

**Ministry of Agriculture and Forestry
P O Box 2526, Wellington, New Zealand**

MAF Food: Dairy & Plants

Circular number 74
Dairy Industry Regulations 1990

D106.2 Farm Dairy Water

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106.1	23 December 1999	Promulgated by Circular number 43. Revoked by Circular number 74	Director, MAF Food: Dairy & Plants	
106.2	21 May 2002	Promulgated by Circular number 74	Director, MAF Food: Dairy & Plants	

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Issue of Circular and implementation

Regulation 59 of the *Dairy Industry Regulations 1990* allows the Director-General of the Ministry of Agriculture and Forestry to issue Circulars setting out criteria for matters which must be approved by, or done to the satisfaction of, the Director-General, pursuant to the *Dairy Industry Regulations 1990*.

This Circular, number 74, containing 'MAF Standard D106.2, "Farm Dairy Water,"' is issued in accordance with that regulation 59.

Circular number 43 containing MAF Standard D106.1, "Farm Dairy Water" issued on 23 December 1999 is revoked.

This Circular, number 74, takes effect on 21 May 2002.

For new Product Safety Programmes (PSPs) this Standard will apply from the date of issue by Circular.

All existing farm dairy water supplies that have had their checklists physically checked by a farm dairy assessor on-farm and are deemed to meet the water quality requirements of D106.1, are deemed to comply with the requirements of D106.2 for a period of three years from the date of their validation unless a significant change has been made. Thereafter, such supplies must be assessed against the requirements of this version of the Standard.

New farms and those farms that do not already have their checklist assessed on-farm, will be required to have the checklist assessed on-farm within three months of this Standard being issued, according to the requirements of this version of the Standard.



Tim Knox
Director, Dairy and Plant Products
MAF Food Assurance Authority

21 May 2002

(Signed under authority delegated by the Director-General of MAF, pursuant to regulation 59 of the Dairy Industry Regulations 1990.)

Foreword

The purpose of this Standard is to ensure that all owners of farm dairies supplying raw milk intended for manufacturing into dairy products operate in accordance with a MAF-approved Product Safety Programme which documents procedures to ensure that:

- All water which comes into contact with milk during milking or as a result of cleaning the milking plant, is of suitable quality to ensure that the raw milk is safe from microbiological and physical contamination; and
- Relevant records are kept for the above requirements, and these will be made available for inspection.

This revision of MAF Standard 106.1 has been partly based on a case study carried out by the New Zealand dairy industry as a consequence of the implementation of MAF Standard D106.1. Recommendations from this review have been incorporated into MAF Standard D106.2, “Farm Dairy Water”.

The MAF Standard on farm dairy water was originally developed to:

- outline regulatory requirements specified in New Zealand dairy legislation for water used in farm dairies;
- describe acceptable criteria (means for satisfying MAF that the requirements are being achieved); and
- outline relevant importing country requirements.

Specifically, this Standard sets out the outcomes that are specified in the *Dairy Industry Regulations 1990* relating to water used in farm dairies.

The acceptable criteria outlined in Appendix One of this Standard were developed in consultation with industry:

- to establish clear rules for judging whether or not a proposed PSP is satisfactory, and
- to assist parties to achieve the outcomes described in this Standard.

Operators of farm dairies may offer proposals to MAF for alternate criteria that deliver the outcomes described in this Standard. Proposals for alternative criteria will be approved by MAF, provided it can be demonstrated to MAF's satisfaction that the required outcomes will be achieved. A guide to the information required in these proposals and the procedures used by MAF to assess proposals can be obtained from MAF Food.

Appendix Two of this Standard outlines where importing country requirements may be found relating to official assurances provided by MAF concerning farm dairy water.

Preface

RESOURCES

The following standards must be read in conjunction with this Standard:

- MAF Standard D101, “Product Safety Programmes”
- MAF Standard D115, “Raw Milk Acceptance”.

