



Organic Production Rules

21 March 2019

Draft for
Consultation

TITLE

Organic Export Requirement: Draft Organic Production Rules Organic Export Requirement for consultation

COMMENCEMENT

This Organic Export Requirement is effective from [Effective Date]

REVOCATION

This Organic Export Requirement replaces:

- NZFSA Official Organic Assurance Programme Standard OP3, Registration and Performance Measurement Criteria for Operators – Organic Products, August 2005, Version 2.
- MAF Standard OP3, Appendix Two Technical Rules for Organic Production, June 2011, Version 7.1
- MAF Standard OP3, Appendix Two Technical Rules for Organic Production, July 2014, Version 7.2, including Chapter 8A Organic Wine

ISSUING BODY

This Organic Export Requirement is issued by the Ministry for Primary Industries.

Dated at Wellington this ... day of 2019

[Approver]

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Contents	Page
Introduction	3
Part 1: Requirements	5
1.1 Application	5
1.2 Definitions	5
Part 2: Administrative requirements	11
2.1 Registration	11
2.2 Providing access and information to the TPA	11
2.3 OMP	12
2.4 Record keeping	16
2.5 Traceability	19
2.6 Sub-contracted activities	19
2.7 Imported inputs	19
2.8 Product identification and labelling	19
2.9 Official organic assurances	20
2.10 Reporting to the TPA	20
2.11 Management of non-conforming products	20
Part 3: Technical Requirements	22
3.1 General	22
3.2 Plant production	23
3.3 Wild harvest	26
3.4 Livestock production	26
3.5 Apiary production	35
3.6 Aquaculture	38
3.7 Algae	43
3.8 Mushroom production	44
3.9 Processing and handling	45
3.10 Alcoholic beverages	47
Schedule 1: Fertilisers and soil conditioners	49
Schedule 2: Substances for crop protection	51
Schedule 3: Feed materials and feed additives	53
Schedule 4: Food additives and processing aids	57
Schedule 5: Animal stocking rates and housing space	66
Schedule 6: Permitted inputs in aquaculture and algae production	68

Introduction

This introduction is not part of the Organic Export Requirement but is intended to indicate its general effect.

Purpose

This Organic Export Requirement outlines the responsibilities of operators participating in the Ministry for Primary Industries (MPI) Official Organic Assurance Programme (OOAP).

Background

This Organic Export Requirement outlining the Organic Production Rules is an integral part of the MPI system for official assurances for organic products. It describes the responsibilities of operators participating in the OOAP. The OOAP is not a mandatory programme, however, operators choosing to participate in the OOAP are obliged to abide by the requirements of this Organic Export Requirement.

This Organic Export Requirement is in addition to all relevant legislative requirements, including but not limited to agricultural production, horticultural production, food, wine and resource management.

Who should read this Organic Export Requirement?

This Organic Export Requirement should be read by organic operators participating in the OOAP.

Why is this important?

Operating other than in accordance with this Organic Export Requirement may result in the suspension of operator's eligibility to participate in the OOAP. Failure to address the agreed corrective actions to resolve a suspension will result in the termination of operator's eligibility. Operators who fail to abide by the requirements of this Organic Export Requirement may be refused official assurance for their consignments.

Document history

NZFSA Standard 3 Registration and performance Measurement Criteria for Operators – Organic Products

No.	Version Date	Section Changed	Change(s) Description
1	March 2001		New Standard published
1.1	2003		
2	August 2005		
3	XX this version	Full revision	Reviewed and published in accordance with MPI Requirements and Guidance Programme Renamed to Organic Export Requirement: Organic Production Rules Added rules for Aquaculture and Algae

MAF Standard OP3, Appendix Two Technical Rules for Organic Production

No.	Version Date	Section Changed	Change(s) Description
1.1	2003		
2	August 2005	4	

No.	Version Date	Section Changed	Change(s) Description
3	November 2002		
3.1	May 2003		
	May 2004		
5	December 2004		
6	November 2006		
6.1	May 2009		
6.2	August 2009		This version applied only to the export of organic products to Japan.
7.0	August 2009		
7.1	June 2011		
7.2	July 2014	New chapter added	Chapter 8A Organic wine. Chapter added to Technical Rules for Organic Production.

Other information

The information contained within a border throughout this Organic Export Requirement is for guidance only and is not part of the requirements.

Operators may also find the following documents useful:

- ISO/IEC Standard 17020:2012 Conformity Assessment – Requirements for the operation of various types of bodies performing inspection
- ISO/IEC Standard 17065:2012 Conformity Assessment – Requirements for bodies certifying products, processes and services.
- Organic Export Requirement: Recognised Agencies and Persons.
- The Contract for Services as Third Party Agency for the Official Organic Assurance Programme.

Part 1: Requirements

1.1 Application

- (1) This Organic Export Requirement: Organic Production Rules (this Requirement) applies to operators participating in the OOAP.
- (2) This Requirement applies to the following products, which are produced and processed within the framework of the OOAP, and, which carry, or may carry an organic labelling claim:
 - a) unprocessed horticultural products for human consumption;
 - b) wild harvest of plant products for human consumption;
 - c) animal products for human consumption from bovine, porcine, ovine, caprine, cervine, equine, avian, ratite, bivalvia and *Apis mellifera* species;
 - d) live animals from the same species as listed in 1.1 (2)c);
 - e) processed agricultural products for human consumption;
 - f) wine;
 - g) mushrooms;
 - h) algae;
 - i) yeast;
 - j) processed agricultural products for animal consumption;
 - k) vegetative propagating material and seed for cultivation;
 - l) unprocessed wool.
- (3) This Requirement applies to any product where labelling, advertising material or commercial documents claims the product, its production or its ingredients is 'organic'.
- (4) Organic products not included in clause 1.1(2) may be issued with an official assurance if the requirements of the OOAP, including the relevant Overseas Market Access Requirement (OMARs) have been met.
- (5) In addition to this Requirement, products exported under the OOAP must also meet the importing country specific requirements, which are set in the organic OMAR for each destination. The OMAR takes precedence over this Requirement where there are differences between this Requirement and the relevant OMAR.

1.2 Definitions

- (1) In this Requirement:

accountable person means the person named in an organic management plan (OMP) who is responsible for all operations covered by the OMP, and for ensuring that those operations comply with regulatory and non-regulatory requirements

adverse event means an event declared as such by the Minister for Primary Industries. Adverse events may include, but are not limited to: storms, droughts, floods, snow storms, volcanic eruptions, earthquakes, or biosecurity incursions

agricultural compound has the same meaning as in the Agricultural Compounds and Veterinary Medicines Act 1997

algae means macroalgae and microalgae, including phytoplankton occurring both naturally and under cultivation in aquatic environments, both of marine water as well as fresh water

algae production involves active cultivation of algae, and does not include collection of algae that is grown naturally in unmanaged areas

animal welfare recommended best practice means those practices identified in the relevant Code of Welfare as recommended best practice for the care and management of animals.

apiary production means to keep honey bees (*Apis mellifera*) for the purposes of producing bee products for export and who is required to notify apiaries under the American Foulbrood Pest Management Plan (AFBMP), but does not include the extraction of honey and other bee products

aquaculture production means the controlled or managed production of aquaculture livestock in fresh, brackish or salt water in a circumscribed aquatic environment

aquaculture product means aquatic organisms at any stage of their life cycle resulting from any aquaculture activity or products derived therefrom

assurance failure means a situation where an official organic assurance has been issued for products which do not conform with the Organic Export Requirements or relevant organic OMARs

background contamination means background levels of naturally occurring substances and/or persistent synthetic chemicals that are present in the soil at the beginning of the conversion period

beer and related products has the same meaning as in the Australia New Zealand Food Standards Code

biofouling is the accumulation of microorganisms, plants, algae, or aquatic animals on wetted surfaces that affect all aquaculture

buffer zone means a clearly defined and identifiable boundary area bordering an organic production site that is established to limit application of, or contact with, prohibited substances from an adjacent area

certification means the procedure by which an operator receives a written endorsement from a TPA that a clearly identified process has been methodically applied. This procedure verifies that the operator is producing specified products according to specific requirements or standards

certification body means an organisation which is responsible for verifying that a product sold or labelled as 'organic' is produced, processed, prepared, handled, imported and exported in conformance with an organic standard

chaptalisation (enrichment) means the winemaking additions or processes that are permitted for the purpose of increasing (or potentially increasing) the actual alcoholic strength of a wine i.e. the addition of sugars before the completion of fermentation and concentration of alcohol after fermentation

cider has the same meaning as in the Australia New Zealand Food Standards Code

compost means decayed organic material used as a soil fertility amendment in agricultural production, produced by a combination of actions over time by microbes, invertebrates, temperature, and other elemental factors (for example, moisture content, aeration). Composted material shows no indication of the original substrate(s) from which it was made

contamination means contact of organic crops, animals, land or products with any substance that would compromise the organic integrity

control file means all the documentation relating to an operator participating in the OOAP, for the purposes of the certification activities

conventional means any production or processing practice or system that does not conform to organic production practices and standards

conversion period means the time between the start of organic management and the recognition of crops, pasture and animal products as organic

critical non-conformance means any identified non-conformance which affects the system's ability to continue to provide confidence that the requirements of the OOAP are met. Examples of critical non-conformance include:

- a) critical situations (see definition);

- b) events (see definition);
- c) critical non-conformance identified following assessments of registered operators
- d) failure to identify when a product is non-conforming;
- e) failure to segregate non-conforming product;
- f) failure to identify a non-conformance;
- g) failure to rectify non-conformance within the specified timeframe;
- h) failure to prevent reoccurrence of a non-conformance.

critical situation means any situation which places public health, animal welfare, market access, national good, or MPI's credibility at risk, or where an offence is suspected

crop rotation means the practice of alternating the species or families of annual and/or biennial crops grown on a specific field in a planned pattern or sequence so as to break weed, pest and disease cycles and to maintain or improve soil fertility and organic matter content

dispensation means an approval granted by a TPA, or an authorisation granted by MPI exempting an operator from meeting a requirement where a dispensation is provided for in Part 3 of this Requirement

event means any of the following situations:

- a) assurance failure;
- b) critical non-conformance identified by the TPA within the TPA's system;
- c) critical situation identified during the TPA's work;
- d) importing countries requirements obtained from sources other than MPI, for example, where an overseas authority issues new requirements and does not notify MPI through normal channels

exporter means an operator registered with MPI to export organic products under the OOAP

facilities means machinery, equipment, premises, packaging and transport containers used during the production, harvesting, processing and handling of organic agricultural product and foodstuffs

feed additive has the same meaning as in the Agricultural Compounds and Veterinary Medicines (Exemptions and Prohibited Substances) Regulations 2011

food additive has the same meaning as in the Australia New Zealand Food Standard Code

food business has the same meaning as in the Food Act 2014

food processing aid has the same meaning as in the Australia New Zealand Food Standard Code

fruit and vegetable wine has the same meaning as in Australia New Zealand Food Standards Code

Genetically Modified Organism (GMO) has the same meaning as in the Hazardous Substances and New Organisms Act 1996

GMO derivative means a substance that is produced by or from a GMO. This is traced one step back from the substance to its source. 'Produced from GMO' means that it consists in whole or in part of a GMO. 'Produced by GMO' means that it is a GMO metabolite

green manure means a crop that is grown and then incorporated into the soil for the purpose of soil improvement, erosion prevention, preventing nutrient loss, mobilisation and accumulating plant nutrients, and balancing soil organic matter. Green manure may include spontaneous crops, plants or weeds

handling includes transport, import and export of organic products and as relevant for the product type, has the same meaning as:

- a) 'processing and handling' in the Food Act 2014, specifically section 11 (c), (d), (e) and (f);
- a) 'dairy processing' in the Animal Products Act 1999, but does not include the extraction of milk;
- b) 'process' in the Animal Products Act 1999; and
- c) 'making' or 'made' in the Wine Act 2003

hatchery means a place of breeding, hatching and rearing through the early life stages of aquaculture animals, including shellfish.

holding means all of the production units operated under a single management for the purpose of producing and/or processing agricultural or aquaculture products. A holding is a physically, financially and operationally independent entity

homeopathic preparation means preparations made through successive dilutions of a substance that in larger amounts produces symptoms in healthy subjects similar to those of the disease itself

hydroponic production means the method of growing terrestrial plants with their roots in a mineral nutrient solution only or in an inert medium, such as perlite, gravel or mineral wool to which a nutrient solution is added

importer means an operator who imports a consignment for use or supply to operators producing or processing organic products for later export under the OOAP

in-conversion feed means feed produced during the period of conversion to organic production, excluding feed harvested in the first 12 months of conversion

ingredient means any single substance, including a food additive, vitamins and minerals used in the processing, manufacture or handling of a food

input means agricultural compounds, plant propagation material and seeds for planting, ingredients, food additives and processing aids as permitted in Schedules 1 to 4

irradiation means technology using high-energy emissions from radio-nucleotides, capable of altering a product's molecular structure for the purpose of controlling microbial contaminants, pathogens, parasites and pests in products, preserving products or inhibiting physiological processes such as sprouting or ripening. Irradiation does not include low-level radiation sources such as the use of X-rays for foreign body detection

labelling means any written, printed or graphic matter that is present on the label, accompanies the product, or is displayed near the product, including that for the purpose of promoting its sale or disposal

livestock means any domestic or domesticated animal including bovine (including buffalo and bison), ovine, porcine, caprine, cervine, equine, poultry, bees, and bivalve molluscs raised for food or in the production of food. This does not include the products of hunting or fishing of wild animals

livestock production means to farm, raise, grow, or keep animals for reward or for the purposes of trade in those animals or in animal material or products derived or taken from those animals, and includes the extraction and storing of raw milk from dairy animals

market access eligibility means a product that has met the requirements of the importing country, as set in the relevant OMAR for that market

marketing means holding or displaying for sale, offering for sale, selling, delivering or placing on the market in any other form

mead has the same meaning as in Australia New Zealand Food Standards Code

MPI means Ministry for Primary Industries

natural flavouring means substances obtained by physical, microbiological, enzymatic, or chemical processes from vegetable or animal origin materials either in their raw state or after processing by traditional preparation processes including drying, roasting and fermentation

non-conformance means any failure to conform with the requirements of the OOAP

nulliparous means a female mammal who has never given birth

official assurance means a statement made by MPI to a foreign government, or an agent of a foreign government, attesting that, as appropriate, any one or more of the following conditions apply in respect of a product:

- a) any specified process has been completed with respect to the product concerned;
- b) the product concerned meets the Standards set for the product;

- c) any market access requirements of the importing country, which New Zealand has agreed to meet, that are stated in the official assurance, have been met by the system under which the product was produced or processed;
- d) the situation in New Zealand, in relation to any matter concerning plant or animal product, is stated in the official assurance

official organic assurance means an official assurance attesting to the organic status of consignments exported under the OOAP

operation means the business unit within which organic products are produced, processed and handled. This includes holdings, production units, food businesses, wine businesses, farm dairies, dairy processing businesses, animal product businesses and import and export businesses

operator means the owner or person in control of the products for which certification is sought under the OOAP, and includes primary producers, processors, handlers, importers and exporters

Organic Management Plan (OMP) means a plan for managing a certified organic operation (including import and export) that has been agreed to between the operator and the TPA. The OMP covers all aspects of organic production, processing or handling, and describes all measures taken to ensure conformity to the requirements of the relevant OMARs

organic product means a product that has been produced, processed, or handled in conformance with this Requirement and the relevant organic OMARs

Overseas Market Access Requirements (OMARs) means an overseas market access requirement, which are requirements agreed between the New Zealand government and the government of the export destination and are issued by MPI

package has the same meaning as in the Food Act 2014

perry has the same meaning as in the Australia New Zealand Food Standards Code

plant production means the growing and harvesting of plants and plant products including crops, wild crops, pasture and seeds. This includes any plant or part of a plant intended to be sold or used:

- a) as food for human consumption; or
- b) as livestock feed; or
- c) for plant propagation; or
- d) as a fertiliser or soil conditioner

point of export means the time and place where the consignment is loaded onto a vessel or aircraft

polyculture means the rearing in aquaculture of two or more species, usually from different trophic levels, in the same culture unit

processing has the same meaning as relevant for product type as in:

- a) 'processing and handling' in the Food Act 2014, specifically section 11(a) and (b);
- b) 'dairy processing' in the Animal Products Act 1999, but does not include the extraction of milk; and
- c) 'process' in the Animal Products Act 1999; and
- d) 'making' or 'made' in the Wine Act 2003

production means the processes undertaken to produce agricultural or aquaculture commodities in the state in which they occur on the farm, and may include initial post-harvest handling

production cycle means, in the framework of aquaculture and algae production, means the lifespan of an aquaculture animal or algae from the earliest lifestage to harvesting

production unit means all assets to be used for the production of an agricultural or aquaculture commodity including, but not limited to, production premises, land parcels, pasturages, open air areas, livestock buildings, ponds, containment systems for algae or aquaculture animals, premises for the storage of crops, crop products, algae products, animal products, raw materials and any other input relevant for this specific sector

registration means the process whereby participation in the OOAP is formally confirmed and recorded. For the purposes of this Requirement, all operators must be registered by the TPA and exporters must be registered with MPI. TPAs and registered organic exporters are listed on the MPI website

simultaneous conversion means the conversion of pasture and livestock at the same time. This means that during the conversion period the in-conversion livestock feeds on the in-conversion pasture belonging to the converting production unit

split production means conventional, in-conversion and organic production, breeding or processing within the same holding

stocking density means, in the framework of aquaculture, the live weight of animals at any time during the grow-out phase, either per cubic metre of water or per square metre of surface, as appropriate to the species concerned.

subcontractor means a natural or legal person or business entity who provides services specified in a contract to the operator

sustainable fisheries means the exploitation of a stock in such a way that the future exploitation of the stock will not be compromised

synthetic means a substance that is formulated or manufactured by a chemical process, or by a process that chemically changes a substance extracted from naturally occurring plant, animal or mineral sources. This does not include substances created by naturally occurring biological processes

Third Party Agency (TPA) means an organisation formally recognised by MPI to provide services on behalf of MPI under the OOAP. TPAs are listed on the MPI website

traceability means the ability to verify the history, location or application of a product through records or record keeping

trans-shipped means a consignment that temporarily physically enters New Zealand's jurisdiction, but is not cleared by the New Zealand Customs Service

vegetative propagating material means any plant tissue including shoots, leaf or stem cuttings, roots, tubers, rhizomes, bulbs, or corms used in plant production or propagation

verification means the ongoing checks carried out by recognised persons to determine whether:

- a) operations that are subject to an OMP are in ongoing conformance with the requirements of the OMP and the OOAP;
- b) organic products exported under the OOAP have been produced or made in a way that meets the requirements of the relevant organic OMAR.

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

wild harvest is a plant or portion of a plant that is collected or harvested from a site that is not maintained under cultivation or other agricultural management

wine has the same meaning as in the Wine Act 2003, but does not include mead, fortified wines, fruit or vegetable-based liqueurs, wine products, beer or spirits

wine business has the same meaning as in the Wine Act 2003

withholding period means the interval between the last administration of a veterinary medicinal product to animals under normal conditions of use and the production of foodstuff from such animals.

Part 2: Administrative requirements

2.1 Registration

- (1) Operators must meet the requirements of this Organic Export Requirement and the relevant organic OMARs to participate in the OOAP. Operators must be certified to this Requirement by a TPA.

Guidance

Organic OMARs can be found on the MPI website

- (2) Operators must provide a declaration of intent to maintain registration to their TPA every 12 months following initial registration.
- (3) Exporters must register with MPI as an Organic Exporter.
- (4) Registered organic exporters must designate a person or persons to apply for official organic assurances.

Guidance

- The application form for registering as an organic exporter can be found on the MPI website
- The form application form for designating a person to apply for official organic assurances can be found on the MPI website

2.2 Providing access and information to the TPA

2.2.1 Access and information

- (1) Operators must allow:
- a) the TPA full access to the operator's records, personnel and facilities at any reasonable time;
 - b) exchange of information between TPAs in cases where an operator is certified by more than one TPA;
 - c) transmission of the OMP verification reports between TPAs where the operator changes their TPA;
 - d) MPI representatives and importing country officials access to all premises, land, accounts and other relevant documentation to enable assessment of conformance with this Requirement;
 - e) the TPA to store the operator's control file for a period of at least five years in cases where the operator withdraws from the OOAP;
 - f) access to the product or production site for the purpose of sampling for testing as considered necessary by the TPA; and
 - g) the TPA to report any relevant information on the operator's holding to MPI.

2.2.2 Management of non-conformance

- (1) Operators must undertake corrective actions to address any non-conformance within the timeframe specified by the TPA.
- (2) Operators must notify purchasers of any product that is affected by a non-conformance.

2.2.3 Application of the Official Information Act 1982

- (1) All information collected by a TPA in the course of activities undertaken under the OOAP on behalf of MPI is official information, and is subject to the requirements of the Official Information Act 1982.

2.2.4 Fees

- (1) Operators must pay all fees charged by the TPA and MPI related to the registration and participation in the OOAP.
- (2) Operators must pay all charges associated with routine testing.

2.3 OMP

- (1) Operators must document an OMP addressing all parts of the supply chain under their control.
- (2) The OMP must include all of the following:
 - a) the scope of the plan;
 - b) details of legal owner of the holding;
 - c) details of accountable person(s) who has overall responsibility for the holding;
 - d) details of any person with delegated responsibility for selected activities;
 - e) details of sub-contractors and all activities undertaken by them;
 - f) procedure to ensure traceability of product under the operators control;
 - g) procedures for tracking products through the operation and between operations;
 - h) procedures for controlling and securing non-conforming product;
 - i) contingency plans;
 - j) record keeping procedures;
 - k) production unit or processing Schedules;
 - l) procedures for ascertaining organic status and market access eligibility;
 - m) procedures for mitigating the risk of contamination by unauthorised substances or products; and
 - n) procedures for product recall.

Guidance

- OMPs should be developed using a risk management framework that identifies, monitors, controls, manages and eliminates or minimises hazards and other risk factors.
- The provisions outlined in this Requirement do not prejudice the implementation of more restrictive conditions by the TPA.

- (3) The OMP must be approved by the TPA.
- (4) Operators must operate in accordance with their OMP.
- (5) The OMP must be kept up-to-date and all amendments to the OMP must be approved by the TPA.
- (6) Operators must review their OMP annually.
- (7) Operators must provide training to staff, contractors and visitors in their roles and responsibilities as set out in the OMP.

2.3.1 Plant production

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the production unit including all of the following:
 - a) map with land valuation numbers or other unique identifiers for production areas including boundary lines, water supplies and buffer zones;
 - b) map of storage facilities;
 - c) areas of organic production per crop type;
 - d) areas used by livestock;
 - e) inputs planned to be used, including brand names, quantities and reason for use;
 - f) pest, disease and weed management practises; and
 - g) post-harvest handling activities.

- (2) Operators may manage a holding as a split production holding of clearly separated production units which are not all managed under organic production, with TPA approval and annual reassessment of the conversion plan. The OMP must include all of the following:
- a) type and location of non-organic crops;
 - b) storage facilities for non-organic inputs and products;
 - c) organic and non-organic harvest procedures;
 - d) procedures for ensuring separation between organic and non-organic products;
 - e) clean-down procedures for any equipment used for both organic and non-organic processes; and
 - f) a plan for converting the non-organic part of the holding.
- (3) In case of application for conversion to organics, operators must include the following in their OMP:
- a) an affidavit stating the date of the last application of prohibited substances on the area under conversion to organics; and
 - b) test results for prohibited substances that may potentially be present as background contamination in the soil.

2.3.2 Wild harvest

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must also include all of the following:
- a) map of the collection area;
 - b) the collection method; and
 - c) procedures for ensuring the volume collected will not deplete the collection area.
- (2) Where relevant, the OMP must also include a copy any permit for the collection.

2.3.3 Livestock production

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the production units including all the following:
- a) information required in clause 2.3.1 relating to pasture areas;
 - b) animal nutrition;
 - c) animal health disease prevention and veterinary treatments;
 - d) livestock welfare and husbandry practices;
 - e) livestock identification;
 - f) handling activities;
 - g) manure management, including installations for the storage of animal manure;
 - h) livestock buildings and storage facilities; and
 - i) equipment cleaning procedures.
- (2) Operators may manage a holding as a split production holding of clearly separated production units which are not all managed under organic production, with TPA approval and annual reassessment of the conversion plan. The OMP must include all of the following :
- a) species and number of non-organic animals;
 - b) organic areas grazed by non-organic animals and timing when such grazing takes place;
 - c) identification and segregation of non-organic animals at all stages of production;
 - d) storage facilities for non-organic inputs and products;
 - e) procedures for ensuring segregation of organic and non-organic products;
 - f) clean-down procedures for any equipment used for both organic and non-organic processes; and
 - g) a plan for converting the non-organic part of the holding.

2.3.4 Apiary production

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the holding including all of the following:
- a) number of hives;

- b) map of hive sites;
 - c) description of the bee foraging area;
 - d) disease prevention and veterinary treatments;
 - e) supplementary feeding;
 - f) honey extraction and production methods for other bee products;
 - g) storage facilities;
 - h) bee products handling facilities; and
 - i) equipment cleaning procedures.
- (2) Operators may run organic and non-organic beekeeping units in the same holding for the purpose of pollination activities, with TPA approval and annual reassessment of the conversion plan. The OMP must include all of the following:
- a) number of non-organic hives;
 - b) location of non-organic hives;
 - c) identification and segregation of non-organic hives, honey and other bee products at all stages of production;
 - d) storage facilities for non-organic products;
 - e) procedures for ensuring segregation of organic products and non-organic products;
 - f) clean-down procedures for any equipment used for both organic and non-organic processes; and
 - g) a plan for converting the non-organic part of the holding.

2.3.5 Aquaculture production

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the operation including all of the following:
- a) Map showing:
 - i) all organic aquaculture production sites;
 - ii) seed collection areas; and
 - iii) neighbouring non-organic activities, and other potential contamination sources, including land based contamination sources;
 - b) feed and nutrition of bivalve seed, where relevant;
 - c) aquaculture animal health disease prevention and veterinary treatments;
 - d) aquaculture animal welfare and husbandry practices;
 - e) aquaculture animal identification procedures;
 - f) aquaculture animal handling activities;
 - g) storage facilities for inputs and equipment;
 - h) equipment cleaning procedures;
 - i) an environmental assessment showing the conditions of the production unit and its immediate environment and likely effects of its operation;

Guidance

If the production unit has already been subject to an equivalent assessment, that assessment may be used for this purpose.

- j) water quality monitoring procedures;
 - k) procedures for monitoring the environmental effects of the operation on the surrounding environment; and
 - l) a waste reduction plan.
- (2) Operators may run organic and non-organic aquaculture units in the same holding, with TPA approval and annual reassessment of the conversion plan. The OMP must include all of the following:
- a) number of non-organic production units;
 - b) location of non-organic production units;

- c) identification and segregation of all production units, input storage facilities, and products at all stages of production;
- d) clean-down procedures for any equipment used for both organic and non-organic processes; and
- e) a plan for converting the non-organic part of the holding.

2.3.6 Algae

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the operation including all of the following:
 - a) an environmental assessment showing the conditions of the production unit and its immediate environment and likely effects of its operation;

Guidance

If the production unit has already been subject to an equivalent assessment, that assessment may be used for this purpose.

- b) water quality monitoring procedures;
 - c) procedures for monitoring the environmental effects of the operation on the surrounding environment;
 - d) procedures for monitoring biomass estimates; and
 - e) where algae are collected from a shared or common collection area,
 - i) map of the collection area;
 - ii) collection method; and
 - iii) documentary evidence produced by the relevant local authority showing that the total collection complies with relevant local requirements.
- (2) Operators may manage a holding as a split production holding of clearly separated production units which are not all managed under organic production, with TPA approval and annual reassessment of the conversion plan. The OMP must include all of the following:
 - a) type and location of non-organic facilities;
 - b) storage facilities for non-organic inputs and products;
 - c) organic and non-organic harvest procedures;
 - d) procedures for ensuring separation between organic and non-organic products;
 - e) clean-down procedures for any equipment used for both organic and non-organic processes; and
 - f) a plan for converting the non-organic part of the holding.

2.3.7 Processing and handling

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the operation. This must include all of the following:
 - a) processing facilities;
 - b) process for each product type;
 - c) packaging, including bottling;
 - d) labelling;
 - e) storage and storage facilities;
 - f) transport between operations; and
 - g) equipment cleaning procedures.
- (2) Operators may process and handle organic and non-organic products in the same operation, with TPA approval. The OMP must include all of the following:
 - a) procedures for separating organic and non-organic processing runs;
 - b) procedures for ensuring segregation of organic and non-organic products;
 - c) storage facilities for non-organic inputs and products; and
 - d) clean-down procedures for any equipment used for both organic and non-organic processes.

2.3.8 Alcoholic beverages

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the wine business including all of the following:
 - a) processing facilities;
 - b) production process for each product type;
 - c) packaging, including bottling;
 - d) labelling;
 - e) storage and storage facilities; and
 - f) equipment cleaning procedures.
- (2) Operators may make organic and non-organic alcoholic beverages in the same operation, with TPA approval. The OMP must include all of the following:
 - a) procedures for separating organic and non-organic products;
 - b) procedures for ensuring segregation of organic products and non-organic products;
 - c) storage facilities for non-organic inputs and products; and
 - d) clean-down procedures for any equipment used for both organic and non-organic processes.

2.3.9 Importing and exporting

- (1) In addition to the requirements in clauses 2.3(1) to (7), the OMP must provide a full description of the operation including all of the following:
 - a) procedures for ascertaining the organic status and market access eligibility of products back to their origin; and
 - b) procedures for recording the first destination of all organic consignments.

2.4 Record keeping

- (1) Operators must keep records of all activities described in the OMP including all of the following:
 - a) pest management, cleaning and sanitising activities;
 - b) need for use of agricultural compounds listed in Schedules 1-3 or food additives and processing aids listed in Schedule 4;
 - c) use of dispensation;
 - d) training records for personnel and sub-contractors;
 - e) records of all activities performed by subcontractors, if relevant;
 - f) relevant records for the specific type of operations described in clauses 2.4.1 - 2.4.8;
 - g) copy of any laboratory test results;
 - h) annual pre-season estimates of products collected, harvested, produced, or processed; and
 - i) quantities of organic products sold or supplied, including date, product description, and client.
- (2) For split production units, operators must keep records of:
 - a) all operations;
 - b) quantities of organic products harvested, produced or processed; and
 - c) quantities of non-organic products harvested, produced or processed.
- (3) Operators must maintain adequate record keeping to ensure that products can be tracked through the operation and between operations.
- (4) Operators must keep these records for at least 5 years.

2.4.1 Plant production

- (1) In addition to the requirements in clauses 2.4(1) to (4), operators must keep records of:
 - a) purchase of inputs including date, origin, brand, quantity;

- b) use of inputs including brand name, date of application, amount applied, reason and need for use, crop or area affected;
- c) harvest details including date, type and amount of harvested products,
- d) propagation material and seeds harvested; and
- e) crop rotation, if relevant.

2.4.2 Wild harvest

- (1) In addition to the requirements in clauses 2.4(1) to (4), operators must keep records of:
 - a) species collected;
 - b) collection dates;
 - c) name of the person responsible for the collection; and
 - d) quantity harvested.
- (2) Where relevant, any environmental quality monitoring activities, including dates and as relevant: observations or test results.

