) any segregated animals are milked, with the milk going into a different bulk milk tank or to waste; then
d) all milking equipment is rinsed, cleaned and sanitised.

(2) Milk from a segregated animal must be withheld and not at any stage be mixed with milk from animals in the main RCS milking herd.

(3) The farm dairy operator must have and comply with a documented procedure that sets out how clauses 6.1(1) and (2) will be complied with.

6.2 Special rules for hand-milking

(1) Despite the requirements of Part 2 relating to milking areas, hand-milked animals need not be milked in a milking area that complies with those requirements; but if they are not:

a) during milking there must be shelter from the environment for the animal, the milk harvester, and the milk; and
b) the ground under the animal and surrounding area must be firm and free from effluent; and
c) buckets or other containers into which milk is harvested must be covered when not being milked into.

(2) The harvester must wash his or her hands, or put on fresh gloves, before milking the first animal and before milking each subsequent animal.

6.3 Personnel involved in milk production and processing

(1) In order for a farm dairy operator to comply with Regulation 41, a milk harvester who has symptoms that indicate that he or she may be an infectious person (as defined in Regulation 41), must report this to the farm dairy operator or other person in charge.

(2) A record must be kept of any limitations imposed on milk harvesters as a consequence of the symptoms.

(3) Milk harvesters must keep hands, forearms, and gloves (if worn) clean during milking.

(4) If any person is present during milking who is not routinely present, the person's presence must be recorded and:

a) the person's activities must be supervised by a person who meets the competency requirements of clause 6.4 for the activities concerned; or
b) the farm dairy operator must have assessed and recorded the person's competencies.

6.4 Personnel competencies

(1) Farm dairy operators must ensure that any person for whom they are responsible who undertakes activities to do with the production or processing of RCS milk:

a) has:

i) completed the Primary ITO course "Milk Quality Stage 1"; or
ii) at least 3 years' experience of milking the relevant species; or
iii) a qualification that, in the opinion of the verifier, is equivalent to the "Milk Quality Stage 1", with adequate practical experience; and

b) understands the operation of the milking machine at their farm dairy; and
c) understands food safety issues related to RCS milk; and
d) is familiar with mastitis identification and management; and
e) is familiar with the applicable requirements of the Regulations and this Notice.

6.5 Cleaning and checking before milking

(1) Before harvesting milk from any animal in the main RCS milking herd, the animal must be checked to see that:

a) it is outwardly healthy and shows no signs of injury, illness or disease; and
b) its teats are clean and dry; and
c) its milk is not visibly abnormal.

(2) Teats must be cleaned and dried by:

a) for bovine animals, washing and drying teats with a single service towel; or
b) for caprine and ovine animals, wiping the teats.

(3) The teats of any animal currently being fed fermented feeds (such as silage) must be sanitised between cleaning and drying.

(4) Volume washing must not be used to clean teats.

(5) Milk harvesters must strip the foremilk from each teat immediately before harvesting milk and check for clots or flakes, watery appearance or unusual colour, consistency or ropiness.

(6) Where somatic cell counts require remedial action but the foremilk of the RCS milking herd appears normal, milk harvesters must take additional steps to identify and remedy cases of subclinical mastitis, such as through use of the California mastitis test or conductivity/resistivity meters.

6.6 After milking

(1) Teats must be sanitised immediately after milking.

6.7 Milk filtering and cooling

(1) All milk must be filtered before entering the first bulk milk tank.

(2) Milk must be cooled as soon as possible after milking (and no later than required by Regulation 49(2)).

6.8 Withheld milk

(1) The following must be withheld from sale or supply as RCS milk:

a) milk harvested from a segregated animal;
b) milk harvested at premises, or using equipment, or in a manner, that does not comply with the Regulations or this Notice;
c) milk that the farm dairy operator knows or suspects would be non-conforming milk if it was offered for supply;

d) milk harvested from an animal in a RCS milking herd in which any animal in that herd has been shown to be Tb positive or has been directed to slaughter by a veterinarian or person authorised under the Tb Plan;
e) milk harvested from an animal that has been shown to be first test positive to a Tb test and has not been confirmed Tb negative;
f) milk from a farm dairy for which the assessments required by Part 6 of the Regulations or Part 7 of this Notice have not been carried out at the required frequency and with acceptable outcomes;
g) milk from animals that have fed on pasture that have been contaminated (for instance, by flooding or breach of clause 5.14), unless the responsible verifier determines that milk from those animals need no longer be withheld;
h) milk containing, or that has come into direct contact with, any of the above.

6.9 Sell-by time

(1) The sell-by time for a lot of milk is the time that is 30 hours after the commencement of milking for the oldest milk in that lot. (For example, if milking commenced at 7 am on Monday 4 June, the sell-by time is 1 pm on Tuesday 5 June, even if milk from a subsequent milking is added to that lot).

(2) The farm dairy operator that produces milk must have and comply with a documented procedure for:

a) determining and recording the sell-by time of each lot of RCS milk produced; and
b) ensuring that every depot operator who stores, and every transport operator who transports, a lot of milk knows its sell-by time.

6.10 Non-conforming milk

(1) Milk that is or was supplied, or is available for supply, and is any of the following is deemed to be non-conforming milk:

a) milk that is no longer in its raw state (as defined in the Regulations);
b) milk that should have been withheld under clause 6.8;
c) milk that has been packaged or put into a dispensing device more than 30 hours after the milking of that lot of milk commenced;
d) milk that receives a classification of critical non-conformance or major non-conformance following conformance testing;
e) milk that is tainted, impure or fails an organoleptic test;
f) milk that contains any foreign matter or has in any way been adulterated or tampered with;
g) milk that is sour (i.e. for bovine milk, it has an acidity level of 0.18 % or higher, and for all other species, it has an acidity level of 0.20 % or higher).

(2) Non-conforming milk must be stored in sealed containers that are clearly marked as holding non-conforming milk, with signage that is clearly visible above the outlet, and secured in such a way that it cannot be accidentally sold as RCS raw milk.

(3) Containers of non-conforming milk must be sited on a concrete pad that is capable of being cleaned, and drainage from the pad must be connected to the effluent system.

6.11 Frequency of conformance testing

(1) Milk must be tested for the parameters listed in column 1 of Table 6.11 at the frequency specified in column 2, unless the verifier permits testing at the reduced frequency specified in column 3.

(2) A verifier may permit the frequency of testing to be reduced to the frequency specified in column 3 if:

a) no more than 2 demerit points have been incurred in the past 12 months; and
b) no demerit points have been incurred in the past 3 months; and

c) all RMFD assessments and verification audits in the past 12 months have had an acceptable outcome; and
d) there are no outstanding major non-conformances from any RMFD assessment or verification audit.

(3) A farm dairy operator must revert to the frequencies listed in column 2 If any of the criteria in clause 6.11(2) are no longer met.

Table 6.11: Conformance testing frequencies

Parameter	Standard frequency	Reduced frequency
Salmonella spp.	Once every 10 days	Once per calendar month
Listeria monocytogenes	Once every 10 days	Once per calendar month
Campylobacter spp.	Once every 10 days	Once per calendar month
Coagulase Positive Staphylococci	Once every 10 days	Once per calendar month
Escherichia coli	Once every 10 days	Once per calendar month
Total coliforms	Once every 15 days	Once every 15 days
Aerobic Plate Count	Once every 10 days	Once every 10 days
Somatic Cell Count	Once every 10 days	Once every 10 days
Inhibitory Substances	Once every 10 days	Once every 10 days
Aflatoxin M_1	Once every 15 days while feeding copra and nut waste	Once every 15 days while feeding copra and nut waste
IgG_1	On request	On request
Bacillus cereus	On request	On request

6.12 Microbiological and chemical test limits

(1) The microbiological limits applying to milk are set out in Table 6.12A, and the chemical limits are set out in Table 6.12B.

