



Animal Products (Dairy Processing Specifications) Notice 2006

Pursuant to sections 45, 159 and 167 of the Animal Products Act 1999, I, Timothy Knox, Director (New Zealand Standards), issue the Animal Products (Dairy Processing Specifications) Notice 2006 for the purpose of specifying requirements for dairy products and the processing of dairy material and dairy products including requirements for risk management programmes relating to the processing of dairy material and dairy products.

Signed at Wellington this 14th day of February 2006

Timothy Knox
Director (New Zealand Standards)
New Zealand Food Safety Authority
(Acting under delegated authority)

Certified in order for signature

Solicitor
Legal Services

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Notice

1 Title

This is the Animal Products (Dairy Processing Specifications) Notice 2006.

2 Commencement

This Notice will come into force on 14 February 2006.

Part 1 Preliminary Provisions

3 Application

This notice contains specifications issued under section 45, 159 and 167 of the Animal Products Act 1999 that apply to—

- (a) the processing of dairy material;
- (b) dairy risk management programmes;
- (c) dairy processors, dairy risk management programme operators and exporters of dairy products;
- (d) anyone who develops, validates, evaluates, verifies, approves or registers a dairy risk management programme or a component of a risk management programme; and
- (e) anyone responsible for determining the conformance of dairy material and dairy products against the required fitness for intended purpose outcomes.

4 Interpretation

- (1) In this notice, unless the context otherwise requires—

Act means the Animal Products Act 1999.

agricultural compound has the same meaning as given to it in the *Agricultural Compounds and Veterinary Medicines Act 1997*.

approved means approved under the Act.

aseptic packaging means the packaging of commercially sterile product into sterilised containers followed by hermetic sealing with a sterilised closure in a manner which prevents viable microbiological recontamination of the sterile product.

assessment means systematic examination of an individual, organisation, plan, programme, or system against regulatory requirements.

clean means free of soil, food residue, dirt, grease, cleaning or sanitising agents or other objectionable matter.

Codex means the Codex Alimentarius Commission Joint Food and Agriculture Organisation (FAO)/ World Health Organisation (WHO) Food Standards Programme.

competent person means a person who can be shown to have sufficient experience, training and knowledge to perform the nominated function.

completion of milking means the time when milking of all animals intended to supply raw milk for consumption or further processing finishes.

compliance refers to all aspects of confirming that products, facilities, people, programmes, and systems meet regulatory requirements and, where applicable, export requirements issued under section 60 of the Act.

corrective action means action taken to rectify, eliminate the causes of, and prevent recurrence of any problem/failure/non-compliance identified in a plan, procedure, process, product, programme, or system.

critical control point (CCP) means a step in a process at which a control can be applied which is essential to prevent, eliminate, or reduce a food safety hazard to an acceptable level.

critical limit means a criterion which separates acceptability from unacceptability.

critical non-compliance means an action, event or omission which may result in—

- (i) failure to follow the lawful direction of an Animal Products Officer;
- (ii) an alleged offence against the Animal Products Act 1999;
- (iii) a critical situation;
- (iv) failure of a critical control point within a risk management programme or approved plan;
- (v) failure to identify when dairy material or dairy product is non-conforming;
- (vi) failure to stop a non-compliance;
- (vii) failure to keep accurate and complete records;
- (viii) failure to provide accurate, complete, and timely reports;
- (ix) failure to dispose of non-conforming dairy material or dairy product in compliance with regulatory requirements;
- (x) failure to prevent recurrence of a non-compliance; or
- (xi) failure to rectify a non-compliance within the specified timeframe.

critical situation means any situation which, in the professional judgement of an Animal Products Officer, places public health, animal welfare, market access, official assurances, national good, or the credibility of MAF or the Director-General at risk, or where an offence is suspected.

dairy factory means any factory engaged in the manufacture of dairy products and includes a skimming station, a buying or receiving station, or any other premises ancillary to a dairy factory.

dairy manufacturer means operator of a dairy factory processing dairy material.

days unless specified otherwise, refers to calendar days. “Working days” means Monday to Friday inclusive, excluding statutory holidays.

Director-General means chief executive of the Ministry of Agriculture and Forestry.

disease means any illness which has the potential to make the raw milk unfit for the manufacture of dairy products for consumption.

evaluation has the same meaning as that given to it in the Animal Products (Dairy Risk Management Programme Specifications) Notice 2005.

export means transport of goods outside New Zealand.

facilities includes water supply, steam supply, refrigeration, heating, ventilation, lighting, air conditioning, effluent disposal, waste disposal and sanitary arrangements for personnel.

finished product means dairy material or product which has been packed, in the manner intended for sale, and is awaiting the decision concerning conformance with regulatory requirements.

foreign matter means any extraneous thing—

- (i) that is injurious to health or harmful;
- (ii) that is offensive; or
- (iii) the presence of which would be unexpected or unreasonable in food of that description prepared or packed for sale in accordance with good trade practice.

HACCP means the Hazard Analysis and Critical Control Point system adopted by the Codex Alimentarius Commission. HACCP is a systematic identification of hazards and the measures for their control to ensure the safety of food. It focuses on prevention rather than end-product testing.