2.4.3 Livestock production

- (1) In addition to the requirements in clauses 2.4(1) to (4), operators must keep records required in clause 2.4.1 relating to pasture areas included in their OMP.
- (2) For animals brought onto the holding, the operator must document:
 - a) species and breed;
 - b) number of animals by age and sex;
 - c) name of the operation that supplied the animals;
 - d) date of arrival;
 - e) veterinary treatments received before stock enter into the holding;
 - f) current health and welfare status including lameness, broken tails and problems not previously treated in clause 2.4.3(2)e); and
 - g) organic status and market access eligibility.
- (3) For livestock included in the OMP, the operator must keep records of:
 - a) feed offered, including pasture and supplementary feed in clause 3.4.7(9) and 3.4.7(10);
 - b) access to free-range areas and movements from one grazing area to another;
 - c) health treatments including diagnosis, date of treatment, brand, dosage, method, duration and withholding periods;
 - d) livestock deaths and culls, with reasons where known; and
 - e) natural increase in herd size as a result of a breeding programme.
- (4) For animals leaving the holding, the operator must keep records of:
 - a) species and breed;
 - b) number of animals by age, sex and weight, if relevant;
 - c) date of departure;
 - d) destination; and
 - e) organic status and market access eligibility.

2.4.4 Apiary production

- (1) In addition to the requirements in clause 2.4(1) to (4), operators must keep records of:
 - a) inventory of hives, queen bees and swarms;
 - b) data on any hive movements;
 - c) purchase of inputs including date, origin, brand name, amount;
 - d) use of health treatments including brand name, date of application, dosage, method, duration, reason for use, hives affected;

- e) use of supplementary feeding including product type, brand, date of application, amount, reason, hives affected;
- f) honey extraction details including dates, types, quantities and process used;
- g) harvest details for any other apiary products; and
- h) details of production of other apiary products including dates, types, quantities and process used.

2.4.5 Aquaculture production

- (1) In addition to the requirements in clause 2.4(1) to (4), as relevant, operators must keep records of:
 - a) data obtained from environmental monitoring undertaken by the manager or Regional Council, including water temperature, oxygen content, pH, and the like;
 - b) origin of stock (juveniles and seed), including supplier details, date of arrival and any conversion periods;
 - c) locations and dates any wild bivalve seed was collected;
 - d) purchase of inputs including supplier details, date, brand name, amount;
 - e) disease prevention measures including details for fallowing, and cleaning equipment;
 - f) use of health treatments including brand name, date of application, dosage, method, duration, reason for use, production units affected;
 - g) use of techniques to manipulate light, temperature, oxygen levels, aeration, and the like;
 - h) instances of escapes, and efforts taken to recapture lost animals (if applicable);
 - i) livestock deaths and culls, with reasons where known;
 - j) harvest details including dates, types, lot identifications, quantities and process used; and
 - k) facility cleaning and equipment maintenance activities.

2.4.6 Algae

- (1) In addition to the requirements in clause 2.4(1) to (4), operators must keep records of:
 - a) history of harvesting activity for each species, including dates, locations, and quantities;
 - b) environmental quality monitoring activities, including dates and as relevant: observations or test results; and
 - c) for algae harvesting in open waters, biodiversity and biomass estimates before and after harvest operations.

2.4.7 Processing and handling

- (1) In addition to the requirements in clause 2.4(1) to (4), operators must keep records of:
 - a) inward raw materials, inputs and products, including quantities;
 - b) movement of any products to and from any third party packaging facilities;
 - c) outward products, including quantities;
 - d) sources and/or suppliers of raw materials; and
 - e) customers including organic certification and market eligibility details.

2.4.8 Alcoholic beverages

- (1) In addition to the requirements in clause 2.4(1) to (4), operators must keep records of:
 - a) inward raw materials, inputs and products, including quantities;
 - b) movement of any beverage product to and from any third party packaging facilities;
 - c) outward products, including quantities;
 - d) sources and/or suppliers of raw materials; and
 - e) customers including organic certification and market eligibility details.

2.4.9 Importing and exporting

- (1) Operators must keep records of all products under their control including type, quantity, labelling, certification body, and market access eligibility.

- (2) Operators must keep records of suppliers and customers.
- (3) Operators must keep records of organic product location and movements.
- (4) Operators must maintain records which ensure non-conforming products are traceable after dispatch as required in clause 2.5.

2.5 Traceability

- (1) Products must be traceable from the primary producer to the point of export. This means that each operator must be able to document:
 - a) the quantities of all types of products produced by the operation;
 - b) where products and inputs have been sourced from, including details of the organic certification and supplier, as relevant;
 - c) the market access eligibility and location of products while under their control; and
 - d) the first destination of the product after dispatch.

2.6 Sub-contracted activities

- (1) Operators must have a written agreement in place with any subcontractors carrying out activities under the OMP.
- (2) The agreement must cover:
 - a) access to relevant subcontracted premises and facilities for the purpose of the OMP verification by the TPA;
 - b) traceability procedures;
 - c) procedures to protect the organic integrity of the product; and
 - d) record keeping of all activities performed on behalf of the operator.

2.7 Imported inputs

- (1) Importers of organic inputs to be used in the preparation of processed products for export under the OOAP must be certified by, and registered with, a TPA to participate in the OOAP.
- (2) Operators using imported organic inputs in the preparation of processed products must ensure that such inputs are in conformance with the relevant provisions of the OMAR for the destination market.
- (3) Imported organic products trans-shipped through New Zealand are not eligible for official organic assurance.

2.8 Product identification and labelling

- (1) Product identification methods must ensure traceability in the supply chain from:
 - a) primary producer to the point of export, and
 - b) importer to the point of export.
- (2) The use of organic logos on any product requiring an official organic assurance must meet the importing markets requirements for use of that logo.
- (3) In all cases, organic label claims must clearly identify:
 - a) the TPA of the operator who has carried out the most recent preparation step of the product; and
 - b) the name or identification number of that operator.

Guidance

- All products must meet New Zealand labelling requirements first and foremost.
- Specific organic labelling requirements for different markets, including any use of logos, are set out in OMARs.

2.9 Official organic assurances

- (1) All products to be exported with an official organic assurance must be produced in accordance with the OMAR of the importing market.
- (2) Only exporters registered with MPI as organic exporters are eligible to export under the OOAP.
- (3) Exporters must apply to MPI for official organic assurance for all consignments exported under the OOAP.
- (4) The products in each consignment must be verified by a TPA as being eligible for an official organic assurance.
- (5) Each consignment must be:
 - a) registered by MPI according to the requirements set in the relevant OMARs; and
 - b) issued with an official organic assurance.
- (6) Only designated persons of registered organic exporters may apply to MPI for official organic assurances in accordance with 2.9(3).

Guidance

- OMARs specify the format of the official assurance required by the importing market.
- Exporters can register as organic exporters using the form on the MPI website.
- Registered organic exporters can designate persons to apply for official organic assurances using the form on the MPI website.

2.10 Reporting to the TPA

- (1) Operators must make annual production volumes, including a breakdown by production unit available to the TPA.
- (2) TPAs must conduct an annual reconciliation of volumes of inputs brought into an operation, products produced by the operation, and products in conformance with this Requirement leaving the operation.
- (3) Operators must notify the TPA of any incident that might affect the organic status or the market access eligibility of the product as soon as practical.

2.11 Management of non-conforming products

- (1) Operators must ensure that all products, including inputs, that are identified as non-conforming are isolated, appropriately labelled and secured against:
 - a) export with an official organic assurance; and
 - b) use as an input or ingredient in a processed product intended for export with an official organic assurance.
- (2) When an operator identifies an organic product as non-conforming, they must:
 - a) notify the TPA;
 - b) locate all non-conforming product in the supply chain;

- c) notify any client(s) to whom non-conforming product has been dispatched; and
- d) co-operate with the TPA in the investigation of the cause(s) of the non-conformance.

Draft for
Consultation

Part 3: Technical Requirements

3.1 General

Guidance

- Products produced under this Part must meet the relevant requirements under:
 - Agricultural Compounds and Veterinary Medicines Act 1997
 - Animal Products Act 1999
 - Animal Welfare Act 1999
 - Australia New Zealand Food Standard Code
 - Biosecurity Act 1993
 - Codes of Welfare issued under the Animal Welfare Act 1999
 - Fisheries Act 1996
 - Food Act 2014
 - National Animal Identification and Tracing Act 2012
 - Wine Act 2003
 - Other legislative requirements as relevant, including but not limited to the Resource Management Act 1991.
- Once conversion is complete, organic operations should not switch back and forth between organic and conventional management.

3.1.1 Inputs used in organic production

- (1) Unless specified otherwise in this Requirement, operators must only use inputs which are listed in Schedules 1 to 4 and Schedule 6 and which have been approved by the TPA as part of the operator's OMP.
- (2) The use of all inputs must be in accordance with the conditions set in this Requirement.

Guidance

TPAs can implement more restrictive conditions than set in this Requirement. The operator must conform with whichever requirement is higher.

- (3) Operators must take reasonable steps to seek out and secure a reliable supply chain for organic inputs.

3.1.2 Pest management

- (1) Operators must implement suitable pest management measures.
- (2) Pest management practices must be based on the following order:
 - a) prevention;
 - b) physical methods; and then
 - c) non-physical methods approved by the TPA.
- (3) The performance of the measures in clause 3.1.2(1) must be monitored and recorded.
- (4) Pest management must be performed in a way that does not compromise the organic integrity of the organic products.

3.1.3 Cleaning and sanitising

- (1) Operators must have and implement procedures for clean-down of any equipment used for both organic and non-organic products.

- (2) An intervening step must be performed between the use of cleaners and sanitisers on surfaces in contact with organic products. This intervening step must be sufficient to protect the organic integrity of the organic product.
- (3) The performance of the activities in clause 3.1.3(1) must be monitored and recorded.
- (4) For organic production in aquatic environments, cleaners and sanitisers must not have adverse ecological effects.

3.1.4 Handling and packaging

- (1) Operators must implement procedures which segregate organic and non-organic products, and prevent the contamination of organic products with non-organic products and prohibited substances.
- (2) Operators must not use or reuse packages, unless such packages have been thoroughly cleaned and pose no risk of compromising the organic integrity of organic products.
- (3) In the case of non-dedicated handling operations, operators must ensure that any products that do not conform with this Requirement are stored and handled separately.
- (4) Permitted storage and treatment techniques include controlled atmosphere, temperature, and humidity regulation.

3.1.5 General prohibitions

- (1) GMOs and their derivatives are prohibited, except for veterinary medicinal products.
- (2) Irradiation is prohibited for use as a treatment of organic products.

3.1.6 Emergency pest or disease treatment

- (1) Where a substance not permitted by this Requirement has been used under legislative direction or a mandatory pest or disease treatment programme, operators must:
 - a) notify their TPA of the mandatory direction as soon as practicable; and
 - b) discuss, develop and document an appropriate risk mitigation plan with their TPA.
- (2) The TPA must make a decision regarding the on-going certification status of affected operations.
- (3) Following consultation with MPI, the TPA may allow products from affected operations to continue to be marketed as organic provided residues of the substance are not detectable.

3.2 Plant production

3.2.1 Conversion

- (1) The relevant provisions of this Requirement must have been applied on the parcels of land during a period of:
 - a) at least 2 years before sowing; or
 - b) in the case of pasture, at least 2 years before any product is marketed as organic feed; or
 - c) in the case of perennial plants other than pasture, at least 3 years before the harvest of products to be exported with an official organic assurance.
- (2) The conversion period starts when the Operator files an OMP with the TPA showing how this Requirement will be met.
- (3) The conversion period may include a period of up to 12 months immediately before the lodgement of the OMP. The operator must apply to the TPA for approval, and the TPA must apply to MPI for authorisation to recognise this prior conversion period. The following conditions must be met:
 - a) the land has been:

- i) a natural or fallow agricultural area; or
 - ii) under active organic management, and only inputs listed in Schedules 1 and 2 have been applied to the land; and
- b) the land has been under the oversight of a TPA for a period of 12 months from the lodgement of the OMP and a minimum of 2 on-site verifications have been completed; and
- c) the TPA is confident at the end of the 12 month period that the operator is able to conform with this Requirement; and
- d) the TPA can prove that clauses 3.2.1(3)a) to 3.2.1(3)c) have been met, by providing the following evidence:
 - i) affidavit of last application of prohibited substances; and
 - ii) the most recent TPA verification report; and
 - iii) satisfactory soil test results for background contamination of persistent compounds; and
 - iv) any other relevant information requested by the TPA.
- (4) The re-conversion period of land which has already been converted, or was in the process of conversion, and has been treated with a product not included in Schedule 2 as part of a mandatory pest or disease control scheme or, scientific tests approved by MPI may be reduced. Operators must apply to the TPA for approval, and the TPA must apply to MPI for authorisation for this reduction in conversion period.
- (5) Any request for reduction in the re-conversion period under clause 3.2.1(4) must be based on prohibited substances not being detected in the products deriving from the treated land.

Guidance

The TPA may, in consultation with MPI, extend the conversion period in certain cases where the land has been contaminated with products that do not conform with this Requirement.

3.2.2 Split production

- (1) Operators may manage split production holdings provided that:
 - a) the Requirements in clauses 2.3.1(2) and 2.4(2) are met;
 - b) different species or varieties of plants which are easily and obviously distinguishable are involved;
 - c) the organic and non-organic units are managed separately;
 - d) non-organic activities are separated in space or time from organic activities; and
 - e) handling and harvesting activities are carried out only after suitable cleaning of the equipment.

3.2.3 Soil fertility

- (1) The fertility of the soil must be maintained or improved by:
 - a) cultivation of green manures and appropriate crop rotation;
 - b) incorporation of animal manure and products from organic animal production, preferably composted; and
 - c) incorporation of other (non-animal) material from organic production units, preferably composted.

Guidance

- Soil management practices should include tillage and cultivation practices that maintain or increase soil organic matter, biological activity, enhance soil stability and soil biodiversity prevent soil compaction and erosion.
- For perennial crops where a rotation is not possible, a diverse ecosystem should be created and maintained by such means as companion planting, under sowing, mixed cropping, creating wildlife refuges, and the like.

- (2) Where adequate soil fertility cannot be maintained by the methods set out in clause 3.2.3(1), fertilisers and soil conditioners listed in Schedule 1 may be applied, as a complement to the methods in clause 3.2.3(1).
- (3) Composts, soil conditioners and mulches must meet the physical, chemical and biological criteria set out in the current version of NZS 4454 (New Zealand Standard - Composts, Soil Conditioners and Mulches).
- (4) The use of manure and/or animal excrements must not result in the amount of nitrogen per hectare per year (N/ha/yr) exceeding the limit set by relevant local regulations, and in any case not exceed 170 kg N/ha/year.
- (5) Synthetic nitrogen fertilisers are prohibited.
- (6) Hydroponic production methods must not be used.

Guidance

Where livestock are an integral part of the operation, Table 5.1 of Schedule 5 provides the recommended stocking rates to facilitate meeting the requirement in clause 3.2.3(4).

3.2.4 Seeds and vegetative propagating material

- (1) Seeds and vegetative propagation material must come from parent plants that have been produced in conformance with this Requirement for at least 12 months before propagules are considered organic.
- (2) Non-organic seed or vegetative propagating material in the following order of preference may be used if certified organic material is not available, subject to the conditions in clause 3.2.4 (3):
 - a) untreated material from a production unit in conversion to organic farming;
 - b) untreated non-organic material;
 - c) non-organic material treated with a product listed in Schedule 2; and then
 - d) with MPI authorisation, material treated to meet New Zealand import requirements.
- (3) The conditions for using non-organic seed or vegetative propagating material allowed in clause 3.2.4 (2) are:
 - a) Operators must request TPA approval to use this material;
 - b) Operators must demonstrate to the TPA that material of a higher order of preference is not available; and
 - c) Operators must demonstrate to the TPA that access to this material is necessary for the continuity of production.
- (4) Edible sprouts must only be produced from seeds from certified organic plants.
- (5) Non-organic planting stock must be managed in conformance with this requirement for at least 12 months before harvested products can be exported with an official organic assurance.
- (6) Seeds and vegetative propagating material may temporarily be grown in containers, before transplanting for on growing to produce products that may be eligible for official organic assurances. This material may be supplied to other operators participating in the OOAP.

3.2.5 Pest, disease and weed management

- (1) The operator must use management practices to prevent crop pests, weeds, and diseases by a combination of the following measures:
 - a) crop rotation and soil and crop nutrient management practices;
 - b) sanitation measures to remove disease vectors, weed seeds, and habitat for pest organisms;
 - c) management practices which suppress the spread of disease organisms; or
 - d) selection of plant species and varieties with regard to the suitability of site-specific conditions and resistance to prevalent pests and diseases.