Table 6.12A: Microbiological limits

Microbiological parameter	Limits	Demerit points	Classification
Salmonella spp.	absent in 5 x 25 ml	0	Acceptable result
	Presence detected when tested at 5 x 25 ml	4	Critical non-conformance
Listeria monocytogenes	absent in 5 x 25 ml	0	Acceptable result
	Presence detected when tested at 5 x 25 ml	4	Critical non-conformance
Campylobacter spp.	absent in 5 x 25 ml	0	Acceptable result
	Presence detected when tested at 5 x 25 ml	4	Critical non-conformance
Coagulase Positive Staphylcocci	Not exceeding 100 cfu/ml	0	Acceptable result
	101 to 1,000 cfu/ml	1	Remedial action required
	Greater than 1,000 cfu/ml	2	Major non-conformance

Microbiological parameter	Limits	Demerit points	Classification
Bacillus cereus	Not exceeding 100 cfu/ml	0	Acceptable result
	101 to 1,000 cfu/ml	1	Remedial action required
	Greater than 1,000 cfu/ml	2	Major non-conformance
Escherichia coli	Not exceeding 3 cfu/ml	0	Acceptable result
	4 to 9 cfu/ml	1	Remedial action required
	Greater than 9 cfu/ml	2	Major non-conformance
Total coliforms	Not exceeding 100 cfu/ml	0	Acceptable result
	101 to 500 cfu/ml	1	Remedial action required
	Greater than 500 cfu/ml	2	Major non-conformance
Aerobic Plate Count 30 °C/72 hours	Not exceeding 20,000 cfu/ml	0	Acceptable result
	20,001 to 50,000 cfu/ml	1	Remedial action required
	Greater than 50,000 cfu/ml	2	Major non-conformance
Somatic Cell Count	Not exceeding 160,000 cells/ml bovine Not exceeding 400,000 cells/ml (other species)	0	Acceptable result
	161,000 to 320,000 cells/ml (bovine) 601,000 to 1,000,000 cells/ml (other species)	1	Remedial action required
	> 320,000 cells/ml (bovine) > 1,000,000 cells/ml (other species)	2	Major non-conformance
Aerobic Plate Count 2 month geometric or arithmetic average	Greater than 50,000 cfu/ml	2	Major non-conformance
Somatic Cell Count 2 month geometric or arithmetic average	Greater than 300,000 cells/ml (bovine) Greater than 1,000,000 cells/ml (other species)	2	Major non-conformance
Total Coliform 2 month geometric or arithmetic average	Greater than 500 cfu/ml	2	Major non-conformance

Table 6.12B: Chemical limits

Parameter	Limits	Demerit points	Classification
Inhibitory Substances - penicillinase sensitive - not penicillinase sensitive	 0.006 i.u./ml 0.003 i.u./ml as benzylpenicillin equivalent	4	Critical non-conformance
Aflatoxin M_1	0.5 ug/L	4	Critical non-conformance
IgG_1	1.35 g/L	1	Remedial action required
Chemical residues	As applied by the latest New Zealand (Maximum Residue Limits for Agricultural Compounds) Food Standards	4	Critical non-conformance
Chemical contaminants	As applied by the joint Australia New Zealand Food Standards Code	4	Critical non-conformance

6.13 Unacceptable outcome of conformance test results

(1) An unacceptable outcome of a test is one that results in either of the following classifications:

a) critical non-conformance;
b) major non-conformance.

(2) An acceptable outcome of a test is one that results in any other classification.

(3) If a conformance test result indicates a critical non-conformance, the farm dairy operator must, in accordance with Regulation 76, immediately cease the production, processing and supply of RCS milk (and not recommence until the verifier advises that he or she may) and must issue an advisory to customers who have received potentially affected milk that includes:

a) the lot identification of the affected RCS milk; and
b) the nature of the failure (such as that the milk failed to meet the salmonella limit); and
c) the following advice:

i) in the case of a microbiological failure, advice to heat the milk to boiling or discard it; and
ii) in any other case, advice to discard the milk.

(4) A verifier must not advise the recommencement of the production, processing or supply of RCS milk following a test result indicating a critical non-conformance until tests of at least 5 consecutive lots of milk, over at least 5 consecutive days, have resulted in acceptable outcomes.

(5) If a conformance test indicates a major non-conformance, the farm dairy operator must, in accordance with Regulation 76, immediately cease the production, processing and supply of RCS milk and must not recommence production, processing and supply until tests of at least 3 consecutive lots of milk, over at least 3 consecutive days, have resulted in acceptable outcomes.

6.14 Other action required on basis of conformance test results

(1) If a conformance test result indicates that remedial action is required, the farm dairy operator must:

a) immediately take steps to identify the cause of the elevated result and to remedy the situation; and
b) implement per-lot testing for the parameter concerned until at least 3 consecutive lots over at least 3 consecutive days result in acceptable outcomes not requiring remedial action.

(2) If a farm dairy operator incurs 10 or more demerit points over a 3-month period, the supply of RCS milk to consumers must be suspended until:

a) the total demerit points over the past 3 months is reduced to 5 or less, with a minimum of 3 samples tested each month; or
b) the verifier reviews all investigations into the cause of the accumulation of demerit points and the corrective actions implemented and is satisfied that the situation has been rectified.

6.15 Taking milk samples

(1) Samples of RCS milk for testing must be taken at the point where milk is available for supply to consumers, either as:

a) packaged milk (i.e. in an RCS container); or
b) from a dispensing device.

(2) The milk samples must be representative of the lot from which the sample is drawn.

(3) Any milk samples that are not in RCS containers must be collected in hygienically assembled containers or bags that are suitable for milk samples.

(4) Every sample must be clearly marked:

a) as a sample; and
b) show, at a minimum, the lot identification of the milk.

(5) Between the time when the sample is collected and when it is received by the recognised laboratory, samples must:

a) be held at or below 6 ºC but above freezing; and
b) be protected from contamination.

6.16 Laboratories conducting conformance testing

(1) Laboratories conducting conformance testing must use an acceptable test method for raw milk that meets the requirements applicable to the recognised laboratory.

6.17 Disposal of withheld milk and non-conforming milk

(1) Farm dairy operators must ensure that withheld milk and non-conforming milk is not, and cannot be made, available for human consumption in any form, or supplied for use in any product intended for human consumption.

(2) Withheld milk and non-conforming milk may be made available for use as animal feed only if:

a) the milk complies with the Agricultural Compounds and Veterinary Medicines Act 1997 and the Agricultural Compounds and Veterinary Medicines Regulations (Exemptions and Prohibited Substances) Regulations 2011; and
b) the milk remains in the control of the farm dairy operator up until it is delivered to the place where it will be used as animal feed.

(3) Withheld milk and non-conforming milk may be disposed of:

a) on land at the farm dairy address, or into the farm's effluent system; or
b) as otherwise authorised by the verifier in writing.