The following documents are useful resources:

- “Drinking-Water Standards for New Zealand 2000” (DWSNZ 2000) or later version, Ministry of Health. This is available on www.moh.govt.nz or from Bennetts Bookshops

EFFECTIVE CHANGES

This Standard will introduce the following changes to the previously existing situation:

- amended standards for the quality of farm dairy water:
 - annual turbidity or clarity testing in association with farm dairy assessment; and
 - testing for *E. coli* instead of faecal coliforms;
- recognition of the Community water scheme grade ratings and the management of water with a “D” or better water quality;
- amended terminology in the checklist to provide clarification of water types;
- a specific requirement that the checklist will be checked on-farm by a farm dairy assessor;
- non-complying water is to be managed under a Water Management Plan.

The revised Standard will apply to all new PSPs.

All existing farm dairy water supplies that have had their checklists checked by a farm dairy assessor on-farm and are deemed to meet the water quality requirements of D106.1, are deemed to comply with the requirements of D106.2 for a period of three years from the date of their assessment unless a significant change has been made. Thereafter, such supplies must be assessed against the requirements of this version of the Standard.

New farms and those farms that do not already have their checklist assessed on-farm, will be required to have the checklist assessed on-farm within three months of this Standard being issued, according to the requirements of this version of the Standard.

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MAF Standard D106.2, “Farm Dairy Water”

1. SCOPE

This Standard contains the outcomes for farm dairy owners to ensure water that may come into contact with raw milk intended for the manufacture of dairy products, during milking or as a result of cleaning the milking plant, is of suitable quality.

All farm dairies where animals are milked to supply raw milk for the manufacture of dairy products must comply with this Standard.

2. DEFINITIONS

MAF Food: Dairy & Plant Products Group definitions of terms can be found in their “Glossary of Terms,” available on the Dairy & Plants website (www.maf.govt.nz/Dairy).

These definitions must be read in conjunction with the interpretations in the *Dairy Industry Act 1952* and the *Dairy Industry Regulations 1990*.

Deep groundwater – Water contained beneath the land surface that is abstracted from a bore that is cased to a minimum depth of ten metres via a secure wellhead. It is unlikely to be under the direct influence of surface water, and in the absence of evidence to the contrary, may be treated as being equivalent to secure groundwater. There are no insects or other macro-organisms such as algae, organic debris or large diameter pathogens.

Farm dairy assessor – A person recognised by MAF Food as being competent to carry out an assessment, to specified criteria, of conditions, procedures and systems at a farm dairy.

Milking plant – includes any milking machine, milk pumping equipment, milk cooling equipment, milk storage equipment, or separator, and any other plant and equipment with which milk comes into contact in a farm dairy.

Owner – Includes –

- (a) any agent, manager, lessee, or bailee of an owner; and
- (b) in the case of a farm, a farm dairy, or any part of a farm or farm dairy, a sharemilker of an owner; and
- (c) where an owner is a body corporate, every person who is a manager, secretary, director or other principal officer (however described) of the body.

Product Safety Programme (PSP) – A programme of conditions, processes, procedures, measures, and standards to be complied with, performed, undertaken, taken, or met in relation to:

- (a) any process or activity related to dairy produce, ingredients used in the manufacture of dairy products, or both; and
- (b) sampling, examination, inspection, and testing, or any of those actions, relating to any such process or activity; and
- (c) the recording and inspection (by persons with qualifications and experience approved by the Director-General for the purpose) of information relating to any such action; and (without limiting the generality of the foregoing) may include conditions, processes, procedures, measures, or standards relating to the production, manufacture, storage, or transport of dairy produce.

Raw milk or cream – Means milk or cream produced in accordance with an approved PSP that has not been subjected to any processing intended to alter the quality or compositional characteristics of the milk or cream.

Reticulation – The network of pipes, pumps and holding tanks that delivers a fluid from its source to the point of use.

Safe – In relation to any dairy product, ‘safe’ means satisfactory, fit for human consumption, and not having in it or on it any pathogenic organisms

- (a) that are present in an amount that makes the product harmful or injurious to the health of the people who may eat or drink it; or
- (b) that
 - (i) are not present in an amount that makes the product harmful or injurious to the health of the people who may eat or drink it; but
 - (ii) by virtue of their ability to reproduce, to produce toxins, or both, make the product potentially harmful or injurious to the health of the people who may eat or drink it.