- (2) Pests, diseases and weeds may be controlled through a combination of the following measures:
- biological control;
 - development of habitat for natural enemies of pests;
 - rotation programmes;
 - mechanical controls such as barriers, light and sound;
 - non synthetic repellents;
 - mechanical cultivation;
 - mulching with biodegradable materials;
 - mowing and hand weeding; or
 - grazing of animals.
- (3) Traps and dispensers may be used, but must be collected after use and disposed of safely. They must be designed in such a way to prevent any substances coming in contact with organic crops or being released into the environment.
- (4) Soil solarisation may be performed, provided any plastic is re-used and recycled responsibly once it has deteriorated beyond use.
- (5) Flame or steam weeding of emerged plants must be carried out using mobile units which minimise soil damage.
- (6) Products referred to in Schedule 2 may be used only when the appropriate measures in clause 3.2.5(1, 2 and 3) have failed.

3.3 Wild harvest

Guidance

- This section covers:
 - gathering of plants, plant products and fungi from the wild.
 - gathering of aquatic plants grown in the riparian zone where the land and water meet.
 - collecting beach cast seaweed for own use in composts.
- Wild terrestrial animals are not covered by this Regulation.
- Wild collection of spat for aquaculture and algae production are covered separately in the sections for aquaculture (3.6) and algae (3.7)

- (1) Edible plants, plant products, including aquatic plants and fungi which have grown spontaneously in natural or agricultural areas, including aquatic plants growing close to the seashore or bordering other aquatic environments, may be eligible for an official organic assurance provided that:
- the collection area is clearly defined;
 - the operator managing the collection is clearly identified and familiar with the collection area;
 - the collection area has not received any treatment with prohibited substances for a period of three years before products are gathered or collected;
 - the collection area is at an appropriate distance from conventional farming, conventional farming run-off, pollution and contamination; and
 - the collection activity does not affect the stability of the natural habitat or the maintenance of the species in the collection area and does not damage the environment.

3.4 Livestock production

3.4.1 General

- (1) The use of livestock production systems which are not pasture based is prohibited.
- (2) Animals and animal products must be identified at all stages of their production, preparation, transportation and marketing.

- (3) Identification techniques must be appropriate to each species. Existing (permitted) animal identification formats already in use may be used.

Guidance

Recommended best practice guidance in relevant Animal Welfare Codes of Practice should be followed where ever practicable.

3.4.2 Split production

- (1) Operators may manage split production holdings provided that:
- the requirements in clauses 2.3.2(2) and 2.4(2) are met;
 - the non-organic animals are reared on units where the buildings and parcels are separated clearly from the units where organic animals are reared; and
 - organic and non-organic animals belong to easily and obviously distinguishable breeds.
- (2) Animals not reared in conformance with this Requirement may use the pasture of conforming organic units. The operator must apply to the TPA for approval. This approval is subject to the following:
- these animals have not been fed feed containing GMO or antibiotics; and
 - animals reared in conformance with this Requirement are not present on this pasture at the same time.

Guidance

- The TPA may require reasonable sanitary (health) quarantine measures for all animals brought into the unit from units not conforming with this Requirement.
- Consideration should also be given to the risk of introducing weed seeds to the organic production area.

3.4.3 Conversion of land

- (1) The whole land area of the unit used for feed production must comply with this Requirement, using the conversion periods in clause 3.2.1.
- (2) The conversion period starts when the Operator files an OMP with the TPA showing how this Requirement will be met.
- (3) The conversion period for non-herbivores may be reduced. The operator must request TPA approval for this reduction in conversion period. The reduced conversion periods are:
- 12 months for pasture, open air runs and exercise areas; or
 - 6 months where the land has not been treated with products other than those allowed in Schedules 1 and 2, for the previous 12 months.

3.4.4 Conversion of animals

- (1) To be eligible for official organic assurance, animals must be reared according to this Requirement for at least:
- 12 months in the case of equine, cervine, bovines and ratites for meat production, and in any case at least three quarters of their lifetime;
 - 6 months in the case of small ruminants and porcine;
 - 6 months in the case of animals for milk production;
 - 10 weeks for poultry for meat production, brought in before they are 3 days old; or
 - 6 weeks in the case of poultry for egg production.
- (2) Animals and animal products produced during the conversion period must not be marketed as organic.

3.4.5 Simultaneous conversion of land and animals

- (1) Where the whole production unit is converted simultaneously, products from non-organic animals present on a holding at the beginning of the conversion period may be marketed as organic once the whole production unit has completed conversion.
- (2) The total combined conversion period for the existing animals, their offspring, pasturage and any land used for animal feed production may be reduced to 24 months if the animals are predominantly fed with products from the same production unit.
- (3) Stock born during the conversion period under simultaneous conversion, can be marketed as organic for meat when the 24 months conversion period is completed.

3.4.6 Origin of animals

- (1) The choice of breeds must take into account the capacity of animals to adapt to local conditions and the farming system, their vitality, and their resistance to disease.
- (2) Animals born and raised on fully converted production units in conformance with this Requirement may be brought in.
- (3) Animals not conforming with this Requirement which were present on the production unit before the beginning of the conversion period can be converted. The operator must apply to the TPA for approval to convert these animals. The requirements in clause 3.4.4 must be met.
- (4) When a herd or flock is constituted for the first time, non-organically reared animals may be brought into an organic production unit, subject to the following conditions:
 - a) bovine, equine and cervine species must be reared according to this Requirement as soon as they are weaned and must be less than six months old at the date on which they enter the herd;
 - b) ovine and caprine species must be reared according to this Requirement as soon as they are weaned and must be less than 60 days old at the date on which they enter the herd; or
 - c) porcine species must be reared according to this Requirement as soon as they are weaned and weigh less than 35 kg at the date on which they enter the herd.
- (5) Poultry for egg production and meat production may be brought in, with TPA approval, subject to the following conditions:
 - a) the animals are less than 3 days old; and
 - b) the operator can show that organically reared animals are not available in sufficient numbers.
- (6) Non-organic adult male and nulliparous female mammals may be brought on to an organic unit to renew a livestock herd. The operator must apply to the TPA for approval to bring on these animals. This approval is subject to the following:
 - a) organically reared animals are not available in sufficient numbers;
 - b) for production units with 10 or more animals, the number of female mammals is limited to an annual maximum of
 - i) 10% of adult bovine, equine or cervine animals; or
 - ii) 20% of the adult porcine, ovine or caprine animals.
 - c) for production units with less than 10 equine, bovine or cervine animals, or with less than five porcine, ovine or caprine animals, any renewal is limited to a maximum of one animal per year;
 - d) non-organic adult male mammals brought in for breeding purposes must be managed in accordance with this Requirement while they are on the organic property; and
 - e) the use of this clause must be kept to a minimum and be limited in time.

Guidance

The TPA may require reasonable sanitary (health) quarantine measures for all animals brought into the unit from units not conforming with this Requirement.

- (7) The maximum percentage of non-organic nulliparous female mammals in clause 3.4.6(6)b) may be increased to 40%. The operator must apply to the TPA for approval to utilise this maximum percentage. The TPA must apply to MPI for authorisation for the increase, and this will only be considered in the following cases:
- a) when a major extension to the farm is undertaken; or
 - b) when a breed is changed; or
 - c) when a new animal specialisation is being developed.
- (8) A herd or flock may be renewed or reconstituted with non-organic animals where health or adverse events cause high mortality of animals. Operators must apply to the TPA for approval to renew or reconstitute the herd or flock. The TPA must apply to MPI for authorisation for these animals. The operator must demonstrate that:
- a) organically reared animals are not commercially available; and
 - b) this is a temporary measure necessary to ensure access to live animals.

Guidance

The TPA, in consultation with MPI, may set a time frame within which this approval/authorisation must be used.

3.4.7 Feed

- (1) Livestock must be fed organically produced feed.
- (2) Animals of all ages must receive sufficient quantities of organic food and nutrients to enable each animal to:
- a) maintain good health;
 - b) meet their physiological requirements; and
 - c) minimise metabolic and nutritional disorder.
- (3) When the body condition score of any animal falls below that which is appropriate for that species as described in any relevant Animal Welfare Code of Practice, urgent remedial action must be taken to improve condition.
- (4) Feeding must be managed so that any injury and/or conditions resulting in ill health, as a consequence of the food or feeding methods are minimised.
- (5) Feed must come from the same organic unit or, when this is not possible, from other operations conforming with this Requirement.
- (6) For herbivores, at least 60% of the feed must come from the organic unit itself.
- (7) Up to 30% of the feed ration on average may comprise in-conversion feeds.
- (8) When the in-conversion feeds come from within the organic unit, this percentage can be increased to 100%.
- (9) The following materials may be used as supplementary feed:
- a) non-organic spices, herbs and molasses, up to 1% of the feed ration calculated annually as a percentage of dry matter of feed from agricultural origin;
 - b) products from sustainable fisheries, subject to the following conditions:
 - i) they are processed without the use of chemical solvents;
 - ii) their use is restricted to non-herbivores; and
 - iii) the use of fish protein hydrolysate is restricted solely to young animals.
 - c) salt as sea salt or rock salt.

Guidance

Where it is necessary to destroy an animal, it should be done promptly, safely and humanely.

- (10) The materials in Schedule 3 may only be used for the function and under the specific conditions listed.
- (11) Synthetically derived vitamins A, D and E may be used for ruminants. Operators must apply to the TPA for approval, and the TPA must apply to MPI for authorisation for the use of these vitamins. The operator must demonstrate that:
 - a) the health and welfare of the animals cannot be guaranteed without their use; and
 - b) they are identical to non-synthetic vitamins.
- (12) The feeding of young mammals must be based on natural milk, preferably maternal milk. All mammals must be fed on natural milk for a minimum period, depending on the species concerned:
 - a) 90 days for bovines, cervines, and equines;
 - b) 45 days for ovines and caprines;
 - c) 40 days for porcines.
- (13) If young mammals require feed from other sources to meet clause 3.4.7(2), this feed must be provided.
- (14) Operators may reduce the period for which young mammals must be fed natural milk where the rearing systems use supplementary feed in the form of fresh and dry grass as well as milk, with TPA approval.
- (15) Feeding systems for herbivores must be based on maximum use of grazing according to the availability of pastures in the different periods of the year, except where restricting an animal to pasture alone does not meet the requirements of clause 3.4.7(2).
- (16) At least 60% of the dry matter in daily rations of herbivores must consist of roughage, fresh or dried fodder, or silage.
- (17) Operators may request TPA approval for a reduction in use of grazing to 50% for animals in dairy production for a maximum period of 90 days in early lactation to allow an increase in supplementary feed with materials listed in clause 3.4.7(9).
- (18) For porcine species and poultry, a limited proportion of conventional protein feed of agricultural origin may be used where organic protein feed is not available on the market. Operators must apply to the TPA for approval, and the TPA must apply to MPI for authorisation to use this feed. Use of this feed will be subject to the following conditions:
 - a) such dispensations must be kept to a minimum, and must be limited in time;
 - b) non-organic feed materials must not be produced or prepared with the use of chemical solvents; and
 - c) the maximum percentage of conventional protein feed authorised per 12 month period is 5%. These figures must be calculated annually as a percentage of the dry matter of feed from agricultural origin.
- (19) Operators must have contingency plans in place for normal variations in climatic conditions.

Guidance

Normal variations in climatic conditions are those that do not cause the Minister for Primary Industries to declare an adverse event.

- (20) Conventional feeds may be used for a limited period, in a specified area. Operators must apply to the TPA for approval, and the TPA must apply to MPI for authorisation to use these conventional feeds. Use of this feed will be subject to the following conditions:
 - a) forage production is lost as a result of an adverse event as declared by the Minister for Primary Industries; and
 - b) the health of the animals is at risk.

- (21) Where porcine species and poultry are housed, roughage, fresh or dried fodder, or silage must be added to the daily ration.
- (22) Animals being moved on foot from one grazing area to another may graze on non-organic land, provided this is kept to a minimum.
- (23) Force-feeding and feed deprivation are prohibited.
- (24) Antibiotics, coccidiostats, medicinal substances, growth promoters or any other synthetic substance intended to stimulate growth or production must not be used in organic feed.

3.4.8 Health management

- (1) Operators must have effective preventative measures in place to minimise the occurrence of diseases.
- (2) Disease prevention must be based on the following principles:
 - a) selection of appropriate breeds or strains;
 - b) application of animal husbandry practices appropriate to the requirements of each species;
 - c) handling that minimises stress;
 - d) use of high quality feedstock, including mineral supplements where necessary;
 - e) allowance for regular exercise and access to grazing;
 - f) appropriate density to avoid overstocking;
 - g) adequate housing maintained in hygienic conditions, including clean bedding; and
 - h) use of herbal and homeopathic preparations.
- (3) Where ill-health or injury is identified, appropriate remedial action must be taken. Professional advice must be sought where there is any significant injury or disease, or if a problem persists.
- (4) Treatment must not be withheld where it will result in unnecessary pain and suffering of the livestock, even if this will result in the animal losing its organic status.
- (5) Non-synthetic remedies must be used in preference, provided that their therapeutic effect is effective for the species of animal, and the condition for which the treatment is intended.
- (6) If non-synthetic remedies are not effective, veterinary medicines, including antibiotics, may be used under the responsibility of a veterinarian.
- (7) Hormones may be administered, under the responsibility of a veterinarian, only to individual animals, and only for therapeutic purposes.
- (8) Mandatory veterinary medicines must be administered when a disease risk has been identified as present in a specific area in which the production unit is located.
- (9) Treated animals must be clearly identified, individually where possible or by batch in the case of poultry. Existing animal identification formats may be used.
- (10) The withholding period must be twice the label withholding period or, where this period is nil or is not specified, 48 hours.
- (11) Animals that receive more than a maximum number of courses of treatment with registered veterinary medicines based on productive lifecycle are not eligible for official organic assurances. The maximum numbers are:
 - a) for animals with a productive lifecycle greater than one year: three courses of treatment;
 - b) for animals with a productive lifecycle less than one year: one course of treatment.
- (12) Animals that have received more than the number of treatments specified in clauses 3.4.8(11) and 3.4.8(12) must be reconverted in accordance with clause 3.4.4(1) if they are to remain in the organic herd.
- (13) The following treatments are excluded from the number of treatments counted in clause 3.4.8(11) and 3.4.8(12):
 - a) mandatory vaccinations;

- b) treatments for parasites; and
 - c) treatments under compulsory eradication schemes.
- (14) The use of synthetic veterinary medicines or antibiotics for preventive treatments is prohibited.
- (15) The use of substances to promote growth or production, including antibiotics, coccidiostats and other artificial aids for growth promotion purposes, is prohibited.
- (16) The use of hormones or similar substances to control reproduction (for example, induction or synchronisation of oestrus) is prohibited.

3.4.9 Breeding

- (1) Reproduction of organically reared animals should be based on natural methods.
- (2) Artificial insemination using species appropriate methods is permitted.
- (3) Hormones cannot be used to control reproduction.
- (4) Other forms of artificial or assisted reproduction (for example embryo transfers) are prohibited.

3.4.10 Painful husbandry procedures

- (1) Only painful husbandry procedures that meet species specific animal welfare recommended best practise may be carried out. The operator must apply to the TPA for approval to carry out these procedures.

3.4.11 Access to pasture and free-range areas

Guidance

New Zealand's sheep, dairy and beef cattle farming systems are primarily based on year-round grazing on pastures, avoiding the need for housing.

- (1) Animals must have access to an outdoor area or pasture.
- (2) Herbivores must have access to grazing whenever conditions allow.
- (3) Outdoor stocking densities must be appropriate to:
 - a) the species concerned, their stage of development and their behavioural needs;
 - b) ensure integrated management of livestock and crop production on the production unit;
 - c) avoid problems of over-grazing and soil erosion; and
 - d) meet the nitrogen limit in clause 3.2.3(4).
- (4) Any form of pollution, in particular of the soil, and of surface and ground water, must be minimised.
- (5) Free-range, open-air exercise areas, or open-air runs must provide sufficient protection against rain, wind, sun and extreme temperatures, appropriate for the local weather conditions and the breed concerned.
- (6) Where animal manure is collected for spreading on the holding, storage facilities for animal manure must be designed in such a way as to prevent pollution of the soil and water. They must have the capacity necessary for the entire period they are required.