HACCP Plan means a documented system, prepared in accordance with all the principles of HACCP, to ensure control of significant food safety hazards in a food handling process. A HACCP Plan will always include one or more critical control points.

heat treatment means the use of heat as a critical control point for the control of pathogenic micro-organisms. The term “heat treatment” includes the heat treatment equipment, drawings, manuals, operating and maintenance plans/procedures, training and validation programmes, and records.

hazard analysis means the process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety and therefore should be addressed in the HACCP plan.

hazard identification and analyses means a documented system prepared in accordance with the principles of HACCP but differing from a HACCP Plan because CCPs are not identified.

MAF refers to the Ministry of Agriculture and Forestry.

manufacture means all activities involved with converting dairy material into dairy product (with or without other substances or ingredients), and its preparation in a dairy factory for sale. This includes receipt or deposit of the dairy material from which it is manufactured and the packaging for final sale.

milking animals means animals from which milk is intended to be harvested for the purposes of sale, trade or export, with or without further processing, during their milking-life from commencement of first lactation until they are withdrawn from the milking herd, including the non-lactating periods.

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.

monitor in the context of a HACCP Plan, means the act of conducting a planned sequence of observations or measurements of control parameters to assess whether a critical control point is under control.

non-compliance means any failure to comply with requirements under the Act.

non-conforming in relation to dairy material and dairy product, means any dairy material or dairy product that is suspected or known not to meet regulatory requirements or not to have been processed in accordance with regulatory requirements.

NZFSA refers to New Zealand Food Safety Authority within the Ministry of Agriculture and Forestry.

occupier in relation to a farm dairy, means every person presently occupying, managing or controlling the dairy. In relation to any other premises, includes every person presently carrying on business there.

outcome has the same meaning as that given to it by the Animal Products (Dairy Risk Management Programme Specifications) Notice 2005, and Product Outcome has a similar meaning.

owner means owner including—

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

pathogen means disease-causing organism.

pest means harmful or destructive organism which may affect then fitness for intended purpose of the dairy material or dairy product.

point of use means the point at which the material, e.g. water, comes into contact with the dairy material or dairy product, or in a situation of indirect contact, comes into contact with the equipment, item or other material that comes into contact with the dairy material or dairy product.

potable water means drinking-water which does not contain any determinands which exceed the Maximum Acceptable Values (MAVs) given in the “Drinking Water Standard for New Zealand 2005” issued by the Ministry of Health, or later editions or amendments of those Standards.

prerequisite programme means a documented programme covering good manufacturing practice (GMP)-based food hygiene activities that may interact at a number of process steps within and across various processes in a food premise, and that have the potential to influence the hygiene status of the product and/or control hazards.

pure milk means the whole of the milk drawn at the time of milking from a healthy animal; but does not include milk mixed with any preservative or chemical or colouring matter of any kind.

raw milk means milk produced in accordance with a registered risk management programme and that has not been subjected to any processing intended to alter the quality or compositional characteristics of the milk.

recognised evaluator means a person recognised by the Director-General under section 103 of the Act to perform evaluation functions and activities.

registration means registration under the Act.

shelf life means the period nominated by the manufacturer during which the product maintains its fitness for the intended purpose at a specific storage temperature and at other specified conditions.

significant change means any change made to key staff, environment, premises, equipment, facilities, process or product, which may affect the fitness for the intended purpose of the dairy material or dairy product.

store means premises (not being a dairy factory, or farm dairy, or a retail shop or store ancillary to a milk station, dairy factory or farm dairy) used for storing any dairy material or dairy product processed under a registered risk management programme, prior to—

- (i) delivery of the material to the place of sale for consumption or for end use for purposes other than consumption; or
- (ii) its export.

supporting system means a system used to support the overall ongoing compliance of the Hazard Identification and Analyses/HACCP Plan, but which does not necessarily influence the hygiene status of the product and/or control hazards.

validation means the process by which the operator ensures that the programme, plan or system is complete, and meets the requirements of the Act and any relevant animal product regulations and specifications; and when implemented, will consistently achieve the required outcomes of the programme, plan or system.

veterinary medicine means any substance, mixture of substances, or biological compound used or intended for use in the direct management of an animal.

withheld means excluded permanently from delivery or sale, and withhold has the same meaning.

- (2) Any term or expression that is defined in the Animal Products Act 1999, Animal Products (Ancillary and Transitional Provisions) Act 1999, or regulations made under those Acts and used, but not defined, in this notice has the same meaning as in those Acts or regulations.

Part 2 General Dairy Processing

5 Non-Conforming Dairy Material and Dairy Product

- (1) A risk management programme registered by the Director-General must describe the procedures that ensure any dairy material or dairy product that is non-conforming is identified and detained, and disposed of in accordance with the written consent or instruction of the Director-General.
- (2) All non-conforming dairy material or dairy product must be reported to the recognised agency responsible for verification of the risk management programme by the operator of the programme without delay.
- (3) All testing of non-conforming dairy material and dairy product must be done in a recognised dairy laboratory that is recognised in the appropriate category for the required test, using the test methods as specified in the Animal Products (Dairy Recognised Agency and Recognised Persons Specifications) Notice 2005.