In relation to any dairy produce that is not a dairy produce, ‘safe’ means satisfactory, and fit for the manufacture of dairy products.

Satisfactory – In relation to any dairy produce, means:

- (a) not having in it or on it any harmful or injurious substance in an amount that makes it harmful or injurious to the health of people who may eat or drink it or dairy products made from it;
- (b) not being, or containing anything that is, decomposed, dirty, rotten, spoiled or diseased;
- (c) not affected by disease;
- (d) not affected by any objectionable taint or smell;
- (e) not containing any foreign matter; and
- (f) not condemned under Section 9 of the *Dairy Industry Act 1952*.

Significant change – Any change made to key staff, environment, premises, equipment, facilities, process or product which may effect food safety.

Secure groundwater – Water contained beneath the land surface that is abstracted via a secure well-head. It is not under the direct influence of surface water nor does it demonstrate any significant and rapid shifts in characteristics such as turbidity, temperature, conductivity, pH or colour, which closely correlate to any weather changes, surface water conditions or land use practices. There are no insects or other macro-organisms such as algae, organic debris or large diameter pathogens.

Surface water – Water drawn from streams, rivers, lakes or reservoirs. It also includes spring waters that flow along the surface, or are open to the environment in some other way before being piped, bores/wells that are not cased to a minimum of ten metres, or do not have a secure wellhead, and water collected from roofs or any other open collection area.

3. OUTCOME

In farm dairies, all water that comes into contact with raw milk intended for the manufacture of dairy products, is of suitable quality to ensure that the raw milk is safe from microbiological and physical contamination, in compliance with sections 6 (g) and 14 of the *Dairy Industry Act 1952* and regulations 3, 4, 5 and 7 (i) of the *Dairy Industry Regulations 1990*. Relevant records are kept to demonstrate this, in compliance with 6 (1)(b) of the *Dairy Industry Regulations 1990*.

All farm dairy owners supplying raw milk intended for manufacturing into dairy products must operate in accordance with a MAF-approved PSP which documents procedures to ensure that:

- All water which may come into contact with milk during milking or as a result of cleaning the milking plant, is of suitable quality to ensure that the raw milk is safe from microbiological, chemical and physical contamination; and
- Records relevant to the above requirements are kept and made available for inspection.

4. VERIFICATION

Verification of compliance with the outcomes described in section 3 of this Standard is undertaken by MAF or a MAF-approved Third Party Agency (TPA) as part of a PSP assessment.

4.1 Compliance

The farm dairy owner is compliant with the outcomes described in section 3 of this Standard if:

- the means to deliver the outcomes in section 3 of this Standard are documented in a MAF approved PSP; and
- the party operates in accordance with that MAF approved PSP.

Parties operating in compliance with the outcomes described in section 3 of this Standard and a MAF approved PSP are entitled to:

- produce milk or cream intended for the manufacture of dairy products;
- transport or store dairy produce; and/or
- manufacture, transport, or store dairy products for sale and/or export.

4.2 Non-compliance

Non-compliance with the outcomes described in section 3 of this Standard (including selling or exporting dairy products not manufactured in accordance with an approved PSP) constitutes an offence under regulation 49 of the *Dairy Industry Regulations 1990*.

The farm dairy owner is non-compliant if one or more of the criteria in section 4.1 above for assessing compliance is not met.

If a farm dairy owner does not operate in accordance with the requirements in this Standard:

- a Notice may be issued by a MAF Inspector to remedy any defects;
- export certification and/or use of any MAF marks may be suspended;
- approval of the PSP may be withdrawn; and/or
- prosecution for offences may occur.

Appendix One: Acceptable Criteria

Following are criteria by which a farm dairy owner may be judged to have satisfactorily achieved the outcomes described in section 3 of this Standard. A Product Safety Programme (PSP) that includes procedures for ensuring that each of these criteria is satisfied and meets all other relevant PSP requirements will be approved by MAF.

Proposals for alternative criteria will be approved by MAF, provided it can be demonstrated to MAF's satisfaction that the required outcomes will be achieved. Proposals must include an analysis of hazards and other risk factors that demonstrate water is safe for its intended use and will not compromise the safety of raw milk intended for supply. A guide to the information required in these proposals and the procedures used by MAF to assess proposals can be obtained from MAF Food.