3.4.12 Housing

- (1) Livestock may be temporarily confined during periods of inclement weather when their health, safety or wellbeing could be jeopardised.
- (2) Housing conditions for animals must meet species specific animal welfare recommended best practise.
- (3) Stocking densities in buildings must meet species specific animal welfare recommended best practise.

- (4) Operators must meet the stocking densities, minimum surface areas and other characteristics of livestock housing set out in Tables 5.2 and 5.3 of Schedule 5.
- (5) Animal buildings, installations, equipment and utensils must be properly cleaned and sanitised to prevent infection and the build-up of disease-carrying organisms.
- (6) Faeces, urine and uneaten or spilt feed must be managed to preserve health and welfare, minimise smell and to avoid attracting insects or rodents.
- (7) For mammalian species:
 - a) animal housing must have smooth, but not slippery floors. At least half of the total floor area must be solid, not of slatted or of grid construction. Slatted or grid areas must not be made of materials that could cause damage to the feet of the animal.
 - b) animal housing must have a clean and dry laying/rest area of sufficient size. Ample dry bedding strewn with litter material must be provided in the rest area. The litter must comprise straw or other suitable natural material.
 - c) the litter may be improved and enriched with any mineral product listed in Schedule 1.
 - d) edible bedding materials must be produced in conformance with this Requirement.
- (8) Rodenticides (in traps), and the products listed in Schedule 2, can be used for the control of pests in buildings and other installations where livestock is kept.

3.4.13 Transport and slaughter

- (1) Transport of animals must follow species specific animal welfare recommended best practise.
- (2) The use of any type of electrical stimulation to coerce the animals is prohibited.
- (3) The use of any tranquilliser before, and during transport, is prohibited, unless withholding tranquilliser compromises the animal's welfare.
- (4) The slaughter of livestock must follow species specific animal welfare minimum standards and any relevant recommended best practises.

3.4.14 Specific rules for bovine production

- (1) Farming of bovine livestock must conform with all other relevant sections of this Requirement.
- (2) Only the final fattening phase of adult bovines for meat production may take place indoors, provided that this indoors period does not exceed one fifth of their lifetime, and in any case only for a maximum period of 90 days.

Guidance

- Use of feedlots for organic production systems should not be allowed; feedlots are not considered to be a 'pasture based' system
- Dairy production includes milking sheds, and storing of raw milk before transport.
- Dairy production does not include processing raw milk into dairy products.
- There are no additional specific rules for dairy production at this time.

3.4.15 Specific rules for ovine production

- (1) Farming of sheep shall comply with all other relevant sections of this Requirement.

Guidance

There are no additional specific rules for production of meat or milk.

- (2) For wool to be organic, the sheep must:

- a) have been managed in accordance with this Requirement for at least six months before shearing; and
 - b) not have received treatments for external parasites in the previous three months .
- (3) The requirements of 3.4.13 apply, in cases where sheep must be transported to shearing facilities.
- (4) Where sheep must be transported to non-organic properties for shearing, the following conditions apply:
 - a) provisions must be made to ensure sufficient organic feed is provided; and
 - b) animals not reared in conformance with this Requirement are not present at the same time.

3.4.16 Specific rules for caprine production

- (1) Farming of goats shall comply with all other relevant sections of this Requirement.

Guidance

- Dairy production includes milking sheds, and storing of raw milk before transport.
- Dairy production does not include processing raw milk into dairy products.
- There are no additional specific rules for goat production.

3.4.17 Specific rules for porcine production

- (1) Farming of pigs shall comply with all other relevant sections of this Requirement.
- (2) At least 30 % of the feed shall come from the organic unit itself.
- (3) Sows must be kept in groups, except in the last stages of pregnancy and during the suckling period, during which time the sow must be able to move freely in her pen and her movement shall only be restricted for short periods;
- (4) Exercise areas must permit dunging and rooting by the animals.

3.4.18 Specific rules for cervine production

- (1) Farming of deer shall comply with all other relevant sections of this Requirement.

Guidance

There are no additional specific rules for deer production.

3.4.19 Specific rules for equine production

- (1) Farming of horses shall comply with all other relevant sections of this Requirement.

Guidance

There are no additional specific rules for horse production.

3.4.20 Specific rules for avian production

- (1) Poultry must be reared in free-range conditions.
- (2) Poultry must have access to outdoor runs whenever weather conditions allow, and must have such access for at least one-third of their life.
- (3) Water fowl must have access to water bodies such as streams, ponds or lakes.
- (4) Buildings for poultry must meet the following minimum conditions:

- a) at least one third of the floor area must be solid, that is, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf;
 - b) slatted or grid areas must not be made of materials that could cause damage to the feet of the poultry;
 - c) edible litter materials must be produced in conformance with this Requirement;
 - d) poultry houses for laying hens must include a surface for pecking and scratching, a secluded rest area and sufficient floor area for the collection of bird droppings;
 - e) buildings must have perches of a size and number appropriate for the size of the group, and not less than the minimum set in Table 5.3 of Schedule 5;
 - f) buildings must have openings provided that are wide enough to enable chickens to freely move to and from the outdoors at all times without the risk of smothering or injury; and
 - g) the density in each poultry house must be adequate for the birds to exhibit their natural behaviour, and in any case, not be less than the minimum set in Table 5.3 of Schedule 5.
- (5) Natural light may be supplemented by artificial means to provide a maximum of 16 hours light per day with a continuous nocturnal rest period without artificial light of at least eight hours.
- (6) Outdoor runs must:
- a) be covered mainly with vegetation;
 - b) provide protective facilities; and
 - c) permit animals to have easy access to adequate water and food.
- (7) Between batches of poultry:
- a) buildings must be emptied of animals;
 - b) buildings and fittings must be cleaned and sanitised; and
 - c) outdoor runs must be left empty to allow vegetation to grow back.
- (8) The requirements in 3.4.20 (7) do not apply where poultry are not reared in batches, are not kept in runs and are free to roam throughout the day.

3.4.21 Specific rules for ratite production

- (1) Farming of ratites shall comply with all other relevant sections of this Requirement.

Guidance

There are no additional specific rules for ratite production.

3.5 Apiary production

3.5.1 Characteristics of hives and materials used in beekeeping

- (1) Hives must be made of natural materials presenting no risk of contamination to the environment or the apiary products.
- (2) Only natural products may be used in the hives, with the exception of the synthetic products listed in clause 3.5.7(7).
- (3) Beeswax for new foundations must come from organic production units.
- (4) Beeswax from non-organic production units may be used for new installations or during the conversion period. The operator must apply to the TPA for approval to use this beeswax. This approval is subject to the following conditions:
- a) organically produced beeswax is not available on the market;
 - b) the non-organic wax is free of contamination by substances not conforming with this Requirement; and
 - c) the non-organic wax comes only from the cap.

- (5) The protection of frames, hives and combs from pests, must be done in accordance with clause 3.1.2.

Guidance

Physical treatments such as steam or direct flame may be used.

3.5.2 Conversion

- (1) The hives must be managed in conformance with this Requirement for at least 12 months.
- (2) The conversion period starts when the Operator files an OMP with the TPA showing how this Requirement will be met.
- (3) The wax must be replaced as set out in clause 3.5.1(3).

3.5.3 Split production

- (1) Operators may run organic and non-organic beekeeping units in the same holding for the purpose of pollination activities provided that:
- a) the requirements in clauses 2.3.3(2) and 2.4(2) are met; and
 - b) organic and non-organic hives must be easily and obviously distinguishable.

3.5.4 Origin of the bees

- (1) The ability of bees to adapt to local conditions, their vitality and their resistance to pests and diseases must be taken into account when choosing a breed.
- (2) Apiaries must be constituted by one of the following methods:
- a) division of existing colonies managed in conformance with this Requirement; or
 - b) acquisition of swarms; or
 - c) hives from apiaries managed in conformance with this Requirement.
- (3) Existing apiaries in the production unit that have not been managed in conformance with this Requirement may be converted. The operator must apply to the TPA for approval to convert these apiaries. The requirements in clause 3.5.2 must be met.
- (4) For the renewal of the organic apiaries, 10% per year of the queen bees and swarms may be replaced by queen bees and swarms not conforming to this Requirement. The queen bees and swarms must be placed in hives with combs or comb foundations coming from units in conformance with this Requirement. In this case, the conversion period does not apply.
- (5) Organic apiaries may be reconstituted with non-organic bees. The operator must apply to the TPA for approval, and the TPA must apply to MPI for authorisation to use these non-organic bees. The operator must demonstrate that:
- a) organic apiaries are not available and high mortality of animals is caused by health or adverse events;
 - b) this dispensation is necessary to allow organic production to continue or recommence; and
 - c) use of this dispensation is kept to a minimum and is limited in time.

3.5.5 Location of the apiaries

- (1) Apiaries must not be sited in areas that are potential sources of contamination with substances not permitted in this Requirement.

Guidance

Beekeeping in conformance with this Requirement may not be practicable in some areas.

- (2) During the nectar or honeydew flow period the location of apiaries must:

- a) ensure enough natural nectar, honeydew, pollen sources and access to water; and
- b) ensure that nectar and pollen sources within a 3km radius of the apiary site consists essentially of:
 - i) organic crops;
 - ii) spontaneous vegetation; or
 - iii) non-organic crops treated with low environmental impact methods.

3.5.6 Feed

- (1) At the end of the production season, hives must be left with sufficient reserves of honey and pollen to survive until the start of the next nectar or honeydew flow period.
- (2) Organic honey, organic molasses or organic sugar may be used as supplementary feed for bee colonies after the end of the production season where the survival of the hives is endangered. The operator must apply to the TPA for approval to use this supplementary feed.

Guidance

This provision is restricted to the dormant (non-productive) season. That is, from the end of the last honey harvest after honey supers have been removed until the beginning of the following nectar/honeydew flow period and before honey supers are placed onto the hive.

- (3) Supplementary feed products other than organic honey, organic pollen, or organic sugar must not be used.
- (4) Organic honey, organic pollen or organic sugar may be used as supplementary feed where adverse events hamper normal nectar or honeydew flow. Operators must apply to the TPA for approval, and the TPA must apply to MPI for authorisation to use this supplementary feed. Honey from this production season is not eligible for official organic assurance.
- (5) For organic queen bee production, operators may request TPA approval for the feeding of organic sugars for temporary periods throughout the year when survival of the nucleus beehive is endangered. Where this practice is used between the start of the nectar or honeydew flow period and until the end of the production season, honey from these hives is not eligible for an official organic assurance.

3.5.7 Health management

- (1) Operators must have preventative measures in place to minimise the occurrence of disease.
- (2) Disease prevention must be based on the following principles:
 - a) the selection of appropriate breeds taking into account their capacity to adapt to local conditions, their vitality, their resistance to disease; and
 - b) the application of management practices encouraging strong resistance to disease and the prevention of infections.

Guidance

Management practices may include:

- renewal of queen bees;
- systematic inspection of hives to detect any health anomalies;
- control of drone brood in the hive;
- monitoring the level of *Varroa destructor* in hives, and efficacy of any treatments used;
- cleaning and sanitising of materials and equipment at regular intervals;
- destruction of contaminated materials or sources;
- regular brood comb replacement and renewal of beeswax;
- sufficient reserves of pollen and honey in hives;
- use of entrance reducers during robbing season(s) to minimise potential spread of disease

- moving diseased hives to isolated areas/quarantine apiaries, if necessary.

- (3) Where preventive measures are insufficient and the colonies become sick or infested, they must be treated immediately.
- (4) Non-synthetic remedies must be used in preference, provided that their therapeutic effect is effective for the condition for which the treatment is intended.
- (5) If non-synthetic remedies are not effective, veterinary medicines may be used under the responsibility of a qualified person.
- (6) Hives treated with veterinary medicines must:
 - a) be placed in quarantine apiaries; and
 - b) be reconverted following the conditions outlined in clause 3.5.2.
- (7) The following substances may be used in cases of infestation with *Varroa destructor*:
 - a) acetic acid;
 - b) formic acid;
 - c) lactic acid;
 - d) oxalic acid;
 - e) natural oils (menthol, thymol, eucalyptol or camphor); and
 - f) organic icing sugar.
- (8) Organic icing sugar for the control of *Varroa destructor* must not be used between the start of the nectar or honeydew flow period and the end of the active production season.
- (9) The practice of destroying the drone brood is permitted only to reduce the infestation of *Varroa destructor*.

3.5.8 Husbandry practices

- (1) Mutilation, such as clipping the wings of queen bees, is not permitted.
- (2) The replacement of the queen bees by killing of the old queen is permitted.

3.5.9 Honey harvesting and extraction

- (1) The use of synthetic repellents is not permitted during honey extraction operations.
- (2) The destruction of bees in the combs as a method associated with the harvesting of bee products is not permitted.
- (3) Combs containing brood must not be used for honey extraction.

3.6 Aquaculture

3.6.1 General

- (1) The environmental conditions of the operation and its surrounds must be monitored before, during and after operations.
- (2) Operators must take verifiable and effective measures to minimise the release of excess nutrients and waste into the aquatic ecosystem.
- (3) For mobile organisms adequate measures must be taken to prevent introduced or cultivated species from escaping. Reasonable efforts must be taken to recover escaped animals.
- (4) Adequate measures must be taken to prevent predation on species living in enclosures. The poisoning of predators is not permitted. If predator exclusion nets are used, their design shall not permit diving birds to be harmed.

- (5) Biofouling should be managed in such a way as to reduce risks to the surrounding environment. Exclusion and physical removal methods are preferred. Products referred to in Schedule 6 may be used only when exclusion or physical removal measures are not practicable.
- (6) The production unit must be visited initially, and at least annually, by a qualified animal health person, with the purpose to review biosecurity and disease prevention practices.

Guidance

- Use of polyculture production techniques is encouraged.
- Fallowing of production sites between production cycles is recommended.
- Where possible, the use of any external energy should be limited to energy from renewable sources (thermal, wind, solar, wave, etc.).
- Consideration should be given to the impact on any local species of conservation interest.

3.6.2 Location of operations

- (1) Location of operations must meet relevant regulations and requirements under the Resource Management Act.
- (2) Operations must not be sited in areas that are potential sources of contamination with substances not permitted in this Requirement.

Guidance

Aquaculture in conformance with this Requirement may not be practicable in some areas if the risk of contamination with substances not permitted in this Requirement is assessed to be too high.

3.6.3 Characteristics of facilities

- (1) Construction materials and production equipment must not contain compounds that could detrimentally affect the surrounding environment or contaminate the certified product.
- (2) Facilities and equipment must be maintained in good condition, and repaired or replaced when necessary.
- (3) Containment systems, when used, including cages (net pens) should be designed, constructed, located and operated to suit the requirements of the species cultivated, with the purpose of minimizing escapes and other negative environmental impacts and to prevent the entry of predatory species.
- (4) Only substances for cleaning and disinfection of equipment and facilities that are fit for purpose, will not result in detectable residues in organic products, and will not detrimentally impact the wider aquatic environment are allowed;
- (5) Predator exclusion nets may be used provided their design does not cause diving birds to be harmed.

3.6.4 Split production

- (1) Operators may run organic and non-organic aquaculture units in the same holding, provided that:
 - a) the requirements in clauses 2.3.4(2) and 2.4(2) are met;
 - b) organic and non-organic facilities must be easily and obviously distinguishable;
 - c) organic and non-organic animals belong to easily and obviously distinguishable species or varieties; and
 - d) a suitable buffer zone is maintained between organic and non-organic operations.

Guidance

For open water production facilities, the topographical location of the operations, including the influence of water currents and tidal cycles should be taken into consideration, to ensure hydrodynamic separation between the organic and non-organic production sites.