6 Non-compliant Processing Operations

- (1) The risk management programme must describe procedures that ensure any non-compliance suspected or known to have occurred is reported to the recognised agency responsible for verification of the risk management programme by the operator of the programme without delay.
- (2) Any dairy material or dairy product that is or is suspected to be affected under clause 6(1) is non-conforming and must be managed in accordance with clause 5.

7 Records

In accordance with section 17(2)(d) of the Act, the risk management programme must provide for the keeping of required records to enable it to be readily ascertained whether or not the risk management programme has been, and is

being, complied with and that the dairy material or dairy product is fit for the intended purpose.

8 Official Assurances

The Director-General may only issue an Official Assurance if satisfied that the dairy material or dairy product intended for export meets all notified requirements that are applicable, including any export requirements that may apply generally or for the intended market or markets.

9 Approved Criteria

- (1) The Director-General may approve criteria by which a dairy processor or risk management programme operator may be judged to satisfactorily achieve requirements specified in this Notice. Any approved criteria will be made available on the NZFSA website <http://www.nzfsa.govt.nz/dairy/publications/approved-criteria/index.htm>.
- (2) A risk management programme that satisfies each of the relevant approved criteria and meets all other relevant risk management programme requirements will be registered by the Director-General.
- (3) Alternative criteria may be approved by the Director-General for application in a particular case provided it can be demonstrated to the Director-General's satisfaction that the required outcomes will be achieved.

10 HACCP Requirements

- (1) The risk management programme must include Hazard Identification and Analyses or HACCP Plans of the processes covered by the risk management programme.
- (2) The Hazard Identification and Analyses or HACCP Plans must be confirmed by a competent person to be valid for the processing activities covered by the risk management programme.
- (3) All Hazard Identification and Analyses/HACCP Plans must comply with the Codex document entitled "Hazard Analysis and Critical Control Point (HACCP) System and Guidelines for its Application" - website address: http://www.codexalimentarius.net/download/standards/23/cxp_001e.pdf.
- (4) HACCP principles and guidelines are to be used and the operation will take one of two paths depending on whether or not critical control points (CCPs) are identified, the paths being—
 - (i) the HACCP Plan where CCPs are identified; or
 - (ii) Hazard Identification and Analyses where no CCPs are identified.
- (5) (i) HACCP Plan

The operation follows the HACCP principles and CCPs are identified at step 7.0, thus the following steps are to be completed for this operation—

 - 1.0 Requirements prior to HACCP;
 - 2.0 Describe Product;
 - 3.0 Identify Intended Use;
 - 4.0 Construct flow diagram;
 - 5.0 On-site confirmation of flow diagram;
 - 6.0 Hazard Identification, Hazard Analysis and Control Measures;
 - 7.0 Determine CCPs;
 - 8.0 Establish Critical limits for each CCP;
 - 9.0 Establish a monitoring system for each CCP;
 - 10.0 Establish Corrective Actions;

- 11.0 Establish verification procedures;
- 12.0 Establish Documentation and Record Keeping;
- 13.0 Training (recommended); and
- 14.0 External Assessment.

(ii) Hazard Identification and Analyses

The operation follows the HACCP principles up to Step 7.0: Determine CCPs. After CCP determination when no CCPs are identified steps 8.0, 9.0 and 10.0 are not required, thus the following steps are to be completed for this operation—

- 1.0 Requirements prior to HACCP;
- 2.0 Describe Product;
- 3.0 Identify Intended Use;
- 4.0 Construct flow diagram;
- 5.0 On-site confirmation of flow diagram;
- 6.0 Hazard Identification, Hazard Analysis and Control Measures;
- 7.0 Determine CCPs;
- 11.0 Establish verification procedures;
- 12.0 Establish Documentation and Record Keeping;
- 13.0 Training (recommended); and
- 14.0 External Assessment.

- (6) Where a HACCP Plan includes heat treatment as a critical control point for the control of pathogens, heat treatments must be operated in accordance with the requirements for dairy heat treatments in clause 25 to 28 of this Notice.
- (7) The product outcomes must be documented as part of the hazard analysis.
- (8) Routine testing of product safety attributes may not be required where a HACCP Plan can demonstrate an equivalent level of confidence in meeting product safety outcomes.
- (9) Documented and effective prerequisite programmes, and other supporting systems, are essential to the success of any hazard identification or HACCP Plan, and must be developed prior to implementing HACCP.

11 Performance Measurement of Dairy Processors

- (1) It is the responsibility of the risk management programme operator to ensure verification of compliance with requirements is undertaken by an agency, recognised by the Director-General.
- (2) The frequency and intensity of risk management programme verification is defined by the Director-General, based on the verification category to which the dairy processor is assigned and their performance.
- (3) The performance of all dairy processors must be verified by the recognised agency at the frequency specified by the Director-General. The following performance standards must be assessed—
 - (i) registration of the risk management programme;
 - (ii) evaluation status of risk management programme and its components;
 - (iii) amendments notified in accordance with sections 25 and 26 of the Act;
 - (iv) status of the risk management programme HACCP plan;
 - (v) verification of compliance with the risk management programme;
 - (vi) complete, accurate, and timely reporting; and
 - (vii) management of critical non-compliances.