1. WATER QUALITY CRITERIA

Water that may come into contact with raw milk intended for the manufacture of dairy products, during milking or as a result of cleaning the milking plant, is suitable if it meets the following criteria:

- *E. coli* – absent in 100ml; and either
- Turbidity – maximum 5 NTU (Nephelometric Turbidity Unit); or
- Clarity.

Commentary:

The method used to measure clarity must be correlated to the results obtained using the APHA reference method for turbidity, as specified in the Drinking-Water Standards for New Zealand 2000 (DWSNZ 2000), or later version. The records of this correlation must be kept and made available for inspection.

Alternative instruments may be used to measure turbidity and/or clarity on the condition that the instruments are calibrated against the reference method at least once every six months, in accordance with the DWSNZ 2000, or later version.

The test technique must be checked and calibrated against a primary standard at least annually, in accordance with the DWSNZ 2000, or later version.

2. WATER SUPPLY ASSESSMENT

The “Checklist: Assessment of Farm Dairy Water Status” (see Annex A) is used to identify hazards associated with the farm dairy water source(s) and the farm’s water reticulation system. It also summarises the assessment of the farm’s water quality.

2.1 Initial assessment

Farm dairy owners complete the checklist to assess all of the water sources and reticulation used to supply water to the farm dairy. This may be done by the farm dairy owner or a person contracted to complete the checklist. If the latter occurs, the farm dairy owner remains accountable.

The completed checklist must be signed and dated by the farm dairy owner and made available to the farm dairy assessor.

The farm dairy assessor will confirm this checklist on-farm, and assess *E. coli* levels and either turbidity or clarity on-farm within three months of the farm dairy owner completing the checklist.

Where the water is sourced from a community water scheme, the accountable person may elect to use the results of that community water scheme's test results instead of testing the water of the farm dairy.

Commentary:

Where farms source water from a community water supply, the reticulation system must still be assessed to determine the risk of contamination to the water supply. The checklist must be completed accordingly and appropriate action must be taken depending on the outcomes of the assessment.

The flow diagram, Figure A1.1, summarises the actions required as part of the farm dairy water assessment process.

No further action is required, where:

- no hazards to the water supply or reticulation system are identified; and
- the water meets the standard for the turbidity or clarity; and
- a test for *E. coli* undertaken within the last three years shows an absence of *E. coli*.

2.2 Annual assessment

An annual farm dairy assessment is to be carried out to:

- Identify any changes to the farm dairy water supply or reticulation. If there is a change, the checklist must be reassessed as outlined in section 2.4.
- Assess the water supply for turbidity or clarity (except in cases where water is currently managed as non-compliant in accordance with an approved Water Management Plan). Where water fails the turbidity or clarity test, *E. coli* is also assessed.
- Assess compliance with any Water Management Plan currently in place.

2.3 Triennial (three yearly) assessment

Every three years, the farm dairy water supply, reticulation system, *E. coli* levels and either turbidity or clarity, are to be reassessed and the checklist completed, as stated in section 2.1.

2.4 Water reassessment

The water supply is reassessed as stated in section 2.1 within three months of any of the following occurring:

- a new source of water being used (i.e. the source changes or a new source is added); or
- any changes to the environment on or around the farm that may affect the water quality; or
- a change in ownership where the new owner contests any part of existing requirements placed on the water supply concerned.

3. WATER TESTING AND SAMPLING

Water is sampled and tested:

- as outlined in sections 1 and 2 above; and
- at the request of the farm dairy assessor; and
- when requested for PSP verification.

3.1 Water sampling

Water sampling for *E. coli* and either turbidity or clarity is undertaken:

- at the point of use, immediately prior to use in the farm dairy; and
- during the dairy supply season; and
- using the sampling requirements specified in the farm dairy PSP; and
- by the person specified in the farm dairy PSP.

3.2 Water testing

3.2.1 *E. coli*

For *E. coli* testing, water samples are tested by a laboratory accredited, by an accreditation body, to ISO Guide 25 “General Requirements for the Technical Competence of Testing Laboratories”/ISO Standard 17025 “General Requirements for the Competence of testing and Calibration Laboratories” to test potable water.