(4) The farm dairy operator must keep records of how each quantity of withheld or non-conforming milk is disposed of, and the date and method of disposal.

Part 7: Verification and assessment of farm dairies

7.1 Critical, major, and minor non-conformances

(1) A critical non-conformance is any of the following:

a) a failure to withdraw non-conforming milk from sale;
b) a situation that, in the judgment of the assessor or verifier, represents an actual or possible threat to public health;
c) multiple major non-conformances that, taken together, should in the judgment of the assessor or verifier be treated as a critical non-conformance.

(2) A major non-conformance is any of the following:

a) any departure from the requirements of the Regulations or Notice that could reasonably be expected to affect the quality of RCS milk;
b) a failure to keep accurate and complete records, or to provide accurate and complete records in a timely way to a person entitled to be provided with them;
c) multiple minor non-conformances that, taken together, should (in the judgment of the assessor or verifier) be treated as a major non-conformance.

(3) A minor non-conformance is any departure from the requirements of the Regulations or this Notice, other than a critical non-conformance or a major non-conformance that is identified through a RMFD assessment or verification audit.

7.2 Unacceptable outcomes

(1) For the purposes of Regulation 71 (about RMFD assessments) and Regulation 75 (about verification audits), an unacceptable outcome is the identification during the assessment or audit of a critical non-conformance.

(2) Any other outcome is an acceptable outcome.

7.3 Frequency of RMFD assessments

(1) A farm dairy operator must arrange for the RMFD assessments required by Regulation 71 to be carried out at the frequency appropriate for the RMFD assessment step that the operator is placed on, as set out in Table 7.3.

Table 7.3: Frequency of RMFD assessments

RMFD assessment step	Frequency of assessment
A1	6 weekly
A2	3 monthly
A3	6 monthly
A4	1 yearly

(2) At registration, a farm dairy operator is placed on Step A3 as the default step.

(3) An assessor may place a farm dairy operator on a higher step (i.e., less frequent assessments) if there have been acceptable outcomes from:

a) 2 consecutive scheduled RMFD assessments; and
b) any unscheduled assessments.

(4) If any assessment produces an unacceptable outcome, the farm dairy operator must be moved to a lower step (i.e., to more frequent assessments).

(5) Following each RMFD assessment visit, the assessor must tell the farm dairy operator what step the operator is on (which will determine the frequency of subsequent assessments).

7.4 Unscheduled RMFD assessments

(1) An assessor may conduct unscheduled RMFD assessments:

a) in order to follow up on the current status of any previous non-conformances, whether open or closed; or
b) at the request of the verifier; or
c) if the assessor has reason to believe that the operator is not meeting the requirements of the Regulations or of this Notice.

(2) Assessors may make unscheduled assessments unannounced, and must use their professional judgment to determine the scope of the RMFD assessment conducted.

7.5 Frequency of verification audits

(1) A farm dairy operator must arrange for the verification audits required by Regulation 75 to be carried out at the frequency appropriate for the verification step that the operator is placed on, as set out in Table 7.5.

Table 7.5: Frequency of verification audits

Verification step	Frequency of verification audits
V1	6 weekly
V2	4 monthly
V3	1 yearly
V4	2 yearly
V5	3 yearly

(2) At registration, a farm dairy operator is placed on Step V3 as the default step, unless an alternative verification step is approved by the Director General.

(3) A verifier may place a farm dairy operator on a higher step (i.e., less frequent audits) if there have been:

a) acceptable outcomes from:

i) 2 consecutive scheduled verification audits; and
ii) any unscheduled verification audits; and

b) no more than 7 demerit points from conformance testing in the previous 6 months.

(4) If any verification audit produces an unacceptable outcome, the farm dairy operator must be moved to a lower step (i.e., to more frequent assessments).

(5) Following each verification audit visit, the verifier must tell the farm dairy operator what step the operator is on (which will determine the frequency of subsequent assessments).

7.6 Unscheduled verification audits

(1) A verifier may conduct unscheduled verification audits as provided for by Regulation 82.

(2) Verifiers may make unscheduled verification audits unannounced, and must use their professional judgment to determine the scope of the audit conducted.

7.7 Periodic returns to verifier

(1) A farm dairy operator must provide the following returns to the verifier at intervals, not exceeding 3 monthly, agreed by the verifier:

a) the date of the last RMFD assessment;
b) a copy of the last veterinary assessment of milking animals;
c) a summary of any failures reported following a conformance test;
d) a summary of any reports received of consumer illness related, or possibly related, to RCS milk supplied by the farm dairy operator;
e) whether milk was supplied during the period of the report:

i) in RCS containers; or
ii) from a dispensing device;

f) if milk was supplied in RCS containers, which of the following delivery methods were used:

i) home delivery by a transport operator; or
ii) sale from a retail area at the farm dairy address;

g) the maximum number, during the period of the report, of milking animals in the main RCS milking herd, for each species milked.

7.8 Reporting non-conformances

(1) A farm dairy operator must report any critical non-conformances and major non-conformances to the verifier.

(2) If an initial report of a non-conformance is made by email or fax, it must be followed up by a phone call to a person (not an answering service) to confirm receipt of the report.

(3) If the initial report is made orally, it must be confirmed in writing within 72 hours after the initial notification.

(4) A written report of a non-conformance must include as much as is known at the time of the following:

a) a description of the non-conformance;
b) the extent of any actual or potential contamination (for instance, by giving the date since the last acceptable result);
c) if the non-conformance has resulted in non-conforming milk, its quantity and location, whether it is isolated, and steps taken to secure it against supply.

(5) The following information must be provided in a written follow-up report within 5 working days after the initial report:

a) an outline of all actions taken in connection with the non-conformance;
b) the causes of the non-conformance;
c) a statement of whether any suspect milk has been identified and isolated;
d) any corrective actions completed or underway;
e) the evidence that the situation has been resolved, if it has.

Part 8: Labelling and advertising

8.1 Basic rules about labelling

(1) If a farm dairy operator packages milk into RCS containers, each container must be labelled with a label that:

a) states that the container contains "raw (unpasteurised) milk"; and
b) shows the use-by-date as described in clause 8.2; and
c) includes the lot identification of the milk; and
d) includes the specified storage directions as set out in clause 8.3; and
e) includes the specified warning information set out in clause 8.4; and
f) includes the name and address of the supplier (if this does not already form part of the lot identification), as required by clause 8.5.

(2) If a farm dairy operator sells milk via a dispensing device, information must be provided, and labels must be available, so that once the labels are completed, they comply with clause 8.1(1).

8.2 Use-by date

(1) The use-by date to be shown on the label of an RCS container or on a notice on a dispensing device is the date that is no more than 4 days after the date on which milking for the oldest milk in the container or device commenced.

(2) For example:

a) if milking for the oldest milk in a lot of packaged milk commenced at 8 am on 4 June, the use-by date is 8 June;
b) if milking for the oldest milk in a dispensing device commenced at 5 pm on 4 June , the use-by date is also 8 June.

8.3 Specified storage directions

(1) The specified storage directions are:

"Store at or below 4 ºC. Do not consume after the use-by date."

8.4 Specified warning information

(1) The specified warning information is:

"Raw milk may contain harmful microorganisms that can cause serious illness. To reduce the risk of illness, raw milk should be heated to at least 70 ºC for one minute. This is critical for infants, young children, the elderly, pregnant women, and people with weakened immune systems".