3.6.5 Conversion

- (1) The conversion period starts when the Operator files an OMP with the TPA showing how this Requirement will be met.
- (2) Where the facilities cannot be drained, cleaned and disinfected the conversion period is 24 months.
- (3) Where the facilities have been drained, or fallowed the conversion period is 12 months.
- (4) Where the facilities have been drained, cleaned and disinfected the conversion period is six months
- (5) For open water facilities the conversion period will be three months

Guidance

The TPA may, in consultation with MPI, extend the conversion period in certain cases, where there is concern that environmental factors, and past use of the site with respect to waste, sediments and water quality will mean that detectable residues of substances not in conformance with this Requirement may be detected.

- (6) Before aquaculture products are eligible for official organic assurances, livestock that is not raised organically from birth must be managed in accordance with this Requirement for the following conversion periods:
 - a) for livestock whose life cycle is less than one year: at least one production cycle;
 - b) for livestock whose life cycle is longer than one year: 12 months or at least three quarters of their lifetime;
 - c) brought in breeding stock, juveniles or seed from non-organic hatcheries: at least two thirds of the lifecycle or 90% of the biomass.

3.6.6 Origin of livestock

- (1) The choice of breeds must take into account the capacity of animals to adapt to local conditions and the farming system, their vitality, and their resistance to disease.
- (2) When introducing non-native species, special care must be taken to avoid permanent disruption to natural ecosystems.
- (3) Gametes and seed must come from, in order of preference:
 - a) organic breeding stock;
 - b) breeding stock that has been managed in accordance with this Requirement for at least three months before harvest; and then
 - c) for bivalve seed, 'wild harvest' seed may be collected from outside the production area, provided the conditions under 3.6.12 (Specific rules for Bivalve Molluscs) are met.

Guidance

The TPA may require reasonable sanitary (health) quarantine measures for all animals brought into the unit from units not conforming with this Requirement.

3.6.7 Reproduction

- (1) Natural breeding methods which minimally interfere with the natural behaviour of the cultivated species must be used, as far as these are practicable.

- (2) Manual sorting or selection, manual stripping of gametes and incubation of eggs is allowed.
- (3) For species that cannot spawn naturally in captivity, spawning may be induced using exogenous releasing hormones only if other methods are not available. Operators must request TPA approval for this. Breeding stock treated with hormones is not eligible for official organic assurances.
- (4) The following techniques are prohibited in products that are to be eligible for an official organic assurance:
 - a) synthetic hormones and growth promoters;
 - b) sexually reversed organisms;
 - c) chemically induced polyploidy;
 - d) artificial hybridisation;
 - e) cloning;
 - f) monosex strains, except when hand sorted; and
 - g) artificially sterilized populations.

3.6.8 Feed

- (1) Aquatic organisms must receive organic feed, preferably from the production unit itself.
- (2) Livestock feed must meet the animal's nutritional requirements at the various stages of its development.
- (3) Filter-feeding animals must receive all their nutritional requirements from nature, except in the case of juveniles reared in hatcheries and nurseries.
- (4) Bivalves must feed on natural planktons.
- (5) Feedstuffs, including composite feeds, may be made from the following feed materials:
 - a) organic feed products of aquaculture origin;
 - b) fishmeal and fish oil derived from trimmings of fish sustainably caught for human consumption;
 - c) organic feed material of plant or animal origin; or
 - d) naturally derived nutritional additives, where it can be demonstrated to the satisfaction of the TPA that a nutritionally balanced diet cannot be obtained from items a) to c).
- (6) The following feed materials are prohibited:
 - a) terrestrial livestock products from operations not in conformance with this Requirement;
 - b) products from aquaculture production where the death was either from a disease or an unknown cause; and
 - c) synthetic additives or processing aids;
 - d) human waste;
 - e) artificial colouring agents.

3.6.9 Health management

- (1) Operators must have preventative measures in place to minimise the occurrence of diseases.

Guidance

- Note that the operators Biosecurity risk management plan will include assessment and management of pathways for disease incursion, including risks associated with people, stock, equipment and trucks and vessels, wildlife, water and feed.
- Disease prevention is based on the following principles:
 - using hardy breeds and strains that are resistant to disease
 - good location and design of the operations
 - application of good husbandry and management practices

- (2) Where ill-health or injury is identified, appropriate remedial action must be taken. Professional advice must be sought where there is any significant injury or disease, or if a problem persists.
- (3) Treatment must not be withheld where it will result in unnecessary pain and, even if this will result in the animal losing its organic status.
- (4) Non-synthetic remedies must be used in preference, provided that their therapeutic effect is effective for the species of animal, and the condition for which the treatment is intended.
- (5) If non-synthetic remedies are not effective, veterinary medicines, including antibiotics, may be used under the responsibility of a veterinarian.
- (6) Mandatory veterinary medicines must be administered when a disease risk has been identified as present in a specific area in which the production unit is located.
- (7) Treated animals must be clearly identified, by individual or batch. Existing animal identification formats may be used.
- (8) The withholding period must be twice the label withholding period or, where this period is nil or is not specified, 48 hours.
- (9) Animals that receive more than a maximum number of courses of treatment with registered veterinary medicines, excluding parasite treatments, based on productive lifecycle are not eligible for official organic assurances. The maximum numbers are as follows:
 - a) for animals with a productive lifecycle greater than one year: two courses of treatment;
 - b) for animals with a productive lifecycle less than one year: one course of treatment.
- (10) The following treatments are excluded from the number of treatments counted in clause 3.6.9(9)a) and 3.6.9(9)b):
 - a) mandatory vaccinations;
 - b) treatments under compulsory eradication schemes.
- (11) The use of parasite treatments, other than through compulsory control schemes in clause 3.6.9 (10), shall be limited to twice per year, or once per year where the production cycle is less than 18 months.

3.6.10 Animal welfare and husbandry practices

- (1) Mechanical aeration is permitted.
- (2) Artificially prolonged light periods are allowed. Operators must request TPA approval for this. The operator must demonstrate that:
 - a) this is appropriate for the species and geographical location;
 - b) day length will not be artificially prolonged beyond 16 hours per day; and
 - c) abrupt changes in light intensity will be avoided.
- (3) Ultraviolet light and ozone may only be used in hatcheries and nurseries.
- (4) Natural bore water may be used to heat or cool facilities at any stage of production.
- (5) Artificial heating or cooling must only be used in hatcheries and nurseries.
- (6) The use of oxygen is only permitted for animal health requirements, during critical periods of production and transport, and in the following cases:
 - a) exceptional cases of temperature rise or drop in atmospheric pressure or accidental pollution; or
 - b) occasional stock management procedures such as sampling and sorting; or
 - c) in order for the survival of the farm stock.
- (7) Stocking densities should be reflective of the natural behaviour of the species and in keeping with good health and welfare.
- (8) Closed recirculation aquaculture animal production facilities shall be prohibited, with the exception of hatcheries or nurseries.

3.6.11 Harvesting and transport

- (1) All relevant Animal Welfare requirements for handling and transport live aquatic animals apply.
- (2) Before transport of organic aquaculture products, transport tanks shall be thoroughly cleaned, disinfected and rinsed. An intervening event is necessary to ensure residues of any prohibited substances are not detected in organic products.
- (3) Chemically synthesised tranquilisers or stimulants must not be given to the animals before or during transport or at any time. Oil of cloves and ice/ice slurry is permitted for transport.

3.6.12 Specific rules for bivalve molluscs

- (1) Bivalve mollusc farming may be carried out in the same area of water as organic finfish, gastropod molluscs and algae farming in a polyculture system.
- (2) Specific rules concerning characteristics of facilities:
 - a) organic bivalve mollusc production in open waters shall take place within areas delimited by posts, floats or other clear markers and shall, where appropriate, be restrained by net bags, cages or the like;
 - b) bivalve molluscs may be treated once during the production cycle with a lime solution to control competing biofouling organisms;
 - c) operators may use long-lines, rafts, bottom culture, net bags, cages, trays, lantern nets, bouchet poles and other containment systems;
 - d) bivalve molluscs cultivation in bags on trestles is permitted;
 - e) bivalve molluscs cultivation structures must not form a continuous barrier along the shoreline for more than 500m.
- (3) Specific rules concerning the origin of seed:
 - a) bivalve molluscs will preferably be raised organically from birth.
 - b) seed collected from natural areas may be used if organically produced seed is not available, provided the following conditions are met:
 - i) this is permitted by local legislation; and
 - ii) the conditions of any permit are met; and
 - iii) there is no significant damage to the environment; and
 - iv) seed has settled on settlement beds which are unlikely to survive winter weather or
 - v) seed has settled naturally on collectors.

3.7 Algae

- (1) Location of operations must meet relevant regulations and requirements under the Resource Management Act.

Guidance

- Operations should be sited at appropriate distance from contamination sources.
- Algae production in conformance with this Requirement may not be practicable in some areas.

- (2) The conversion period starts when the Operator files an OMP with the TPA showing how this Requirement will be met.
- (3) Where the facilities cannot be drained, cleaned and disinfected the conversion period is 24 months.
- (4) Where the facilities have been drained, or fallowed the conversion period is 12 months.
- (5) Where the facilities have been drained, cleaned and disinfected the conversion period is six months
- (6) For open water facilities the conversion period will be three months

Guidance

The TPA may, in consultation with MPI, extend the conversion period in certain cases, where there is concern that environmental factors, and past use of the site with respect to waste, sediments and water quality will mean that detectable residues of substances not in conformance with this Requirement may be detected.

- (7) Algae production may be carried out in the same area of water as other organic aquaculture production in a polyculture system.
- (8) For algae cultivated in natural environments:
 - a) sustainable practices must be used in all stages of production, from the collection of juvenile algae to harvesting;
 - b) a biomass estimate is to be carried out at the start of organic operations;
 - c) production density/intensity must maintain the integrity of the aquatic environment by ensuring that the maximum quantity of algae which can be supported without negative effects on the environment is not exceeded;
 - d) ropes and other equipment used for growing aquatic plants and algae must be re-used or recycled where possible. They must be collected and disposed of responsibly when they can no longer be reused;
 - e) split production holdings are allowed provided that the requirements of 2.3.6 and 2.4(2) are met; and
 - f) the application of supplementary fertiliser is prohibited. Algae cultivation in natural environments must rely on nutrients naturally occurring in the same production location.
- (9) For algae not cultivated in natural environments:
 - a) permitted fertilisers and supplementary nutrients listed in Schedule 6 may be allowed subject to the following conditions:
 - i) operators must request TPA approval to use supplementary fertiliser; and
 - ii) nutrient levels in the effluent water shall be verifiably the same, or lower, than the inflowing water.
 - b) operators may manage split production holdings provided that:
 - i) the requirements in clauses 2.3.6 (2) and 2.4(2) are met; and
 - ii) separate water distribution systems are used.
- (10) To ensure a wide gene pool, the collection of juvenile seaweed from the wild should take place on a regular basis to supplement the cultured stock.
- (11) Biofouling organisms should be managed in such a way as to reduce risks to the surrounding environment, through physical removal, exclusion, or through approved organic treatment.

Guidance

- Algae collected from open water areas should be carried out in a way that does not damage the aquatic environment. The collection method should prevent by-catches of un-intended species
- Measures such as collection technique, minimum sizes, ages, reproductive cycles or size of remaining algae shall be taken to ensure that algae can regenerate and to ensure that by-catches are prevented

3.8 Mushroom production

- (1) The conversion period starts when the Operator files an OMP with the TPA showing how this Requirement will be met.

- (2) For existing mushroom production facilities, a conversion period of twelve months or two complete production cycle, whichever is greater, is required.
- (3) For new mushroom production facilities, where new equipment and new substrate is used, a conversion period of three months or two complete production cycles, whichever is less, is required.
- (4) Trays and other equipment that comes in contact with mushrooms and substrate must not be constructed from treated timber.
- (5) Operators may manage split production holdings provided that:
 - a) the requirements in clauses 2.3.1(2) and 2.4(2) are met;
 - b) different species or varieties of mushrooms which are easily and obviously distinguishable are involved;
 - c) the organic and non-organic units are managed separately;
 - d) non-organic activities are separated in space or time from organic activities; and
 - e) handling and harvesting activities are carried out only after suitable cleaning of the equipment.
- (6) Only substrates composed of the following components may be used:
 - a) farmyard manure and animal excrements from
 - i) holdings operating an OMP, including those in their final year of conversion; or
 - ii) operations not in conformance with this Requirement, where it can be shown that the animals have not been fed feed containing GMO or antibiotics, or kept in caged farming systems. This material must not exceed 25% by weight (excluding the covering material and any added water);
 - b) non-animal products from:
 - i) holdings operating an OMP, including those in their final year of conversion; or
 - ii) operations not in conformance with this Requirement, where it can be shown that the products have not been treated with prohibited substances;
 - c) peat (not chemically treated);
 - d) wood and wood products (not chemically treated);
 - e) mineral products listed in Schedule 1; or
 - f) water and soil.
- (7) Pests and diseases must be controlled through removal of diseased or infested materials.

Guidance

Diseased material should be burned or disposed of as recommended by good management practices.

- (8) Fungal spawn or cultures must come from operations that are in conformance with this Requirement.
- (9) Non-organic spawn/culture may be used if certified organic material is not available. Operators must request TPA approval to use this material. Operators must demonstrate to the TPA that organic spawn/culture is not available

3.9 Processing and handling

3.9.1 Compositional requirements

- (1) The composition of organic processed products must meet the following criteria:
 - a) at least 95% of the ingredients of agricultural origin by weight, excluding water and salt, must be produced in conformance with this Requirement unless otherwise set in specific OMARs;
 - b) only legally permitted additives, processing aids, minerals (including trace elements), vitamins, amino acids and other nitrogen compounds can be used; and

- c) water and salt (with sodium chloride or potassium chloride as basic components) may be used.

Guidance

Salt should be free of anti-caking agents.

- (2) Non-organic ingredients of agricultural origin may be used. The operator must apply to the TPA for approval to use these ingredients. This approval is subject to:
- a) the operator demonstrating that the ingredient is not available in organic form;
 - b) annual reassessment of availability of the ingredient;
 - c) the total weight of these ingredients not exceeding 5% of all ingredients of agricultural origin by weight, excluding water and salt; and
 - d) maximum time period of 36 months from the date the first application is approved by the TPA.
- (3) Any single ingredient must not be present in both organic and non-organic or in-conversion forms.
- (4) Food produced from in-conversion crops must contain only one ingredient of agricultural origin.

3.9.2 Processing requirements

- (1) The integrity of the organic product must be maintained throughout the processing chain including reception, packaging, labelling, storage and transport activities.
- (2) The food must be processed using biological, mechanical or physical methods.
- (3) Substances and techniques that reconstitute properties that are lost in the processing and storage of organic food, that correct the results of negligence in the processing of these products or that otherwise may be misleading as to the true nature of these products must not be used.

3.9.3 Split production

- (1) Operators may process and store organic and non-organic products in the same business, provided that the following requirements are met:
- a) the requirements in clauses 2.3.7(2) and 2.4(2);
 - b) organic processing is carried out continuously until the production run is complete;
 - c) organic processing must be separated by place or time from similar activities performed on non-organic products;
 - d) before and after processing operations, organic products are stored separately in space or time from non-organic products;
 - e) necessary measures are taken to ensure traceability and to segregate organic and non-organic products at all times; and
 - f) preparation or handling of organic products are carried out only after suitable cleaning of the production equipment.

3.9.4 Specific rules for food processing

- (1) Processing of food must conform with all other relevant sections of this Requirement.
- (2) The use of the following inputs may be allowed where there is an essential technological need or for a particular nutritional reason:
- a) food additives, micronutrients, micro-organisms, and processing aids listed in Tables 4.1, 4.2 and 4.3 of Schedule 4;

Guidance

Before using any food additive, processing aid, vitamin or mineral in a particular food type, both the generic permissions in the Australia New Zealand Food Standards Code for the use of food additives, and the organic food additive permission (Schedule 4) should be checked.

- b) engineered nanomaterials are not used.
- (3) Quantities of inputs listed in 3.9.4 (2)a) must not exceed the minimum required to achieve the need or reason for using them.