The test method used must be an approved reference method. An alternative MAF-approved dairy test method may be used to test *E. coli*.

3.2.2 Turbidity/ Clarity

Where turbidity is tested, the water samples are tested using the APHA reference method for turbidity specified in the DWSNZ 2000, or latest version. The instrument used to test turbidity must be calibrated in accordance with the requirements of the DWSNZ 2000, or latest version.

For clarity testing, water samples are calibrated to the turbidity test as determined in section 1.

The turbidity or clarity testing is carried out by the farm dairy assessor or the person specified in the farm dairy PSP who checks the water supply against the checklist, on-farm. Alternatively, water sampled as above may be tested by an accredited laboratory.

4. NON-COMPLYING WATER

Water is non-complying where it does not meet the criteria in sections 1 and 2. In such cases, a Water Management Plan shall be followed until appropriate corrective action has been taken, and confirmed by the farm dairy assessor as being effective.

4.1 Water Management Plan

Where the water supply fails to meet one or more of the criteria in section 1, and where any hazards identified may impact on the water quality, the farm dairy owner must comply with an approved Water Management Plan until appropriate corrective action has been taken and confirmed by the farm dairy assessor as being effective.

Where water fails to meet the water quality criteria specified in section 1, the Water Management Plan must, as a minimum, include the following requirements:

- (a) Targeted milk monitoring
 - per consignment screening test for Excess Water; and
 - minimum two milk coliform screening tests per month. Should any milk coliform result be 500 cfu/ml or greater the farm's milk supply is to be subject to per consignment screening until 3 consecutive results below 500 cfu/ml are obtained.
- (b) On-farm procedures
 - non-complying water must not be used for any activity where it may come into direct contact with milk; and
 - non-complying water must not be used to flush milk into the bulk milk tank; and
 - where non-complying water is used to rinse or wash the plant and/or bulk milk tank there must be a final sanitiser rinse and complete drainage of the plant and/or bulk milk tank before the next milking; and
 - the water must be of sufficient quality to ensure that no residue remains in the plant following the sanitiser rinse.

(c) Traceback

Where in any calendar month a farm supply incurs three or more milk coliform results of 500 cfu/ml or greater and/or three Excess Water screening test results at or above the freezing point of the milk, then a traceback must be undertaken. Should the water supply be shown to be the cause then corrective action must be taken. The farm dairy assessor will determine the timeframe for such action.

Where it is determined that the requirements of the Water Management Plan are not being followed corrective action will be required immediately.

In all cases, the Water Management Plan must be agreed to by the Farm Dairy Assessor, or the owner of the farm dairy PSP where that is another person.

Commentary:

At the time of writing this Standard, only the freezing point of cow's milk was available, at a temperature of -0.512°C . The freezing points of goat and sheep's milks are still to be determined, and are required as part of the Water Management Plan assessment criteria.