8.5 Name and address of supplier

(1) The name and address of the supplier is:

a) the business name of the farm dairy operator who supplied the milk; and
b) the address of the farm dairy where it was produced.

8.6 Legibility requirements for prescribed matters on labels

(1) On all labels, the use-by date, specified storage directions, specified warning information, and name and address of the supplier must:

a) be legible; and
b) have a minimum font size of 3 mm; and
c) be in a prominent position; and
d) contrast with the background sufficiently to show up distinctly.

8.7 Notices displayed in retail areas

(1) A notice containing the specified warning information must be:

a) displayed in the retail area in such a way that the notice is clearly visible to customers intending to buy RCS milk; and
b) at least A4 size, with writing that is legible to customers.

8.8 RCS milk sold from dispensing device

(1) This clause applies where RCS milk is sold from a dispensing device.

(2) The farm dairy operator must provide printed labels for customers to attach to the containers they fill with milk (unless containers with printed labels are provided by the farm dairy operator).

(3) The labels must comply with clause 8.1(1), except that the space for the lot identification and use-by date may be blank, in which case the farm dairy operator must provide the means for customers to add the lot identification and use-by date to the label.

(4) Unless the labels provided show the lot identification and use-by date of the milk, the farm dairy operator must display a notice requesting customers to add the lot identification and use-by date of the oldest milk in the dispensing device to the label.

(5) The notice must:

a) be displayed on or close to the dispensing device in such a way that the notice is clearly visible to customers intending to use the device; and
b) be at least A4 size, with writing that is legible to customers.

8.9 Acknowledging receipt of specified warning information

(1) A farm dairy operator must ensure that a consumer cannot place an order for RCS milk (whether orally, in writing, using an electronic device, or in any other way) without first acknowledging that he or she has read or been given the specified warning information.

(2) If an order is placed using an online sales site, the specified warning information must be on the same page as the place where the acknowledgement is given, and must be large enough to be easily read.

8.10 Written advertisements

(1) All written material (except road signs) produced or published by or on behalf of a farm dairy operator for the purpose of advertising RCS milk for sale to consumers must include the specified warning statement.

(2) The specified warning statement included in any advertisement must:

a) be legible; and
b) be in a prominent position; and
c) contrast with the background sufficiently to show up distinctly.

(3) The requirements of this clause apply to all forms of written advertisements, whether the advertisement is broadcast, online, in hard copy or any other form.

8.11 Oral advertisements

(1) All oral advertisements for RCS milk that are made by or on behalf of a farm dairy operator must include the specified warning information.

(2) The specified warning information must be given at a volume and speed that is audible to listeners.

(3) The requirements of this clause apply to all forms of oral advertisement, whether the advertisement is broadcast, online or delivered in any other way.

Part 9: Depot Operators

9.1 Basic rules for depot operators

(1) A depot operator may only store RCS milk that is in the RCS container in which it arrived at the depot.

(2) A depot operator must not receive RCS milk from anyone other than a transport operator or the farm dairy operator who produced the milk.

(3) A depot operator must allow only transport operators to take RCS milk from the depot (unless the milk is being disposed of under clause 9.11), and must not allow a transport operator to take RCS milk for sale after the sell-by time of that milk.

9.2 Construction and operation of depots

(1) Parts 2 and 4 of this Notice apply (with all necessary modifications) to the premises of depots and to their operation, cleaning and maintenance.

9.3 General operating requirements for depots

(1) Every depot must be operated within its capability and capacity.

(2) RCS milk stored at the depot must be stored in a manner that ensures it will not be mistaken for any other food product.

(3) The depot must be designed and operated to minimise the possibility of delay or contamination of the milk during delivery to, and collection from, any chilled compartment.

(4) If any pesticides, fumigants, or other hazardous substances are used in the depot, they must not contaminate RCS milk stored there or damage RCS containers, and their use must be recorded and controlled.

9.4 Chilled compartments

(1) At a depot, all RCS containers must be held in a chilled compartment.

(2) Chilled compartments used by depot operators must:

a) be constructed of durable materials that have no toxic effect and minimise contamination and deterioration of stored milk; and
b) have interior surfaces that are easy to clean and sanitise and made of impervious materials with a smooth surface; and
c) be vermin proof; and
d) have tight-fitting doors and openings; and
e) be capable of maintaining all RCS containers held in it at or below 6 ºC but above freezing.

(3) Mechanical refrigeration used to control the temperature in the chilled compartment must have a calibrated thermostat and indicating thermometer, and the indicating thermometer must be visible from outside the chilled compartment.

(4) Chilled compartments must not be used to store anything that may contaminate the RCS milk (such as petrochemicals) or damage RCS containers or their labels.

(5) The temperature of milk held in chilled compartments must be monitored and recorded at least daily.

(6) Chilled compartments must be cleaned following a documented procedure that:

a) specifies the frequency of cleaning; and
b) identifies all maintenance compounds to be used during cleaning; and
c) records the required strengths of the working solutions; and
d) records the required temperature and volume of the working solutions.

9.5 Self-monitoring assessments

(1) A depot operator must carry out the self-monitoring assessment required by Regulation 72(2) at least once a month.

9.6 Unacceptable outcomes

(1) For the purposes of Regulation 75 (about verification audits), an unacceptable outcome is the identification during the verification audit of a critical non-conformance.

(2) Any other outcome is an acceptable outcome.

9.7 Frequency of depot verification audits

(1) A depot operator must arrange for the verification audits required by Regulation 75 to be carried out at the frequency appropriate for the verification step that the operator is placed on, as set out in Table 9.7.

Table 9.7: Frequency of depot verification audits

Depot verification step	Frequency of assessment
D1	6 weekly
D2	3 monthly
D3	6 monthly
D4	1 yearly

(2) At registration, a depot operator is placed on Step D3 as the default step.

(3) A verifier may place a depot operator on a higher step (i.e., less frequent audits) if there have been acceptable outcomes from:

a) 2 consecutive scheduled verification audits; and
b) any unscheduled verification audits.

(4) If any verification audit produces an unacceptable outcome, the depot operator must be moved to a lower step (i.e., to more frequent verification).

(5) Following each verification audit visit, the verifier must tell the depot operator what step the operator is on (which will determine the frequency of subsequent assessments).

9.8 Unscheduled depot verification audits

(1) A verifier may conduct unscheduled depot verification audits as provided for by Regulation 82.

(2) Verifiers may make unscheduled depot verification audits unannounced, and must use their professional judgment to determine the scope of the audit conducted.

9.9 Damaged RCS containers

(1) If an RCS container at a depot leaks or appears likely to leak:

a) it must be kept separate from other RCS containers and away from any other food products until it is emptied; and
b) any spilt milk must be immediately cleaned up using appropriate methods; and
c) the container must be emptied and discarded.

(2) If an RCS container is damaged so that the specified warning information, lot identification or use-by date on it is no longer legible, the depot operator:

a) must not allow the RCS container to be collected by a transport operator for delivery to a consumer; and
b) must treat the container in accordance with clause 9.12 as if it contained non-conforming milk.

9.10 Milk older than 30 hours

(1) Milk that has not been collected from a depot by its sell-by time must be treated in accordance with clause 9.12 as if it were non-conforming milk.