- (4) Dairy processors demonstrating compliance appropriate to a verification category that is better than their current verification category may request a review of the verification category to which they have been assigned.

Part 3 Farm Dairies

12 Farm Dairy Operators

Farm dairy operators must operate under, and in accordance with a registered risk management programme that complies with the specifications in this Part.

13 General requirements

- (1) The risk management programme must describe—
- (i) how farm dairies are to be located to minimise the risk of flooding, objectionable smells, smoke, dust, and other contaminants;
 - (ii) how milking areas are to be located, designed, and constructed so that—
 - (A) walls and floors are easily cleaned;
 - (B) drainage is effective;
 - (C) lighting is sufficient to allow for proper milking; and
 - (D) working space is sufficient to minimise the risk of contamination of milk during milking;
 - (iii) the steps to be taken if any dairy material is not, or is suspected not to be, fit for the intended purpose either—
 - (A) as milk withheld from supply under clause 18; or
 - (B) in accordance with clause 5 and Part 4.

14 Required systems

- (1) The risk management programme must describe systems that are in place to ensure that—
- (i) the surroundings will be kept clean and tidy, and free from harbourage for birds, rodents, insects and other pests;
 - (ii) all milking plant used is designed and maintained so that materials and substances coming into contact with milk do not contaminate the milk or cause it to deteriorate;
 - (iii) milking areas are used only for milking, breeding, veterinary treatment, and animal husbandry;
 - (iv) milk receiving areas and milk storage areas—
 - (A) protect milk against manure, dust and other contaminants, objectionable smells, birds, rodents, insects, and other pests;
 - (B) are easy to wash and clean; and
 - (C) have suitable facilities for filtering and cooling milk;
 - (v) farm dairies have enough water, of suitable quality, to clean the premises, animals, and plant, and, if necessary, cool the milk;
 - (vi) milking plant in farm dairies is—
 - (A) used only for handling milk;
 - (B) designed and constructed to be easily and properly cleaned;
 - (C) cleaned to minimise the risk that milk may deteriorate or be contaminated;
 - (D) cleaned only with approved detergents and sanitizers in accordance with regulation 24(1)(d) of the Animal Products (Dairy) Regulations 2005; and

- (E) cleaned in a manner that minimises the risk of contaminating milk with the detergents and sanitisers.
- (vii) the risk of the contamination of milk by pesticides is minimised by—
 - (A) preventing the storage of pesticides and similar substances in farm dairies; and
 - (B) controlling the use of pesticides and similar substances in or near farm dairies;
- (viii) only milking animals with clean teats are milked.

15 Milk Filtering and Cooling

- (1) The risk management programme must describe procedures to ensure that raw milk is filtered and cooled immediately after milking and either—
 - (i) cooled to 7° C or below within 3 hours of completion of milking; and
 - (ii) kept at or below 7° C until collected, or until the addition of milk at the next milking; or
 - (iii) further processed without delay.
- (2) For raw milk that is not cooled and processed in accordance with clause 15(1) the risk management programme must describe the procedures to be followed to ensure the raw milk is withheld until it is assessed and confirmed as fit for its intended purpose.
- (3) Raw milk that is not cooled and processed in accordance with clause 15(1) and is not confirmed as suitable under the provisions specified in clause 15(2) is non-conforming and must be managed in accordance with clause 5.

16 Milking Animal Health

- (1) Every farm dairy must only supply raw milk that is fit for the intended purpose and from healthy milking animals.
- (2) The risk management programme must describe systems that are in place to ensure that—
 - (i) milk offered for supply is only harvested from milking animals free of diseases capable of contaminating milk with pathogenic microorganisms;
 - (ii) milk offered for supply comes only from milking animals that are outwardly healthy and show no clinical signs or other evidence of diseases capable of contaminating milk with pathogenic microorganisms or toxic substances; and
 - (iii) diseased animals are identified and, if necessary, isolated.

17 Farm Dairy Water Quality

The risk management programme must describe the systems to ensure that in farm dairies, all water that may come into contact with milk intended for consumption, either with or without further processing, is of suitable quality so that the raw milk is protected from microbiological, chemical and physical contamination and remains fit for its intended purpose.

18 Milk Withholding

- (1) The risk management programme must describe systems that are in place to ensure that farm dairy operators withhold and do not offer for supply milk that—
 - (i) may be contaminated with extraneous substances, toxic substances, or pesticides, capable of rendering raw milk unfit for its intended purpose; or

- (ii) is required to be withheld in accordance with agricultural compound and veterinary medicine label instructions for use, unless
 - (A) under the written instruction of a veterinarian; or
 - (B) the Director-General is satisfied that associated risks are being effectively managed and has given written exemption from this requirement.
- (2) The risk management programme must describe systems that are in place to ensure that farm dairy operators withhold and do not offer for supply milk intended for human consumption, with or without further processing, that—
 - (i) is tainted, impure or otherwise not fit for its intended purpose; or
 - (ii) is colostrum unless there is a written supply agreement and the milk is identified in accordance with clause 19(2).