5 RECORDS

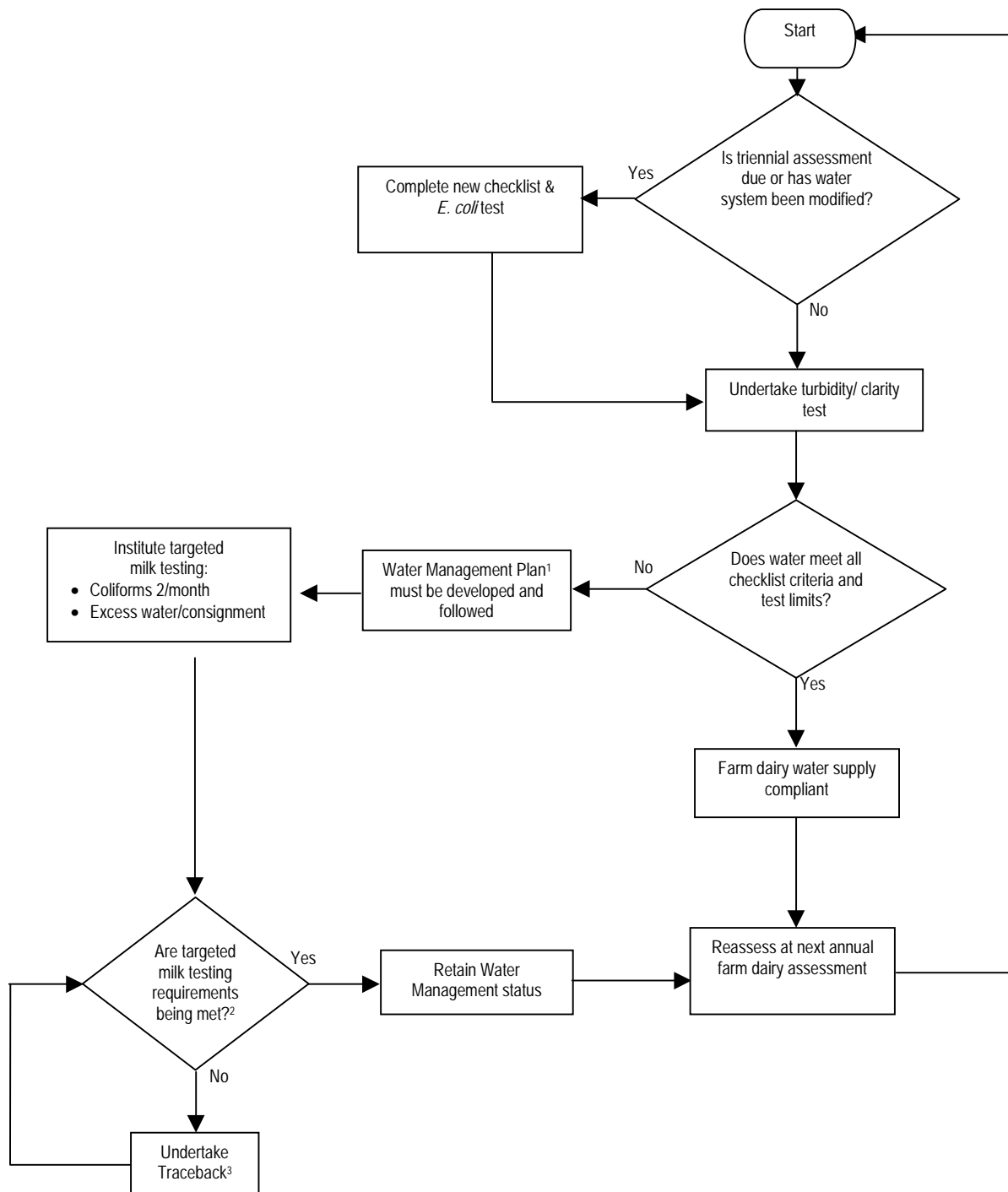
The farm dairy owner or the farm dairy PSP owner keeps the completed checklist(s) and any water test results, along with sampling date, time and place of sampling.

All records are legible and made available to:

- the farm dairy assessor who physically confirms the checklist on-farm; and
- MAF/the TPA, during the on-site assessment of the PSP, and at other times by request.

All records relating to the farm dairy water are kept for at least three years. Where the ownership of the farm dairy changes, the new owner obtains a copy of the records.

Figure A1.1 Flow diagram for farm dairy water quality



Notes:

¹ In cases of a failed result for *E. coli*, turbidity or clarity, the Water Management Plan must, as a minimum, include the following:

- Targeted milk monitoring via per consignment Excess Water screen and minimum 2 milk coliform tests per month; and on-farm procedures to ensure;
- Non-compliant water is not used for any activity where it may directly or indirectly come into contact with milk.
- Non-compliant water is not used to flush milk into the bulk milk tank.
- Where non-compliant water is used to rinse or wash the plant and/or bulk milk tank there is a final sanitiser rinse and draining of the plant and/or bulk milk tank before the next milking, and there is no visible residue remaining in the plant.

² In any calendar month less than 3 milk coliform results of 500/ml or greater and less than 3 Excess Water results.

³ Where it is determined that the requirements of the Water Management Plan are not being followed then immediate corrective action will be required.