9.11 Suspect milk

(1) If a depot operator is advised that any milk held at the depot is or may be non-conforming milk, or if the depot operator suspects on reasonable grounds that the milk is or may be non-conforming milk, he or she must report the matter to the farm dairy operator who produced the milk.

9.12 Disposal of non-conforming milk

(1) A depot operator must mark any RCS container that holds non-conforming milk in some way that identifies it as containing non-conforming milk.

(2) The depot operator must dispose of all containers of non-conforming milk:

a) by returning them to the farm dairy that produced the milk; or
b) in accordance with any other instructions of the verifier.

9.13 Reporting non-conformances

(1) A depot operator must report any critical non-conformances or major non-conformances that relate to the depot or to milk that is or has been stored at the depot to the verifier.

(2) If an initial report of a non-conformance is made by email or fax, it must be followed up by a phone call to a person (not an answering service) to confirm receipt of the report.

(3) If the initial report is made orally, it must be confirmed in writing within 72 hours after the initial notification.

(4) A written report of a non-conformance must include as much as is known at the time of the following:

a) a description of the non-conformance;
b) the extent of any actual or potential contamination (for instance, by giving the date since the last acceptable result);
c) if the non-conformance has resulted in non-conforming milk, its quantity and location, whether it is isolated and steps taken to secure it against supply.

(5) The following information must be provided in a written follow-up report within 5 working days after the initial report:

a) an outline of all actions taken in connection with the non-conformance;
b) the causes of the non-conformance;
c) a statement of whether any suspect milk has been identified and isolated;
d) any corrective actions completed or underway;
e) the evidence that the situation has been resolved, if it has.

9.14 Competencies of personnel involved in depots

(1) Depot operators must ensure that any person for whom they are responsible who undertakes activities to do with storing RCS milk:

a) is aware of his or her obligations under, and the requirements of, the Regulations and this Notice; and
b) is able to read and record the temperature of chilled compartments.

Part 10: Transport Operators

10.1 Basic rules for transport operators

(1) A transport operator may only transport RCS milk in the RCS container in which it left the farm dairy address where it was produced.

(2) A transport operator must not collect RCS milk from anyone other than the farm dairy operator who produced it or a depot operator.

(3) A transport operator must not collect RCS milk unless, at the time of collection:

a) in the case of collection for delivery to a depot, the operator knows that the milk has been ordered; and
b) in the case of collection for delivery to final consumers, the operator knows which consumers the milk is going to.

(4) A transport operator must not deliver RCS milk (except for the purposes of clause 10.9):

a) to anyone other than a depot operator or the final consumer who ordered the milk; or
b) after the sell-by time of the milk.

(5) To avoid doubt, a farm dairy operator who transports milk outside his or her farm dairy address must comply with this part.

10.2 Handling

(1) As well as complying with the handling requirements in the Regulations, transport operators must take all reasonable steps to ensure that RCS containers, including their labels, are not damaged before delivery.

(2) During transportation, all RCS containers must be held in a chilled compartment.

10.3 Chilled compartments

(1) Chilled compartments used by transport operators must:

a) be constructed of durable materials that have no toxic effect and minimise contamination and deterioration of stored milk; and
b) have interior surfaces that are easy to clean and sanitise and made of impervious materials with a smooth surface; and
c) be vermin proof; and
d) have tight-fitting doors and openings; and
e) be capable of maintaining all RCS containers held in it at or below 6 ºC but above freezing.

(2) Mechanical refrigeration used to control the temperature in the chilled compartment must have a calibrated thermostat and indicating thermometer, and the indicating thermometer must be visible from the outside of the chilled container.

(3) The thermostats on chilled compartments must be checked regularly, and transport operators must keep a record of those checks.

(4) Chilled compartments must not be used to store anything that may contaminate RCS milk (such as petrochemicals) or damage RCS containers or their labels.

(5) Chilled compartments must be regularly cleaned using only suitable water and approved maintenance compounds.

10.4 Collection

(1) In addition to making the records required by Regulation 87, when a transport operator collects milk he or she must:

a) confirm that the temperature of the milk when collected does not exceed 6 ºC; and
b) record the sell-by time of the milk.

(2) The transport operator must collect the milk in the same vehicle in which it will be delivered.

10.5 Vehicles

(1) A transport operator must ensure that every vehicle used to transport RCS containers:

a) is of a design, material, and construction that ensures the safe and hygienic transportation of milk; and
b) is maintained in a satisfactory state of repair.

10.6 Damaged RCS containers

(1) If an RCS container held by a transport operator leaks or appears likely to leak:

a) it must be kept separate from other RCS containers and away from any other food products until it is emptied; and
b) any spilt milk must be immediately cleaned up using appropriate methods; and
c) the container must be emptied and discarded.

(2) If an RCS container is damaged so that the specified warning information, lot identification, or use-by date on it is no longer legible, the transport operator:

a) must not deliver the RCS container to a final consumer; and
b) must treat the container in accordance with clause 10.9 as if it contained non-conforming milk.

10.7 Milk older than 30 hours

(1) Milk that has not been delivered to a final consumer by its sell-by time must be treated in accordance with clause 10.9 as if it were non-conforming milk.

10.8 Suspect milk

(1) If a transport operator is advised that any milk held is or may be non-conforming milk, or if the transport operator suspects on reasonable grounds that the milk is or may be non-conforming milk, he or she must immediately report the matter to the person from whom the milk was collected.

10.9 Disposal of non-conforming milk

(1) A transport operator must mark any RCS container that holds non-conforming milk in some way that identifies it as containing non-conforming milk.

(2) The transport operator must dispose of containers of non-conforming milk:

a) by returning them to the place from which they were collected; or
b) in accordance with the instructions of the verifier of the farm dairy operator that produced the milk.

10.10 Competencies of personnel involved in transporting RCS milk

(1) Transport operators must ensure that any person for whom they are responsible who undertakes activities to do with collecting and delivering RCS milk:

a) is aware of his or her obligations under, and the requirements of, the Regulations and this Notice; and
b) is able to read and record the temperature of chilled compartments; and
c) is able to read and understand written collection and delivery instructions, and keep records of deliveries.

Schedule A – Milking Equipment Specifications

Components generally

(1) All components must be safe to handle, with burrs and unnecessary sharp edges removed.

(2) Threads, springs, mesh and other forms that are difficult to clean must not be used as components that have a milk-contact surface unless there is no practical alternative.

Openings and lids

(1) Openings on milking equipment (such as hinged covers on bulk milk tanks) must be designed to prevent the entry of extraneous material.

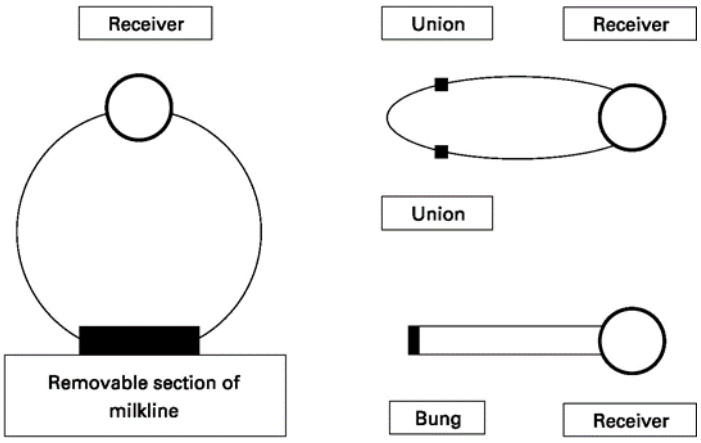
(2) Lids and doors on equipment must be:

a) close-fitting, with downward edges of at least 10 mm; and
b) self-draining; and
c) sufficiently rigid to prevent buckling; and
d) designed so as to prevent liquid or dry material on the outside touching any milk-contact surfaces.