Part 4

Raw Milk Acceptance

19 Sale or supply of tainted, impure or adulterated milk

- (1) A person shall not sell or supply to a dairy processor for any purpose, or to any person for human consumption, any milk which—
 - (i) is from a milking animal that is suspected or known to be diseased; or
 - (ii) is tainted or is not pure milk, except in cases where that person gives to the person to whom the milk is sold or supplied a statement in writing that it is tainted or is not pure milk.
- (2) No person shall deliver, sell, offer or expose for sale, or export or attempt to export, milk—
 - (i) to which any substance (whether or not a natural constituent of milk) has been added;
 - (ii) from which any natural constituent has been removed; or
 - (iii) containing more immunoglobulin than is normally found in milk given by a healthy milking animal after 4 days and 8 milkings from giving birth,unless the addition, removal, or level of immunoglobulin is clearly stated in writing at the time.

20 Refusal to accept suspect milk

- (1) The risk management programme must ensure that any person who transports milk from a farm dairy to a dairy factory must refuse to accept and transport milk if there is reasonable cause to suspect that the milk is not fit for the intended purpose. This applies regardless of any obligations under a contract or under the articles of association of the company that owns the factory.
- (2) Where a dairy processor refuses to accept and transport milk under sub-clause (1) the affected risk management programme operators and dairy processors must be notified of the rejection without delay, and the recognised agency for verification of the risk management programme must be notified by the operator of the risk management programme as part of the routine reporting requirements.

21 Monitoring raw milk

The risk management programme must describe the monitoring in place to ensure that raw milk intended for the manufacture of dairy products is fit for its intended purpose.

22 Use of milk fit for the intended purpose for the manufacture of dairy products

- (1) Dairy material, including raw milk, shall not be used for the manufacture of any dairy products, including pasteurised milk for human consumption, unless it is fit for the intended purpose, that is, it—
- (i) is not, or does not contain anything that is, decomposed, rotten, spoiled or diseased;
 - (ii) is not affected by disease; and
 - (iii) has not been condemned under section 90 of the Act.
- (2) Dairy material, including raw milk, shall not be used for the manufacture of dairy products for human consumption, including pasteurised milk for human consumption, unless it—
- (i) does not have in it or on it any chemical 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;
 - (ii) is not affected by any objectionable taint or smell; and
 - (iii) does not contain any foreign matter.

23 Records of suppliers and traceability

The risk management programme must ensure a record is kept that identifies—

- (a) the name (if any) or unique location of every farm dairy from which raw milk is supplied for the manufacture of dairy products;
- (b) the name and either location or address of each farm dairy operator;
- (c) the name and either location or address of each farm dairy owner, if the operator is not the owner;
- (d) the location of each farm dairy;
- (e) the amounts of milk received on each day from each farm dairy; and
- (f) sufficient detail to allow the identification of dairy products containing or made from milk from each farm dairy.

Part 5 Manufacturing

24 Manufacture of dairy products

A risk management programme covering the manufacture of dairy products must document the systems and procedures that are in place to ensure that—

- (a) only permitted raw materials, ingredients, additives and processing aids are used;
- (b) only conforming dairy material that is fit for the intended purpose is used;
- (c) all ingredients are able to be traced to the product in which they have been used;
- (d) milk, cream, and other ingredients are protected from contamination, infestation, and spoilage;
- (e) edible materials are protected from contamination by inedible materials;
- (f) the fitness for purpose of all milk received or sold for manufacture is monitored;
- (g) the manufacturing and storage areas, and all equipment and product contact surfaces are maintained and cleaned;
- (h) only clean, non-toxic, non-contaminating materials are used for packaging;
- (i) the manufacturing process is protected from the entry of, or contamination from, foreign matter;

- (j) the equipment, manufacturing processes, and manufacturing environment are subject to microbiological surveillance;
- (k) appropriate sampling and testing is undertaken;
- (l) potentially pathogenic organisms are controlled;
- (m) appropriate steps are taken if any dairy material is found or suspected not to be fit for the intended purpose; and
- (n) water used in the processing of dairy material and dairy products is suitable at the point of use and will not compromise the fitness for purpose of the dairy material or dairy product being manufactured.