ANNEX A: CHECKLIST FOR ASSESSMENT OF FARM DAIRY WATER STATUS

INSTRUCTIONS FOR USING THIS CHECKLIST

- This checklist must be completed by either the farm dairy owner or a person contracted specifically to complete it.
- The completed checklist must be signed, dated and held by the farm dairy owner and a copy made available to the owner of the farm dairy PSP where that is another person.
- Everyone must complete parts 1, 2 and all other relevant sections.
- The farm dairy assessor will physically check this checklist and assess your farm dairy water quality during the next farm dairy assessment.

PART 1: SUPPLIER DETAILS *(Complete in all cases)*

Name of owner: _____

Dairy company supplied: _____

Supply number: _____

GO TO PART 2

PART 2: FARM DAIRY WATER SOURCES *(Complete in all cases)*

- Indicate () all water sources used in farm dairy.
- If you use more than one water source, complete the relevant parts of the questionnaire.
- If you use more than three water sources, complete additional checklist(s) as necessary.

	Water Source			
	1	2	3	
Rural/town supply <i>(Supply under the control of local government authority)</i>				GO TO PART 3
Deep groundwater <i>(i.e. bore casing >10m depth)</i>				GO TO PART 4
Surface water <i>(e.g., spring, well, bore < 10m depth, river, lake, reservoir, roof)</i>				GO TO PART 5

PART 3: COMMUNITY WATER SUPPLY

(Complete for community water supply sources only)

All community water supplies have a Ministry of Health grading which provides an assessment of the public health safety of the water to the population served by that supply. The grading has two letters, e.g. "Cd". The first letter (upper case) represents the quality of the water at its source after treatment, while the second letter (lower case) grades the water quality as it arrives at your gate. Gradings containing "D" or "d" indicate marginal quality, while lower gradings ("E" or "e") show that the quality or risk management is unsatisfactory. Some community water supplies are not graded; these water supplies are listed as "ungraded". This grading information can be obtained from your local government authority or the *2000 Register of Community Water Supplies in New Zealand* which is available at following website address:

[Http://www.moh.govt.nz/moh.nsf/wpgIndex/Publications-Online+Publications+Contents](http://www.moh.govt.nz/moh.nsf/wpgIndex/Publications-Online+Publications+Contents)

- Name the water supply and the grading e.g. "Cd", or "ungraded"

Source 1: Name _____ Grading _____

Source 2: Name _____ Grading _____

Source 3: Name _____ Grading _____

If the grading of any of these water supplies contains "E", "e" or "ungraded" then you must:

- Develop a Water Management Plan detailing how the hazards will be eliminated or managed. The Plan must be agreed to by the farm dairy assessor, or owner of the farm dairy PSP where that is another person. Attach the Plan to this checklist.

GO TO PART 6

PART 4: DEEP GROUNDWATER (Complete for deep groundwater sources only)

Deep groundwater from depths of ten metres or more can generally be considered to be isolated from the influence of land-based activities. As such, a less rigorous hazard identification process is required for this type of water source.

Case depth (meters): **Source 1:** _____ **Source 2:** _____ **Source 3:** _____

If the depth of casing of any bore is less than 10 metres it must be assessed as surface water (Go to Part 5)

	Source 1		Source 2		Source 3	
	Yes	No	Yes	No	Yes	No
(a) Is the bore-head securely sealed?						
(b) Is the bore-head protected from animal access?						
(c) Is the bore area safe from ponding and flooding?						
(d) Please describe any other potential hazards to your water supply that you are aware of:						

If the answer to question (a), (b) or (c) is No for any of your water supplies, or you have identified any additional hazards, then you must either:

- Develop a Water Management Plan detailing how the hazards will be eliminated or managed. The Plan must be agreed to by the farm dairy assessor, or owner of the farm dairy PSP where that is another person. Attach the Plan to this checklist; or
- Reassess that water supply as surface water (Go to Part 5).

GO TO PART 6

PART 5: SURFACE WATER (Complete for surface water sources only)

A wide range of land and water based activities can result in contamination of surface and shallow ground waters. Special care is therefore required to ensure that water taken from such sources is of suitable quality for use in farm dairies.