Joints, unions and fittings

(1) All joints, unions and fitting must be assembled to prevent possible milk contamination.

Milk equipment – joints and fittings



Seals, glands and bearings

(1) Shaft seals, glands and bearings that come into contact with milk must be able to be removed for inspection and maintenance.

(2) Seals that come into contact with milk must be removable for inspection and cleaning.

(3) Bearings with a milk-contact surface must be of a non-lubricating type.

(4) Mechanical rotary seals must be used, rather than packed glands.

(5) Equipment that does not come into contact with milk and that has seals and bearings must be designed and fabricated so that lubricant cannot leak, drip, or be forced on to a milk-contact surface.

Gaskets

(1) When fitted, gaskets must have a true fit, so that they do not protrude into the milk or crease recesses or ledges at the joint.

(2) Gaskets must be removable, or be bonded to one surface so that the bond is continuous and mechanically sound.

Spray balls

(1) Spray devices must be easily accessible, readily removable, and easily dismantled for inspection and cleaning.

(2) Spray devices must be fitted so that they cannot fall into the milk.

Airlines

(1) Airlines must be capable of being dismantled for inspection and cleaning.

(2) There must be a union:

a) at the end of the receiver airline immediately adjacent to the receiver; and
b) on the main airline immediately adjacent to the interceptor.

(3) The receiver airline must be connected to either an interceptor or a self-draining sanitary trap.

(4) The pulsator airline must have a threaded union.

(5) Airlines and interceptors (where fitted) must be self-draining.

(6) There must be an airflow meter connection point at or near the interceptor.

(7) Airlines must slope to drain points.

Pipelines

(1) All pipelines must be able to be drained.

(2) Pipelines must slope to drain points, with a recommended slope of 1 in 100, and a minimum of 1 in 200.

(3) Pipe supports must prevent pipe sagging or liquid retention.

(4) The openings of sanitary pipelines to the exterior environment must be covered when not in use, using a stainless steel cap or swing bend.

(5) Any dead ends in pipework must not be greater than 1.5 times the pipe diameter.

Internal radii

(1) For internal angles of 135 º or less, a radius of not less than 3 mm is recommended.

(2) Where a radius is less than 3 mm, the milk-contact surface of the internal angle must be readily accessible for inspection and cleaning.

Air purge system

(1) The design and filling of the air purge system must not allow oil to contaminate the milk.

(2) All air purge systems must be set at no more than 300 kPa (45 psi).

(3) Air purge systems may be adjusted only by a competent milking machine technician.

(4) Air purge systems must meet the requirements of the 3-A Sanitary Standards and Accepted Practices 604-05, “Supplying Air Under Pressure In Contact with Milk, Milk Products and Product Contact

Surfaces", published jointly by the International Association of Milk, Feed and Environmental Sanitarians Inc, and the USFDA (21 November 2004).

Sanitary traps

(1) Any sanitary trap mounted above the receiver, with a direct connection to the receiver, must have an up-stand of at least 50 mm, to prevent liquid entering the receiver from the sanitary trap.

(2) The sanitary trap must have a shut-off device to prevent liquid entering the main airline, and that device must close before any liquid flows over the up-stand into the receiver.

New milking machines

(1) Any new milking machine with more than two clusters installed at a farm dairy must be a recirculation system with the following:

a) for jetter and bucket systems – a minimum of 10 L per cluster of hot and cold water, at a flow rate of not less than 3 L per minute through each jetter; and
b) for reverse flow systems – a minimum of 20 L per cluster of hot and cold water at a flow rate of not less than 15 L per minute.

Air pockets

(1) Special care must be taken to design and install equipment so that no stabilised air pockets occur during cleaning.

(2) Where dead ends are necessary, special provisions must be incorporated to wash them in place or instructions must be given to manually clean them.

Separating CIP system from milk

(1) All connections between the cleaning solution circuit and the milking system under vacuum must be constructed to prevent cleaning solutions and milk mixing during milking.

(2) To prevent mixing, either:

a) the connections between the cleaning solution circuit and the milking system or air system must be disconnected during milking; or
b) the connection between the cleaning solution circuit and the milking system must be vented.

Tubing

(1) Tube fittings must comply with the following:

a) AS 1528.2 Tubes (stainless steel) and tube fittings for the food industry, Part 2: Screwed couplings;
b) AS 1528.3 Tubes (stainless steel) and tube fittings for the food industry, Part 3: Butt weld tube fittings;
c) AS 1528.4 Tubes (stainless steel) and tube fittings for the food industry, Part 4: Clamp liners with gaskets.

Metalware

Plating

(1) For chromium plating on stainless steel milk-contact surfaces, the minimum thickness of plating must be 0.005 mm.

(2) For all other metals that are milk-contact surfaces, the minimum thickness of plating must be 0.05 m.

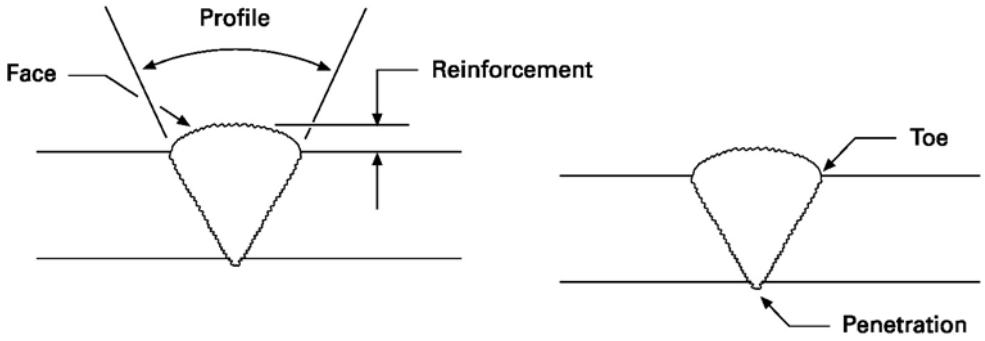
Stainless steel welds

(1) All welds of stainless steel must meet the standards specified in AS/NZS 2980: 2007 Qualification of welders for fusion welding of steels, and the welding must be carried out by someone certified to this standard.

(2) If purge welding is not used, internal grinding and polishing must be used.

(3) Any unpolished welding must either comply with this clause or be ground and polished to <1 µm Ra.

Good weld profile



(4) Any milk-contact surface of welded joints must be ground and polished to an Ra value of no more than 1 µm, and be free from pits, cracks and slag and gas inclusions.

(5) Internal grinding and polishing of welded milk-contact surfaces is not required.

(6) Take-offs from stainless steel pipes must be formed or pulled holes.

(7) The full length of both the face and root of the finished weld must comply with the following.

Shape of profile:

(1) The external profile must be uniform and free from overlap at the toes of the weld.

(2) It must show a maximum of 2 mm reinforcement that must blend smoothly with the parent metal.

(3) The start/stop positions in the weld must merge smoothly and show no pronounced hump or crater in the weld surface.