3.9.5 Specific rules for yeast used as food or feed

- (1) Organic yeasts use as food and feed must be grown on organically produced substrates prepared on conformance with this Requirement.
- (2) Up to 5% non-organic yeast extract or autolysate may be added to the substrate (calculated in dry matter). The operator must apply to the TPA for approval to use this yeast extract or autolysate. The operator must demonstrate that yeast extract or autolysate from organic production is not available in sufficient quality or quantity.
- (3) Only the following additives and processing aids can be used:
 - a) natural flavourings listed in Schedule 4, Table 4.1;
 - b) micro-organisms and enzymes listed in Schedule 4, Table 4.3;
 - c) processing aids listed in Schedule 4, Table 4.5; or
 - d) drinking water and salt (with sodium chloride or potassium chloride as basic components).

Guidance

Salt should be free of anti-caking agents

3.9.6 Specific rules for algae

- (1) For fresh, marine algae products, flushing of algae must use seawater.
- (2) For dehydrated algae products:
 - a) flushing may be done with any suitable water;
 - b) salt may be used to aid moisture removal;

Guidance

Salt should be free of anti-caking agents

- (3) For dried algae products:
 - a) ropes or other equipment used must not be treated with substances that may result in detectable residues of substances not compatible with this Requirement;
 - b) flames must not come in direct contact with the algae.

3.10 Alcoholic beverages

3.10.1 Grape wine

- (1) The production of organic grape wine must be based on the following principles:
 - a) only organic grapes produced in conformance with this Requirement may be used to make organic wine;
 - b) the use of food additives and processing aids must be kept to a minimum. Food additives and processing aids listed in Tables 4.6 and 4.7 of Schedule 4 may only be used where there is an essential oenological need;
 - c) substances and processing methods that might be misleading as to the true nature of the product must not be used;
 - d) substances and techniques that reconstitute properties that are lost in the processing and storage of organic wine, that correct the results of negligence in the processing of these products

- or that otherwise may be misleading as to the true nature of these products must not be used;
and
 - e) the integrity of organic wine must be maintained throughout the winemaking process including reception, packaging, labelling, storage and transport activities.
- (2) Sucrose, concentrated grape must (juice), or rectified concentrated grape must (juice) may be used for chaptalisation / enrichment in the pre-fermentation stage of organic wine production. These ingredients must be certified organic.
- (3) Final total sulphur dioxide levels up to the maximum content listed in Table 4.6 of Schedule 4 plus 30 mg/L, may be permitted. The operator must apply to the TPA, and the TPA must apply to MPI for authorisation for these final levels. The TPA must demonstrate to MPI that the following conditions are met:
- a) exceptional climatic conditions in a specific geographical area have led to severe bacterial or fungal attacks causing a deterioration in the sanitary status of the organic grapes; and
 - b) higher levels of total sulphur dioxide than in previous years are necessary to get a comparable final product.

3.10.2 Alcoholic beverages not including grape wine

- (1) The production of alcoholic beverages, not including grape wine, must be based on the following principles:
- a) only organic agricultural ingredients produced in conformance with this Requirement may be used to make organic alcoholic beverages;
 - b) the use of food additives and processing aids must be kept to a minimum. Only the following food additives and processing aids may be used, and only where there is an essential technological need:
 - i) for fruit and vegetable wine, cider, perry and mead: those listed in Tables 4.8 and 4.9 of Schedule 4
 - ii) for beer and beer related products: those listed in Table 4.10.
 - c) substances and processing methods that might be misleading regarding the true nature of the product must not be used;
 - d) substances and techniques that reconstitute properties that are lost in the processing and storage of organic wine, that correct the results of negligence in the processing of these products or that otherwise may be misleading as to the true nature of these products must not be used;
 - e) the integrity of the beverages must be maintained throughout the production process including reception, packaging, labelling, storage and transport activities.

3.10.3 Split production

- (1) Operators may process and store organic and non-organic beverage products in the same business, provided that the following requirements are met:
- a) the requirements in clauses 2.3.8(2) and 2.4(2);
 - b) organic processing is carried out continuously until the production run is complete;
 - c) organic processing must be separated by place or time from similar activities performed on non-organic beverages;
 - d) before and after processing operations, organic beverages are stored separately in space or time from non-organic beverages;
 - e) necessary measures are taken to ensure traceability and to segregate organic and non-organic beverages at all times; and
 - f) preparation or handling of organic beverages are carried out only after suitable cleaning of the production equipment.

Schedule 1: Fertilisers and soil conditioners

Material	Specific conditions, and additional information
Aluminium calcium phosphate	<ul style="list-style-type: none"> • Cadmium content less than or equal to 90 mg/kg of Phosphorus oxide (P₂O₅). • Use limited to basic soils (pH > 7.5).
Animal excrements	<ul style="list-style-type: none"> • Not from animals fed feed containing GMO or antibiotics. • If liquid, must undergo controlled fermentation and/or appropriate dilution. • If solid, must be adequately dried, dehydrated or composted. • Operators must have a plan for managing microbiological risk where farmyard manure is to be used on crops for human consumption. • May include a mixture of animal excrements, and vegetable matter from animal bedding.
Animal products or by-products	<ul style="list-style-type: none"> • Operators must have a plan for managing microbiological risk where animal products or by-products are to be used on crops for human consumption. • If fish or fish by-products - must be from sustainable fishing.
Basic slag	<ul style="list-style-type: none"> • Thomas phosphates. • Thomas slag.
Biodynamic preparations	If animal products are part of the mix, the operator must have a plan for managing microbiological risk where biodynamic preparations are to be used on crops for human consumption.
Calcium carbonate	Only of natural origin.
Calcium chloride solution	Foliar treatment to treat physiological disorders associated with calcium uptake.
Calcium sulphate (gypsum)	Only of natural origin.
Chitin	<ul style="list-style-type: none"> • Polysaccharide obtained from the shell of crustaceans. • Only if obtained from sustainable fisheries.
Clays	
Crude potassium salt	<ul style="list-style-type: none"> • For example kainit, sylvinit, etc. • Obtained by physical procedures but not enriched by chemical processes to increase its solubility.
Elemental sulphur	
Guano	
Household waste	<ul style="list-style-type: none"> • Vegetable and animal household waste which has been submitted to composting or to anaerobic fermentation. • Only when produced in closed and monitored collection system. • If animal products are part of the mix, operators must have a plan for managing microbiological risk where household waste is to be used on crops for human consumption.
Humates	<ul style="list-style-type: none"> • For example: leonardite. • Also known as 'mined carbon based products'. • Only if obtained as a by-product of mining activities.
Humic acids	<ul style="list-style-type: none"> • Water extracted only. • Only if obtained as a by-product of mining activities.

Material	Specific conditions, and additional information
Industrial lime	By-product of sugar production or from vacuum salt production.
Magnesium and calcium carbonate	Only of natural origin.
Magnesium sulphate	Only of natural origin.
Mushroom culture wastes	The initial composition of the substrate must be limited to products in this Table.
Naturally occurring organisms	For example: rhizobium bacteria, mycorrhiza fungi, yeasts, worms etc.
Peat	For plant propagation only.
Plant products and by-products	Not treated with synthetic additives.
Potassium sulphate	Product derived from crude potassium salt by a physical extraction process and possibly containing also magnesium salts.
Seaweeds and seaweed products	<ul style="list-style-type: none"> • Must be obtained by: • physical processes including dehydration, freezing and grinding; • extraction with water or aqueous acid and/or alkaline solution; and • fermentation.
Sodium chloride	Mined salt or solar salt obtained from seawater by non-synthetic process.
Soft ground rock phosphate	Cadmium content less than or equal to 90 mg/kg of Phosphorus oxide (P ₂ O ₅).
Stillage and stillage extract	Ammonium stillage excluded.
Stone meal	
Trace elements / micronutrients	<ul style="list-style-type: none"> • Sulphates, carbonates, oxides, or silicates of cobalt, copper, iron, manganese, selenium, molybdenum, or zinc. • Soluble boron products.
Vermicast	<ul style="list-style-type: none"> • Composted animal manure not from animals fed feed containing GMO or antibiotics. • If animal products are part of the mix, operators must have a plan for managing microbiological risk where vermicast is to be used on crops for human consumption.
Wood: sawdust, chips, ash and barks	Not from chemically treated wood.

Schedule 2: Substances for crop protection

Name	Specific conditions
Aluminium silicate (Kaolin)	Repellent.
Azadirachtin extracted from <i>Azadirachta indica</i> (Neem oil)	Insecticide.
Beeswax	Pruning agent / wound protectant.
Bentonite	
Biodynamic preparations	
Biological Control	Insects, bacteria, viruses, fungi, nematodes etc. e.g. <i>Bacillus thuringensis</i> , Granulosis virus, etc.
Calcium hydroxide	<ul style="list-style-type: none"> Plant disease control. For application on aerial plant parts only.
Carbon dioxide	
Chitin nematicides	<ul style="list-style-type: none"> Of natural origin. Not processed by acid hydrolysis.
Chlorella (<i>Spirulina</i>) extracts	
Copper compounds in the form of copper hydroxide, copper oxychloride, copper oxide, (tribasic) copper sulphate	<ul style="list-style-type: none"> Bactericide or Fungicide only. Up to 6 kg copper per ha per year. For perennial crops, the 6 kg copper limit can be exceeded in a given year provided that the average quantity actually used over a five-year period consisting of that year and of the four preceding years does not exceed 6 kg. Risk mitigation measures must be taken to protect water and non-target organisms.
Diatomaceous earth	
Ethylene	<ul style="list-style-type: none"> Only to be used in enclosed spaces as a plant growth regulator by authorised users. Degreening of citrus fruit only as part of a strategy for the prevention of fruit fly damage in citrus. Degreening bananas, kiwifruit and kakis (persimmons). Flower induction of pineapple. Sprouting inhibition in potatoes and onions.
Fat from animals	<ul style="list-style-type: none"> Repellent. Must not be applied to parts of the crop intended for human consumption. Must not be applied to crops that are to be eaten by animals.
Fatty acid potassium salt (soft soap)	
Ferric phosphate (iron (III) orthophosphate)	Molluscicide – must only be surface-spread between cultivated plants.
Gelatine	Insecticide.
Horticultural oils	Narrow range oils as dormant, suffocating, and summer oils.
Hydrolysed proteins, excluding gelatine	<ul style="list-style-type: none"> Attractant.

Name	Specific conditions
	<ul style="list-style-type: none"> Only in authorised applications in combination with other appropriate products of this Table.
Laminarin	<ul style="list-style-type: none"> Elicitor. Kelp must be harvested sustainably.
Lecithin	Fungicide.
Lime sulphur (calcium polysulphide)	
Mineral powders	Stone meal and silicates.
Natural acids	For example: vinegar, citric acid fermented from <i>Aspergillus</i> .
Pheromones	<ul style="list-style-type: none"> Attractant, sexual behaviour disrupter. Only in traps and dispensers. The traps and/or dispensers must prevent dispersal of the substances in the environment and prevent contact of the substances with the crops under cultivation. The traps must be collected after use and disposed of safely.
Plant oils	<ul style="list-style-type: none"> Insecticide, acaricide, fungicide, sprout inhibitor. Foliage suppressant: targeted application, spot spraying only. Does not include band or strip spraying of boundaries, walkways etc.
Plant preparations	Excluding preparations from tobacco.
Potassium bicarbonate (Potassium hydrogen carbonate)	
Potassium permanganate	<ul style="list-style-type: none"> Fungicide, bactericide. Only in fruit trees, olive trees and vines.
Pyrethrins extracted from <i>Chrysanthemum cinerariaefolium</i> .	<ul style="list-style-type: none"> Insecticide. Use of piperonyl butoxide as a synergist is prohibited.
Pyrethroids (only deltamethrin or lambdacyhalothrin)	<ul style="list-style-type: none"> Insecticide for fruit fly control. Only in traps with specific attractants. The traps and/or dispensers must prevent dispersal of the substances in the environment and prevent contact of the substances with the crops under cultivation. The traps must be collected after use and disposed of safely.
Quartz sand	Repellent.
Quassia extracted from <i>Quassia amara</i>	Insecticide, repellent.
Ryania	Extracted from <i>Ryania speciosa</i> .
Sabadilla	
Sea water	
Sodium bicarbonate	
Spinosad	<ul style="list-style-type: none"> Insecticide. Only where measures are taken to minimize the risk to key parasitoids and to minimise the risk of development of resistance.
Sulphur	

Schedule 3: Feed materials and feed additives

Table 3.1 Feed materials

Table 3.1.1 Feed materials of mineral origin

Name	Conditions
Calcareous marine shells	
Calcium carbonate	
Calcium-magnesium phosphate	
Calcium-sodium phosphate	
Magnesium carbonate	
Magnesium chloride	
Magnesium oxide (anhydrous magnesia)	
Magnesium phosphate	
Magnesium sulphate	
Monosodium phosphate	
Potassium chloride	
Sodium bicarbonate	
Sodium chloride	
Sodium sulphate	

Table 3.1.2 Other feed materials

Name	Conditions
<i>Saccharomyces cerevisiae</i>	<ul style="list-style-type: none"> • (By)-product of fermentation. • Microorganisms must have been inactivated or killed.

Table 3.2 Feed additives - technological additives

Table 3.3.1 Preservatives

Name	Conditions
Acetic acid	For silage: only when weather conditions do not allow for adequate fermentation.
Formic acid	For silage: only when weather conditions do not allow for adequate fermentation.
Lactic acid	For silage: only when weather conditions do not allow for adequate fermentation.
Propionic acid	For silage: only when weather conditions do not allow for adequate fermentation.
Sodium formate	
Sorbic acid	

Table 3.3.2 Acidity Regulators

Name	Conditions
Dicalcium phosphate	
Magnesium carbonate	
Sodium bicarbonate	

Table 3.3.3 Antioxidants

Name	Conditions
Tocopherol-rich extracts of natural origin	

Table 3.3.4 Emulsifiers, stabilisers, thickeners and gelling agents

Name	Conditions
Monosodium phosphate	
Natural mixtures of stearites and chlorite	
Potassium chloride	

Table 3.3.5 Binders and anti-caking agents

Name	Conditions
Calcium carbonate	
Diatomaceous earth (Kieselgur)	Purified.
Kaolinitic clays	Must be asbestos free.
Magnesium carbonate	
Magnesium oxide (anhydrous magnesia)	
Natural mixtures of stearites and chlorite	
Sodium aluminosilicate (Zeolite)	
Sodium bicarbonate	
Sodium sulphate	
Vermiculite	

Table 3.3.6 Silage additives

Name	Conditions
Bacteria	Only when weather conditions do not allow for adequate fermentation.
Enzymes	Only when weather conditions do not allow for adequate fermentation.
Microorganisms	Only when weather conditions do not allow for adequate fermentation.
Yeasts	Only when weather conditions do not allow for adequate fermentation.

Table 3.3 Feed additives - sensory additives

Table 3.4.1 Flavouring compounds

Name	Conditions
Flavouring compounds	Only extracts from agricultural products.

Table 3.4.2 Colouring agents

Name	Conditions
Calcium carbonate	
Iron oxide (Ferric (III) oxide)	

Table 3.4.3 Nutritional additives

Name	Conditions
Vitamins and provitamins	Derived from agricultural products or only in accordance with 3.3.7 (11)

Table 3.4.4 Compounds of trace elements

Element	Substance	Conditions
Calcium	Calcareous marine shells Calcium carbonate	
Cobalt	Cobalt (II) sulphate monohydrate and/or heptahydrate	
Copper	Copper (II) sulphate, pentahydrate	
Iodide	Calcium iodate, anhydrous	
Iron	Iron oxide (ferric (III) oxide) Iron (Ferrous (II)) sulphate monohydrate and/or heptahydrate	
Magnesium	Magnesium carbonate Magnesium chloride Magnesium oxide (anhydrous magnesia) Magnesium phosphate Magnesium sulphate	
Manganese	Manganese (II) oxide Manganese (II) sulphate, monohydrate Manganese (II) carbonate	
Molybdenum	Sodium molybdate	
Phosphorous	Calcium-magnesium phosphate Calcium-sodium phosphate Monosodium phosphate	
Potassium	Potassium chloride	
Selenium	Sodium selenate Sodium selenite	Preferably applied to pasture for the purpose of addressing selenium deficiency

Element	Substance	Conditions
		in livestock due to lack of selenium in New Zealand soils.
Sodium	Sodium bicarbonate	
Zinc	Zinc oxide Zinc sulphate mono- and/or hepta-hydrate	

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Schedule 4: Food additives and processing aids

Guidance

Permissions and prohibitions under the Australia New Zealand Food Standards Code must be followed.