Dairy Heat Treatments

25 Dairy Heat Treatments

- (1) This section defines the dairy material heat treatment requirements for—
 - (i) thermisation for cheese-making;
 - (ii) pasteurisation; and
 - (iii) ultra high temperature (UHT) treatment.
- (2) The risk management programme must document procedures to ensure—
 - (i) the requirements for heat treatments specified in this Notice are met where there is—
 - (A) a legal requirement for the dairy material to have received a defined heat treatment;
 - (B) a label claim for a defined heat treatment; or
 - (C) certification that the dairy material has received a defined heat treatment in accordance with standards and specifications issued under the Act.
 - (ii) the heat treatment reduces the number of pathogenic micro-organisms to an acceptable level that, together with other measures, results in dairy product fit for the intended purpose.
- (3) The requirements in sub clause (2) do not apply where dairy material already heat treated in accordance with this Notice is used for the manufacture of dairy products, provided that any transport, storage and manufacture following the heat treatment is done in accordance with a risk management programme.
- (4) Dairy material used for the manufacture of dairy products is considered to have received a defined heat treatment when it has been heat treated using properly designed, installed, operated, and maintained heat treatments in accordance with—
 - (i) defined heat treatments and associated requirements;
 - (ii) limits on material or product contamination;
 - (iii) requirements for further processing and cooling; and
 - (iv) the procedures and records for the heat treatment contained in the risk management programme.
- (5) Heating and holding steps in some manufacturing processes may provide adequate heat treatment to ensure product safety. These manufacturing processes are considered to provide the defined heat treatment when—
 - (i) the defined heat treatments and associated requirements provided in clause 26 for the defined heat treatment are demonstrated to be met during the manufacturing process; and
 - (ii) all other requirements for the defined heat treatments are met as provided in clause 27, 28, 37, 38, 39, 40 and 41.
- (6) Further to clause 25(5), heating and holding steps, which may provide heat treatment with the same process performance as pasteurisation, include evaporation in the production of milk powder, cream treatment processes such as Vacreator and Flavourtech in butter making, and deodorisation in AMF manufacture.

26 Defined heat treatments

- (1) The defined heat treatments for thermisation for cheese-making, pasteurisation and UHT treatment, and associated requirements, are detailed under sub-clause (2), (3) and (4), with process performance criteria provided in the Animal Products (Dairy Manufacturing) Approved Criteria 2005 available on the NZFSA website <http://www.nzfsa.govt.nz/dairy/publications/approved-criteria/index.htm>.
- (2) Thermisation for cheese-making
 - (i) Thermisation for cheese-making (also known as thermalisation) is only permitted for the manufacture of cheeses with moisture content less than 39 percent moisture (by mass), pH less than 5.6 and where the pH of the cheese does not increase on ripening.
 - (ii) Thermisation for cheese-making is—
 - (A) rapidly heating liquid dairy material containing low numbers of pathogenic micro-organisms to a temperature of no less than 64.5°C, and retaining it at that temperature for no less than 16 seconds; and
 - (B) labelling the cheese with the date of commencement of manufacture; and
 - (C) prior to sale—
 - (a) storing the cheese at a temperature of not less than 7°C for a period of not less than 90 days from the date of commencement of manufacture; and
 - (b) demonstrating that pathogens are at an acceptable level in the cheese.
 - (iii) The Animal Products (Dairy Manufacturing) Approved Criteria 2005 provides the maximum acceptable limits for pathogenic micro-organism in cheese.
- (3) Pasteurisation
 - (i) Pasteurisation is—
 - (A) rapidly heating milk to a temperature of no less than 72° C and retaining it at that temperature for no less than 15 seconds; or
 - (B) rapidly heating milk to a temperature of no less than 63° C and retaining it at that temperature for no less than 30 minutes.
 - (ii) Dairy material may be rapidly heated and held using a temperature and holding time combination with the same process performance as pasteurisation for the dairy material concerned.
 - (iii) Temperature and holding time combinations with the same process performance as pasteurisation for a range of liquid dairy material including milk, milk with added sweeteners, concentrated dairy material and ice-cream in the Animal Products (Dairy Manufacturing) Approved Criteria.
- (4) Ultra high temperature (UHT) treatment
 - (i) UHT treatment of liquid dairy material is—
 - (A) the application of heat to continuously flowing liquid dairy material using such temperatures for such time that renders the dairy material commercially sterile at the time of processing; then
 - (B) aseptic packaging resulting in commercially sterile product.

27 Dairy material contamination

- (1) Thermisation for cheese-making, pasteurisation and UHT treatment must be undertaken using heat treatments that are designed, installed, operated and maintained in a manner that ensures that no untreated or partially treated dairy material passes forward or is mixed with treated dairy material.

- (2) The fitness for purpose of treated dairy material and dairy product must not be compromised by contamination from services (including coolants, heating media and/or cleaning solutions).

28 Further processing and cooling

At the end of the heat treatment and prior to further processing or storage, the dairy material must be immediately heated or cooled to a temperature that maintains the wholesomeness of dairy material or product either until further processing or for the duration of its shelf life.

Additional Operator Verification and Surveillance

29 Independent Verification Programme

A risk management programme for manufacturers of dairy products intended for human consumption must include an independent verification programme that provides independent sampling and testing of product to confirm the accuracy of routine monitoring used for the determination of dairy material or dairy product conformance under the programme.