No surface defects

(1) The surface of the weld must be reasonably smooth and free from cracks, cavities and porosity.

No overheating

(1) There must be no evidence of localised overheating.

No stray arc strikes

(1) The surface must be free of any stray arc strikes.

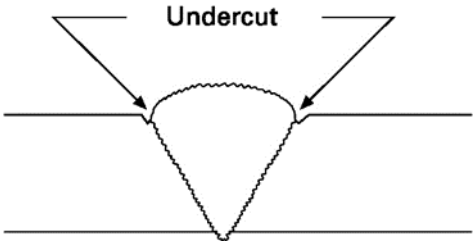
Undercut (weld face)

(1) Any undercut less than 0.2 mm deep may be disregarded.

(2) No undercut may be deeper than 0.5 mm.

(3) Localised undercuts deeper than 0.2 mm, but not more than 0.5 mm deep, must not have a total length of more than 25 mm in the entire test piece.

Undercut weld face



Penetration

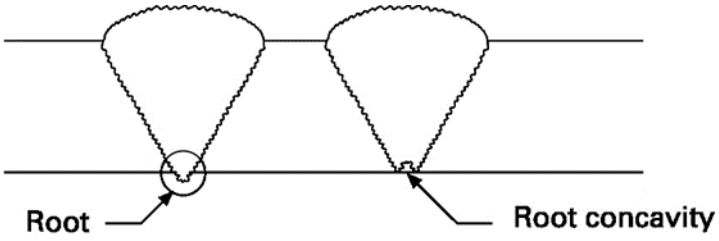
(1) A slight penetration should be present but must not protrude into the bore more than 1 mm.

(2) The penetration bead must be clean and free from oxidation of the weld metal and must merge smoothly with the parent pipe.

(3) If there is complete root fusion, root concavity at the bore is acceptable only if:

a) the depth of the root concavity is not greater than 0.5 mm; and
b) the thickness of the weld is not less than the pipe wall thickness; and
c) the root concavity merges smoothly into the adjacent surfaces.

Weld penetration



Alignment

(1) Misalignment of the bore must not exceed 0.5 mm.

(2) Axial misalignment must not exceed 5º.

Milk pumping systems

(1) The milk pumping system must be installed in such a way that the operation of the milk pump is controlled by the quantity of the milk in the receiver, so that when the receiver is empty, the pump does not run.

(2) Releaser milk pumps must be designed, installed, and maintained to minimise damage to milk composition.

(3) Unions in the delivery line must be pressure-type unions capable of withstanding 400 KPa.

(4) Nylon/steel cone seal type unions, or moulded rubber bend/sleeves must not be installed on the milk delivery line, unless there is no alternative.

Milk filtering systems

(1) Every milking machine must be fitted with a milk filtering system located before the cooler.

(2) The milk filtering system must filter out particulate matter and all other visible extraneous matter from milk before it enters the receiving tank.

(3) Inline milk filtering systems installed after 1 June 2013 must comply with the following:

a) filter elements must withstand pressure drop of at least 200 kPa (2 bar) without failing;
b) filter cages and seals must withstand pressure of 300 kPa (3 bar), without permanent damage or distortion (such as a failure that causes milk to bypass across the filter, allowing unfiltered milk to enter the receiving tank);
c) the filter body must withstand pressure of 400 kPa (4 bar) without permanent damage or distortion;
d) filters must be a minimum of 6.0 cm^2/cow or buffalo effective filtering area, or a minimum of 0.75 cm^2 per animal for other species;
e) filter elements must comply with BS 3424, Part 4: 1982, "Testing of Coated Fabrics, Method 6. Method for determination of breaking strength and elongation at break" or equivalent.

(4) A port of sanitary design must be located on the pump side of the every filter element from which filter performance can be measured.

(5) Multi-use filter elements must be easy to clean either in place or after removal.

(6) Single and multi-use filter elements must only be used in conjunction with the filter bodies for which the filter elements have been designed.

(7) Any filter system installed before 1 June 2013 that has been identified as being ineffective must be upgraded to meet the post 1 June 2013 requirements.

(8) All filters must be designed and installed in a manner that allows for easy removal and replacement of the filter.

(9) Filter bodies must be clearly and durably marked with:

a) the manufacturer's or supplier's name or trademark; and
b) a means of identifying the model.

(10) Filter element sizes must be correctly matched to the filter body size.

(11) If the effective filtering area is unknown, it can be estimated using the formula:

Effective filtering area = (2 x width x length) x 80 %.

Primary cooling systems

(1) Any plate arrangement in a cooling system must be such that cooling water flows on either side of a milk channel.

(2) Milk must flow in the opposite direction to the cooling water.

(3) The water flow must be capable of being turned off by a valve close to the cooler.

(4) A plate arrangement must allow drainage of the plates that form the milk passages in the plate stack without dismantling the cooler.

(5) All milk-contact surfaces must be easily accessible for cleaning, both, when assembled or removed.

(6) Removable parts must be readily de-mountable.

(7) A leak-protector groove, open to the atmosphere at both ends, must be provided to allow leakage past the gaskets to drain to waste.

(8) Coolants that are not water (e.g. glycol) must be food safe, and the construction must be such that:

a) the passage of milk is maintained at a higher pressure so that if a plate is compromised the leak will be from the milk path and not into the milk; or
b) an automatic leak detection system must be in place to ensure the milk flow stops or is diverted immediately a leak is detected.

(9) Gaskets and sealants must be installed to form a true fit so they do not protrude into the product zone or form recesses or ledges at the gasketed joints. Any protruding material must be removed to form a smooth surface.

(10) Sealants containing mould inhibitor must not be used.

(11) Self-curing sealants must not be used unless any excess can be removed from the milk-contact surface.

(12) Gaskets must be regularly assessed and replaced as required.

(13) Only non-toxic freezing point depressants (such as food-grade monopropylene glycol and glycerol) may be used in systems where the chilling liquid is immediately adjacent to milk.

Air purge systems

(1) Any air purge system in milking equipment must be operated in a manner that does not damage milk or cause a bypass of milk filter components (which would allow unfiltered milk to enter the bulk milk tank).

Bulk milk tanks

General design and installation

(1) Bulk milk tanks must be designed and installed to prevent pests and contamination getting into the tank.

(2) Each bulk milk tank at dairy premises must be clearly labelled to identify the kind of milk stored in it.

Vents

(1) The vent of any bulk milk tank must:

a) be located near the top of the tank; and
b) be designed to protect the interior surfaces from contamination; and
c) have an inside surface made of milk-contact surface material.

Drainage

(1) The inside of every bulk milk tank must be able to be drained.

(2) The bottom pitch of tanks designed to be cleaned by recirculation of the cleaning fluid should be at least 1:15 (4º).

Agitators

(1) All bulk milk tanks with greater than 400 L capacity must be provided with agitation sufficient to:

a) mix the milk so that it remains homogenous; and
b) prevent thermal layering and ensure that the variation in temperature in the tank does not exceed 1 ºC; and
c) Ensure that foaming or churning of the milk does not occur.

(2) Agitators must be sealed and adequately covered to prevent contamination.

Access points covered by lid or door

(1) The lid of any bulk milk tank must:

a) be sufficiently rigid to prevent buckling; and
b) be designed so that when the lid is open, any liquid on the outside of the tank cannot drain into the tank.