Describe each water source:

(e.g. spring, well, bore cased <10m, stream, river, dam, reservoir, lake, roof etc.):

Source 1: _____

Source 2: _____

Source 3: _____

	Source 1		Source 2		Source 3	
	Yes	No	Yes	No	Yes	No
(a) Are any of the following hazard sources within 50 metres of the farm dairy water supply?						
• Offal pit/soak hole						
• Septic tank/long-drop toilet						
• Animal effluent to pasture						
• Silage stack						
• Land disposal site/refuse pit						
• Chemical preparation/storage area						
• Fuel tanks						
• Sumps, stock yards or feed pads not Connected to an approved effluent system						
• Other (specify) _____						
(b) Do any of the following hazards, either inside or outside your farm, pose a threat to the quality of your farm dairy water supply?						
• Runoff/flooding						
• Animal access						
• Industrial or urban storm water						
• Industrial wastewater						
• Effluent discharges						
• Spray drift						
• Other (specify) _____						
• If Yes, describe the activity and how it may affect your water quality						

CONTINUED OVER

PART 5: SURFACE WATER *(Continued)*

If the answer to any of the questions in (a), or (b) is Yes for any of your water supplies, then you must:

- Develop a Water Management Plan detailing how the hazards will be eliminated or managed. The Plan must be agreed to by the farm dairy assessor, or owner of the farm dairy PSP where that is another person. Attach the Plan to this checklist.

GO TO PART 6

PART 6: RETICULATION SYSTEM *(Complete in all cases)*

The farm's water reticulation systems (pumps, tanks, pipes, valves etc) can result in contamination of the water supply if they are incorrectly designed or installed, poorly maintained or damaged.

	Yes	No
(a) Is there a veterinary dispensing system linked to the reticulation system for your farm dairy water supply?		
(b) If the answer to (a) is yes, do you have systems in place for ensuring that chemicals do not get into the water and milk supply?		
(c) Are the water holding tanks covered, the walls and roof watertight and protected from contamination by rain, snow-melt and pests?		
(d) Where drains or overflow pipes from the tank empty into sewers or storm-water drains, are the outlets situated above the water level in the sewer/storm-water drains so that suck-back cannot occur?		
(e) Are reticulation pipes protected from damage by machinery or stock?		
(f) Are water tanks and the reticulation system inspected and maintained at least annually, and cleaned when necessary?		
(g) Does water in the farm dairy remain clean and clear for the duration of the dairy season?		

If the answer to any of the questions (b) to (g) is No then you must:

- Develop a Water Management Plan detailing how the hazards will be eliminated or managed. The Plan must be agreed to by the farm dairy assessor, or owner of the farm dairy PSP where that is another person. Attach the Plan to this checklist.

STOP HERE – WAIT FOR WATER QUALITY TO BE ASSESSED

PART 7: WATER QUALITY ASSESSMENT *(To be completed by the Farm Dairy Assessor)*

Summary of water status and action arising from assessment

	Yes	No
(a) Does the water meet the turbidity/clarity standard?		
(b) Does the water meet the <i>E. coli</i> standard?		
(c) Have any risks to the water supply been identified?		

If the answer to either (a) or (b) is No, or Yes for (c) then a Water Management Plan is required.

PART 9: DECLARATION *(Complete in all cases)*

Owner Declaration

I hereby declare that:

- to the best of my knowledge, this information is true and correct; and
- I agree to abide by all requirements specified in any Water Management Plan covering my water supply.

Signed

(farm owner): _____

Date: _____

STOP HERE

Farm Dairy Assessor

Reviewed by

(Assessor's name): _____

Signed *(Assessor):* _____

Date: _____

Attach your Water Management Plan and water tests where appropriate.

Appendix Two: Importing Country Requirements

It is the responsibility of exporters to identify and comply with all importing country requirements; non-compliance is at their commercial risk.

Importing country requirements, which have been officially confirmed, can be obtained from the Dairy and Plant Product Group of MAF or its website (www.maf.govt.nz/Dairy).

Where MAF provides official assurances to competent authorities of importing countries, the statements to which MAF attests must be verifiable. Relevant requirements are described in MAF Standard D206, “Dairy Sanitary and Related Export Certification”.