30 Pathogen Management

- (1) Dairy manufacturers must manage the risk of pathogen contamination in dairy material and dairy product by conducting HACCP assessments of the process and the product, and using good manufacturing practices and appropriate surveillance.
- (2) Dairy manufacturers are required to have, as part of the risk management programme, systems in place for monitoring the manufacturing environment, the process and the dairy material or product to confirm that pathogens are controlled.
- (3) Risk management programme operators must ensure that procedures for pathogen management are validated when new or subject to significant amendment in conjunction with the risk management programme by a competent person independent of the programmes development.
- (4) Procedures for pathogen management are to be verified by the recognised agency as part of the risk management programme verification.

Part 6

Requirements for Dairy Manufacturers and Stores

31 Pest Management

- (1) Dairy processors who manufacture or store dairy material or dairy product must ensure that pests do not infest, spoil or contaminate dairy material or products, and that the application of pesticides in the manufacturing environment of dairy factories or stores does not adversely affect the fitness for the intended purpose of the dairy material or product.
- (2) Dairy processors, other than farm dairy operators, who manufacture or store dairy material or dairy product are required to have, as part of the risk management programme, procedures for pest management that monitor the manufacturing environment, the process and the dairy material or product to confirm that pests are controlled.
- (3) Risk management programme operators are responsible for ensuring that procedures for pest management are validated when new or subject to significant

amendment, in conjunction with the risk management programme, by a competent person independent of the programmes development.

- (4) Procedures for pest management are to be verified by the recognised agency as part of the risk management programme verification.

32 Non-Operating Dairy Factories and Stores

- (1) All premises under a registered risk management programme are assumed to be operating with their risk management programme in full effect until the Director-General registers an amendment to the programme following application by the operator of the risk management programme under section 25 of the Act, or until the Director-General withdraws registration.
- (2) To maintain registration of a non operating premises under the risk management programme, the company shall either—
 - (i) maintain the premises in an operational state under a registered and verified risk management programme; or
 - (ii) prepare a specific “non operational” risk management programme which includes any special arrangements made for mothballing, and make application to the Director-General for registration of an amendment in accordance with section 25 of the Act.

Part 7 Requirements for Dairy Premises

33 Requirements for dairy factories and stores

- (1) Dairy material and dairy products processed under a registered risk management programme must be manufactured and stored only in premises specified for the purpose within the risk management programme for the class or description to which the product belongs and assigned a unique location identifier approved by the Director-General under clause 5(3) of the Animal Products (Dairy Risk Management Programme Specifications) Notice 2005.
- (2) The risk management programme in respect of the manufacture and storage of dairy material must describe systems that are in place to ensure that—
 - (i) Premises, equipment, and facilities are suitable for the processing of dairy material and dairy products of the class or description specified;
 - (ii) premises are located so as to minimise the risk of flooding, objectionable smells, smoke, dust and other contaminants;
 - (iii) the premises and their surroundings are clean, hygienic and tidy and free from pests;
 - (iv) the premises are designed and constructed so that they are hygienic and easy to keep clean;
 - (v) the equipment and facilities in the premises are suitable and maintained to ensure the manufacture or storage of dairy products that are fit for the purpose of the class or description for which registration is given; and
 - (vi) suitable amenities are provided for the personal hygiene of staff and visitors.
- (3) The Director-General may issue a risk management programme location certificate to premises operating under a risk management programme and this certificate must be prominently displayed at the location at all times.
- (4) The operator of premises under a risk management programme must ensure that no significant changes are made to the premises, equipment, or facilities unless—

- (i) the change has been registered as an amendment to the risk management programme by the Director-General under section 25 of the Act in the manner prescribed in the Animal Products (Dairy Risk Management Programme) Specification 2005; and
- (ii) the change is carried out in a manner that, in the opinion of the Director-General, ensures that the fitness for the intended purpose of dairy product is not compromised during and subsequent to the change; and
- (iii) work on the change is undertaken in accordance with the risk management programme, the application for registration of amendment to a risk management programme and any conditions applied by the Director-General under section 22 of the Act or directions given under section 81 of the Act.

34 Change of Ownership

- (1) The risk management programme operator must advise the Director-General in writing before—
 - (i) any dairy processor using premises covered by the risk management programme ceases to use the premises as a dairy factory or store; or
 - (ii) the ownership or right of possession of all or part of the premises changes.
- (2) Every person who acquires any interest in the ownership or possession of premises under a registered risk management programme must advise the Director-General, in writing, without delay.

35 Additional requirements of dairy factories

- (1) In addition to the generic requirements listed in clause 33, the risk management programme must ensure that premises used to manufacture dairy products meet the following minimum requirements—
 - (i) the premises, equipment, facilities, and the manufacturing environment are designed, constructed, and maintained so as to avoid hygiene hazards and to permit easy and thorough cleaning, disinfection, and visual inspection;
 - (ii) vehicle access and parking areas are designed and constructed to prevent the contamination of manufacturing areas;
 - (iii) the design and use of equipment does not permit
 - (A) the inadvertent mixing of raw milk or dairy material with any treated dairy material or product; or
 - (B) the inadvertent mixing of any non-conforming dairy material or product with any conforming dairy material or product; and
 - (iv) lines containing water that is not fit for drinking are clearly labelled as such and are not connected to lines or tanks containing potable water.