(2) Hinges on any lids and doors must be attached to the outside of the tank.

(3) The inside rim of access points must not protrude into the tank.

Temperature measurement and control

(1) Bulk milk tanks, other than one located inside a refrigerated compartment, must be fitted with a temperature measurement and display device that:

a) is capable of registering the temperature of milk inside the tank when the tank contains 10 % or more of its rated capacity; and
b) has a scale range from 0 ºC to 40 ºC, graduated in divisions of at least 0.5 ºC; and
c) has protection against thermal damage to 100 ºC; and
d) can be easily cleaned; and
e) is accurate to +/- 0.5 ºC over its calibration range.

(2) Temperature measurement devices that record the temperature of milk in the bulk milk tank must be calibrated, and the farm dairy operator must keep records of all re-calibrations.

(3) When the bulk milk tank is located in a refrigerated compartment there must be a method by which the temperature of liquids held in the compartment can be monitored.

(4) Thermostats and temperature controllers must have a splash-proof case that protects the device against steam and moisture.

(5) Thermostat controllers must not allow the temperature range at which any refrigeration unit operates to be more than 1 ºC above the set point, once the tank contains more than 10 % of its rated capacity.

Access to interior of bulk milk tanks

(1) Bulk milk tanks must allow for inspection and cleaning.

(2) The outside of bulk milk tanks must have handholds to assist access if required.

(3) If the top of a bulk milk tank is more than 1200 mm above the floor, a suitable appliance (such as a stepladder) must be available to give safe access for cleaning and inspection.

(4) If the top of a bulk milk tank is more than 1800 mm above the floor, it must be fitted with a fixed ladder to give access for cleaning and inspection.

(5) If the top of a bulk milk tank is more than 3 m above the floor, the fixed ladder must be fitted with a means to prevent falls.

Bulk milk tanks located outside

(1) If a bulk milk tank is located outside, it must be sited so its interior will not be contaminated through the vent or while any door or lid is open.

(2) The milk inlet port of a bulk milk tank that is located outside must be no more than 300 mm up the vertical wall of the tank.

(3) Bulk milk tanks installed outside must be:

a) protected from environmental contamination; and
b) installed on a concrete pad that slopes to a drainage point.

Non-conforming milk stored in bulk milk tank

(1) If non-conforming milk is stored in a bulk milk tank within 10 m of the milk storage area, packing area or retail area, a suitable means to disable the tank outlet must be provided such as a vat lock.

Transfer tank

(1) Transfer tanks must be:

a) made of a suitable milk-contact material (such as stainless steel); and
b) designed and fabricated so that they are easy to clean.

Dispensing device

(1) Automated dispensing devices must be designed to ensure that milk is held at the required temperature prior to being dispensed.

(2) The place where the consumer's container is put while it is being filled must be free-draining and readily able to be cleaned.

CIP systems

(1) A farm dairy operator must be satisfied that any CIP system operating at the farm dairy has been installed and is maintained in a manner consistent with the manufacturer's specifications.

(2) Before using a CIP system, a farm dairy operator must have written instructions from the manufacturer of the system that set out, in relation to all components of the system, at least the following:

a) any cleaning solutions that must or must not be used;
b) the temperature at which cleaning solutions must be used;
c) where inspection points are located;
d) the quantity of hot water required to run the system;
e) the required contact times and flow rates;
f) whether the cleaning system is turbulent flow, laminar flow or slug/burst flow;
g) any special cleaning requirements (such as equipment requiring manual cleaning);
h) washing injector settings.

Water heating

(1) Water heaters at a farm dairy must be capable of heating the amount of water required by the CIP system to the required temperature.

(2) The minimum quantity of hot water available must be 10 L per set of cups and 2% of the bulk milk tank volume with a minimum hot water volume of 120 L for tanks with greater than 400 L capacity.

(3) Water heaters and associated valves must comply with the relevant NZS 4600 series standard.

(4) Water heaters must be made of materials that do not release toxic substances into the water.

CIP in bulk milk tanks

(1) All bulk milk tanks with greater than 400 L capacity must be provided with CIP facilities.

(2) Bulk milk tanks with greater than 400 L capacity must have a filter on the CIP inlet pipe to minimise the risk of spray head blockage that does not restrict cleaning solution flow rates below recommended levels.

(3) New CIP systems for bulk milk tanks must be recirculation cleaning systems.

(4) Spray heads in CIP systems in bulk milk tanks must achieve complete coverage of all target surfaces.

(5) The maximum water temperature in CIP systems in bulk milk tanks must not exceed 82 ºC, to avoid damage to the cooling pad.

CIP in installations of multiple bulk milk tanks

(1) Where more than 1 bulk milk tank is installed, the CIP system must enable each tank to be rinsed separately after collection without adding water to other tanks that still contain milk.

(2) The CIP system for each tank must be able to be operated independently.

Schedule B – Water Testing

Water that this schedule applies to

(1) This schedule applies to all water used at a farm dairy address for any of the following:

a) cleaning, sanitising or rinsing milking equipment or RCS containers;
b) teat washing;
c) handwashing.

Testing for *E. coli*

(1) The test acceptance limit for *E. coli* is that no *E coli* is detected in 100 mls of water.

Testing for turbidity or clarity

(1) Turbidity or clarity testing must be carried out by:

a) an assessor; or
b) a person accepted by the verifier as suitably qualified; or
c) a laboratory that complies with the Laboratory testing clause in this Schedule.

(2) The test acceptance limit for turbidity is a maximum of 5 Nepholometric Turbidity Units (NTU) or any equivalent as measured by an alternative instrument.

(3) An alternative instrument, such as a Schmack meter, may be used at a farm dairy address to measure water clarity, instead of turbidity, if:

a) the instrument is suitable for the purpose and is calibrated against the reference turbidity method at least once a year; and
b) records of calibration are kept by the person responsible for the measurement.

Sampling and testing of water

(1) Water from each water supply at the dairy premises must be tested for:

a) the presence of *E. coli*; and
b) either turbidity or clarity.

(2) The water must be tested:

a) as part of the preregistration assessment of a farm dairy operator; and
b) every 6 months following registration; and
c) whenever an assessor or verifier requests it; and
d) within 1 month after any of the following:

i) a new water supply is used;
ii) a significant repair or alteration is made to the water supply system;
iii) a change to the environment occurs on or around the farm dairy address that may affect the water quality.

(3) Water samples must be:

a) collected at the point of use, before any manual treatment; and
b) collected and stored in hygienically assembled containers or bags; and
c) kept cool without freezing; and
d) received by the testing laboratory within 30 hours after the sample is collected.

Laboratory testing

(1) A laboratory that tests water samples for *E. coli* or turbidity must be accredited to test potable water by an accreditation body to ISO Standard 17025 "General Requirements for the Competence of Testing and Calibration Laboratories".

(2) The test method used must be listed under the laboratory's scope of accreditation for testing potable water.

Preregistration assessment

(1) As part of the preregistration assessment, a person proposing to be a registered farm dairy operator must complete, sign, and date the checklist in form DPF-202: Assessment of RCS Farm Dairy Water Status in order to identify hazards associated with all farm dairy water sources and the farm's water reticulation system.

RMFD assessment

(1) As part of a RMFD assessment, a farm dairy operator must:

a) identify any changes to the farm dairy water supply or reticulation; and
b) confirm that the latest version of the checklist DPF 202 is current and valid.