Part 8 Dairy Storage and Transportation

36 Storage or Transport of Dairy Material or Product

- (1) A risk management programme in respect of the storage or transport of dairy material must provide for the following—
 - (i) keeping dairy material and dairy product clean;
 - (ii) handling dairy material and dairy product so as to minimise—

- (A) the risks of contamination, spoilage or deterioration;
 - (B) the proliferation of pathogenic micro-organisms; and
 - (C) the development of toxins;
- (iii) for the transport, ensuring the cleanliness and suitability for the transport of dairy material or dairy products of that class or description or form to ensure the fitness for the intended purpose is maintained;
 - (iv) for a store, ensuring the premises, equipment, and facilities are in all other respects suitable for the storage of dairy material or dairy products of that class or description;
 - (v) maintaining the following records for all dairy material processed—
 - (A) the source of the dairy material and when it was received; and
 - (B) the destination of the dairy material and when it left or was delivered.

Part 9 Evaluation and Verification

37 Evaluation

- (1) Evaluation of compliance with this Notice must be undertaken by a recognised person as part of a risk management programme evaluation.
- (2) Evaluation of the Hazard Identification and Analyses or HACCP Plans must be undertaken by a recognised person as part of a risk management programme evaluation.
- (3) External evaluation of all heat treatments covered by this Notice that are—
 - (i) new;
 - (ii) relocated; or
 - (iii) have undergone a significant change,

must be undertaken by a recognised person as part of a risk management programme evaluation for—

- (iv) compliance with this Notice, and
- (v) confirmation that those means of complying with this Notice that are either specified or referenced in the risk management programme can be or are being followed,

prior to the processing of dairy material for the manufacture of dairy products.

- (4) Finished product manufactured from dairy material heat treated during commissioning of a heat treatment, prior to the evaluation of the heat treatment and the resolution of any critical non-compliances, must be isolated, appropriately labelled and secured against use, sale or export and managed as non-conforming dairy material under clause 5.

38 Evaluation Non-compliance

- (1) Heat treatments that fail to comply with—
 - (i) the criteria in clause 25 to 28 of this Notice; and
 - (ii) those means of complying with this Notice that are either specified in criteria approved by the Director-General or referenced in the risk management programme,

are non-compliant and must not be used to treat dairy material used for the manufacture of dairy products.

- (2) All critical non-compliances must be resolved prior to heat treating any dairy material used for the manufacture of dairy products.
- (3) Any dairy material or product manufactured from dairy material treated by critically non-compliant heat treatments must be managed in accordance with clause 5 of this Notice.
- (4) Where a critical non-compliance is identified, all produce treated by the heat treatment since the last recorded demonstration of compliance by that heat treatment must be managed as non-conforming dairy material in accordance with clause 5.

39 External Verification

- (1) External verification of compliance with the outcomes and requirements described in this Notice must be undertaken by an agency recognised by the Director-General as part of a dairy risk management programme verification. The frequency and intensity of the external verification, including the verification to which the heat treatment is assigned, is determined under clause 11.
- (2) Some importing countries may require specific minimum verification requirements of heat treatment including the frequency of verification and the type of verifier to be used. Where product is being manufactured for export to these countries and the specific verification requirements are more frequent or require a specialist verifier in excess of that specified by performance based verification category to which the dairy manufacturer is assigned then these importing country verification requirements take precedence.

40 External Verification Compliance

- (1) Dairy processors and risk management programme operators are compliant with this Notice if—
 - (i) the dairy risk management programme satisfies all requirements relevant to the processing operations covered by the programme;
 - (ii) they operate in accordance with that risk management programme; and
 - (iii) the heat treatment required under this Notice or the risk management programme has a current evaluation, that is the heat treatment is not new, has not had any significant changes or been relocated since the last evaluation; and

41 External Verification Non-compliance

- (1) Operating other than in accordance with this Notice is an offence under Part 10 of the Act.
- (2) If a dairy processor or risk management programme operator does not operate in accordance with the requirements specified in this Notice—
 - (i) an Animal Products Officer may seize and detain or condemn dairy material or dairy product under section 90 of the Act;
 - (ii) an Official Assessor acting under section 93 of the Act, may condemn dairy material or dairy product under section 90 of the Act;
 - (iii) export certification and/or use of any MAF or NZFSA marks may be suspended;
 - (iv) the Director-General may consider exercising his powers to remove the risk management programme from the register under section 28 of the Act.;
 - (v) prosecution for offences may occur; and

- (vi) any other action may be taken as provided for by the Act.
- (3) External Verification of Heat Treatment
- (i) Where a critical non-compliance is identified for dairy heat treatments, the dairy processor and risk management programme operator must ensure all dairy material and dairy product treated by the heat treatment since the last recorded demonstration of compliance by that heat treatment is managed as non-conforming dairy material under clause 5.
 - (ii) All critical non-compliances must be resolved prior to heat treating any material for the manufacture of dairy products.

Issued under section 167 of the Animal Products Act 1999.

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This notice is administered in the Ministry of Agriculture and Forestry by the New Zealand Food Safety Authority.