Table 4.1 Agricultural additives for foods other than wine and yeast

INS Code	Name	Specific conditions
160b	Annatto	Only as colours in cheese production.
414	Arabic gum	
160b	Bixin	Only as colours in cheese production.
412	Guar gum	
322	Lecithins	Plant products and dairy products only.
410	Locust bean gum	
	Natural flavouring	Must not be produced using synthetic solvents and carrier systems or any synthetic preservative.
160b	Norbixin	Only as colours in cheese production.
440 (i)	Pectin	Plant products and dairy products.
307B	Tocopherol - concentrate, mixed	Anti-oxidant in fats and oils.

Table 4.2: Non-agricultural additives for foods other than wine and yeast

INS Code	Name	Specific conditions
406	Agar	Plant products, dairy products and meat products only.
400	Alginic acid	Plant products and dairy products only.
503	Ammonium carbonates	Plant products only.
300	Ascorbic acid (L-Ascorbic acid)	Plant products and meat products only.
170	Calcium carbonates	Must not be used for colouring or calcium enrichment of products.
509	Calcium chloride	Milk coagulation.
333	Calcium citrates	Plant products only.
516	Calcium sulphate	<ul style="list-style-type: none"> Carrier. Plant products only.
290	Carbon dioxide	
407	Carrageenan	Plant products and dairy products only.
330	Citric acid	Plant products, dairy products and egg products only.
422	Glycerol	For plant extracts.
464	Hydroxypropyl methyl cellulose	Encapsulation material for capsules.
416	Karaya gum	

INS Code	Name	Specific conditions
270	Lactic acid	
504	Magnesium carbonates	Plant products only.
296	Malic acid (DL- Malic acid)	Plant products only.
341 (i)	Mono calcium phosphate	Raising agent for self-raising flour.
941	Nitrogen	
402	Potassium alginate	Plant products and dairy products.
501	Potassium carbonates	Plant products only.
224	Potassium metabisulphite	
336	Potassium tartrates	Plant products only.
551	Silicon dioxide	<ul style="list-style-type: none"> • Anti-caking agent for herbs and spices • Plant products only.
401	Sodium alginate	Plant products and dairy products only.
500	Sodium carbonates	Plant products and dairy products only
331	Sodium citrate	Animal products only.
524	Sodium Hydroxide	Surface treatment of Lugengebaeck (lye rolls) only.
325	Sodium lactate	Animal products only.
335	Sodium tartrates	Plant products only.
220	Sulphur dioxide	
553b	Talc	Plant products and meat products only.
334	Tartaric acid (L(+)-)	Plant products only.
413	Tragacanth gum	
153	Vegetable carbon	Colour in cheese production only.
415	Xanthan gum	

Table 4.3: Micro-organisms and enzymes for foods other than wine

Name	Specific conditions
Enzymes	Normally used in food processing.
Micro-organisms	Excluding yeasts. Normally used in food processing.
Yeast	Derived from organic raw material, if available and fit for purpose.

Table 4.4: Processing aids for foods other than wine and yeast

Name	Specific condition
Activated carbon	Plant products only.
Ammonium hydroxide	Gelatine production of animal origin
Argon	

Name	Specific condition
Beeswax	<ul style="list-style-type: none"> Releasing agent. Plant products only.
Bentonite	In compliance with the specific purity criteria for food additive INS 558.
Calcium carbonate	Plant products only.
Calcium chloride	<ul style="list-style-type: none"> Coagulation agent Plant products only.
Calcium hydroxide	Plant products only.
Calcium sulphate	<ul style="list-style-type: none"> Coagulation agent. Plant products only.
Carbon dioxide	
Carnauba wax	<ul style="list-style-type: none"> Releasing agent. Plant products only.
Casein	Plant products only.
Cellulose	Plant products and production of gelatine of animal origin.
Citric acid	<ul style="list-style-type: none"> pH regulation of salt bath for cheeses. Oil production. Hydrolysis of starch.
Diatomaceous earth	<ul style="list-style-type: none"> Animal products. Production of gelatine from plant origin.
Egg white albumen	<ul style="list-style-type: none"> Derived from organic raw material, if available. Plant products only.
Ethanol	Solvent.
Gelatine	<ul style="list-style-type: none"> Derived from organic raw material, if available. Plant products only.
Hydrochloric acid	<ul style="list-style-type: none"> Production of gelatine from animal origin. For the regulation of the pH of the brine bath in the processing of cheeses.
Hydrogen peroxide	Production of gelatine from animal origin.
Isinglass	<ul style="list-style-type: none"> Derived from organic raw material, if available. Plant products only.
Kaolin	<ul style="list-style-type: none"> Animal products. Production of Propolis. In compliance with the specific purity criteria for food additive E 559.
Lactic acid	pH regulation of salt bath for cheeses.
Magnesium chloride (Nigari)	<ul style="list-style-type: none"> Coagulation agent. Plant products only.
Nitrogen	
Oxygen	
Perlite	Production of gelatine from plant origin.
Potassium carbonate	Drying of grapes.

Name	Specific condition
Rice meal (ground rice)	<ul style="list-style-type: none"> Derived from organic raw material, if available. For preparation of foodstuff of plant origin.
Silicon dioxide	<ul style="list-style-type: none"> Gel or colloidal solution. For preparation of foodstuff of plant origin.
Sodium carbonate	Sugar(s) production.
Sodium hydroxide	<ul style="list-style-type: none"> Sugar production. Oil production from rape seed (<i>Brassica</i> spp).
Sulphuric acid	Sugar(s) production. Production of gelatine from animal origin.
Talc	<ul style="list-style-type: none"> In compliance with the specific purity criteria for food additive E553b. For preparation of foodstuff of plant origin.
Tannic acid	<ul style="list-style-type: none"> Filtration aid. Plant products only.
Vegetable oils	<ul style="list-style-type: none"> Greasing, releasing or anti-foaming agent. Derived from organic raw material, if available.

Table 4.5: Processing aids for yeast and yeast products

Name	Specific conditions
Calcium chloride	For the production of primary yeast only.
Carbon dioxide	
Citric acid	For the regulation of pH in the production of primary yeast only.
Lactic acid	For the regulation of pH in the production of primary yeast only.
Nitrogen	
Oxygen	
Potato starch	For filtering.
Sodium carbonate	For the regulation of pH.
Vegetable oils	Greasing, releasing or anti-foaming agent.

Table 4.6: Food additives for organic grape wine

INS Code	Name	Specific conditions
300	Ascorbic acid	
290	Carbon dioxide	
170	Calcium carbonates	De-acidification.
330	Citric acid	Stabilisation.
342(ii)	Diammonium hydrogen phosphate (also known as diammonium phosphate)	Yeast nutrient.
296	Malic acid	

INS Code	Name	Specific conditions
353	Metatartaric acid	Stabilisation.
228	Potassium bisulphite	<p>The maximum sulphur dioxide content of wines must not exceed:</p> <ul style="list-style-type: none"> • 100 mg/L for red wines with a residual sugar level lower than 2 g/L; • 150 mg/L for white and rosé wines with a residual sugar level lower than 2 g/L; • 120 mg/L for red wines containing a maximum of 4 g/L of reducing substances; • 170 mg/L for white and rosé wines containing a maximum of 4 g/L of reducing substances; • 270 mg/L for red, rosé and white wines containing more than 4 g/L of reducing substances; • 370 mg/L exceptionally in certain sweet wine wines; • 120 mg/L for liqueur wines where the sugar content is less than 5 g/L; • 170 mg/L for liqueur wines where the sugar content is not less than 5 g/L; • 155 mg/L for all categories of quality sparkling wines; or • 205 mg/L for other sparkling wines.
501(ii)	Potassium hydrogen carbonate (also known as potassium bicarbonate)	De-acidification.
224	Potassium metabisulphite	<p>The maximum sulphur dioxide content of wines must not exceed:</p> <ul style="list-style-type: none"> • 100 mg/L for red wines with a residual sugar level lower than 2 g/L; • 150 mg/L for white and rosé wines with a residual sugar level lower than 2 g/L; • 120 mg/L for red wines containing a maximum of 4 g/L of reducing substances; • 170 mg/L for white and rosé wines containing a maximum of 4 g/L of reducing substances; • 270 mg/L for red, rosé and white wines containing more than 4 g/L of reducing substances; • 370 mg/L exceptionally in certain sweet wine wines; • 120 mg/L for liqueur wines where the sugar content is less than 5 g/L; • 170 mg/L for liqueur wines where the sugar content is not less than 5 g/L; • 155 mg/L for all categories of quality sparkling wines; or • 205 mg/L for other sparkling wines.
220	Sulphur dioxide	<p>The maximum sulphur dioxide content of wines must not exceed:</p> <ul style="list-style-type: none"> • 100 mg/L for red wines with a residual sugar level lower than 2 g/L; • 150 mg/L for white and rosé wines with a residual sugar level lower than 2 g/L; • 120 mg/L for red wines containing a maximum of 4 g/L of reducing substances;

INS Code	Name	Specific conditions
		<ul style="list-style-type: none"> • 170 mg/L for white and rosé wines containing a maximum of 4 g/L of reducing substances; • 270 mg/L for red, rosé and white wines containing more than 4 g/L of reducing substances; • 370 mg/L exceptionally in certain sweet wine wines; • 120 mg/L for liqueur wines where the sugar content is less than 5 g/L; • 170 mg/L for liqueur wines where the sugar content is not less than 5 g/L; • 155 mg/L for all categories of quality sparkling wines; or • 205 mg/L for other sparkling wines.
181	Tannins	<ul style="list-style-type: none"> • Clarification. • Derived from organic raw material, if available.
334	Tartaric acid	<ul style="list-style-type: none"> • Acidification or de-acidification. • Natural (L) form only.

Table 4.7: Processing aids for organic grape wine

INS Code	Name	Specific condition
	Activated carbon / charcoal	
	Air	For aeration.
559	Aluminium silicate (Kaolin)	
	Argon	To create an inert atmosphere.
558	Bentonite	Clarification, fining.
	Casein	Clarification, fining.
	Cellulose	Filtration.
	Cupric citrate	
519	Cupric sulphate	
	Diatomaceous earth	Centrifuging and filtration, fining.
	Egg whites (albumen)	<ul style="list-style-type: none"> • Clarification, fining. • Derived from organic raw material, if available.
	Gelatine	<ul style="list-style-type: none"> • Clarification, fining. • Derived from organic raw material, if available.
414	Gum Arabic (Acacia gum)	Derived from organic raw material, if available.
	Isinglass	<ul style="list-style-type: none"> • Clarification. • Derived from organic raw material, if available.
270	Lactic acid	Acidification.
	Lactic acid bacteria / Malolactic bacteria	
1105	Lysozyme (egg white lysozyme)	
941	Nitrogen	<ul style="list-style-type: none"> • Bubbling.

INS Code	Name	Specific condition
		<ul style="list-style-type: none"> To create an inert atmosphere.
	Oak	
	Oxygen	Oxygenation.
	Pectolitic Enzymes	Clarification.
	Perlite	Centrifuging and filtration.
	Plant proteins from wheat or peas	<ul style="list-style-type: none"> Clarification. Derived from organic raw material, if available.
402	Potassium alginate	
	Potassium caseinate	Clarification.
336	Potassium tartrates	De-acidification.
551	Silicon dioxide	Clarification, fining.
	Skim milk	<ul style="list-style-type: none"> Clarification. Must be organic cow's milk.
	Thiamine (Vitamin B1)	Yeast nutrient.
	Yeast preparations	Derived from organic raw material, if available. Includes: <ul style="list-style-type: none"> yeasts for wine production; autolysed yeast; inactivated yeast; organic fresh lees; preparations from yeast cell walls; and yeast extracts.

Table 4.8: Food additives for alcoholic beverages not including grape wine or beer

INS Code	Name	Specific condition
503	Ammonium carbonates	
300	Ascorbic acid	
170	Calcium carbonates	Shall not be used for colouring or calcium enrichment of products.
516	Calcium sulphate	
290	Carbon dioxide	
330	Citric acid	
270	Lactic acid	
296	Malic acid (DL-Malic acid)	
341(i)	Mono calcium phosphate	
501	Potassium carbonates	
224	Potassium metabisulphite	The maximum sulphur dioxide content of non-grape wines must not exceed:

INS Code	Name	Specific condition
		<ul style="list-style-type: none"> In non-grape wines without added sugar (including cider and perry): 50 mg/L. For cider and perry prepared with addition of sugars or juice concentrate after fermentation: 100 mg/L.
336	Potassium tartrate	
500	Sodium carbonates	
220	Sulphur dioxide	<p>The maximum sulphur dioxide content of non-grape wines must not exceed:</p> <ul style="list-style-type: none"> In non-grape wines without added sugar (including cider and perry): 50 mg/L. For cider and perry prepared with addition of sugars or juice concentrate after fermentation: 100 mg/L.
334	Tartaric acid (L+/-)	

Table 4.9: Processing aids for alcoholic beverages not including grape wine or beer

Name	Specific conditions
Activated carbon	
Argon	
Bentonite	In compliance with the specific purity criteria for food additive INS 558.
Calcium sulphate	
Casein	
Cellulose	
Diatomaceous earth	
Egg white albumen	Derived from organic raw material, if available.
Ethanol	
Hydrogen peroxide	
Isinglass	Derived from organic raw material, if available.
Kaolin	In compliance with the specific purity criteria for food additive INS 559.
Nitrogen	
Oxygen	
Silicon dioxide	
Tannic acid	

Table 4.10: Food additives for beer and related products

INS Code	Name	Specific condition
150	Caramel	Must be organic
224	Potassium metabisulphite	The maximum sulphur dioxide content must not exceed 25 mg/L

INS Code	Name	Specific condition
220	Sulphur dioxide	The maximum sulphur dioxide content must not exceed 25 mg/L
270	Lactic acid	
290	Carbon dioxide	
300	Ascorbic acid	
330	Citric acid	
941	Nitrogen	
	Natural flavouring	Must not be produced using synthetic solvents and carrier systems or any synthetic preservative.

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Schedule 5: Animal stocking rates and housing space

Table 5.1: Recommended animal stocking rates

Class or species	Maximum number of animals per ha equivalent to 170kg N/ha/year (clause 3.2.3(4))
Equines over six months old	2
Calves for fattening	5
Other bovine animals less than one year old	5
Male bovine animals from one to less than two years old	3.3
Female bovine animals from one to less than two years old	3.3
Male bovine animals two years old or over	2
Breeding heifers	2.5
Heifers for fattening	2.5
Dairy cows	2
Cull dairy cows	2
Other cows	2.5
Female breeding rabbits	100
Sheep	13.3
Goats	13.3
Piglets	74
Breeding sows	6.5
Pigs for fattening	14
Other pigs	14
Meat chickens	580
Laying hens	230

Table 5.2: Housing space and characteristics for bovines, cervines, ovines and porcines

Class or species	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding grazing)
	Live weight minimum (kg)	M ² / head	M ² / head
Breeding and fattening bovine, cervine equine	Up to 100	1.5	1.1
	Up to 200	2.5	1.9
	Up to 350	4.0	3
	Over 350	5 with a minimum of 1m ² / 100kg	3.7 with a minimum of 0.75m ² / 100kg
Dairy cows		6	4.5

Class or species	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding grazing)
	Live weight minimum (kg)	M ² / head	M ² / head
Bulls for breeding		10	30
Sheep and goats		1.5 sheep / goat	2.5
		0.35 lamb / kid	2.5 with 0.5 per lamb / kid
Farrowing sows with piglets up to 40 days		7.5 sow	2.5
Fattening pigs	Up to 50	0.8	0.6
	Up to 85	1.1	0.8
	Up to 110	1.3	1
Piglets	Over 40 days and up to 30kg	0.6	0.4
Brood pigs		2.5 female	1.9
		6.0 male if pens are used for natural service: 10m ² / boar	8.0

Table 5.3: Housing space and characteristics for poultry

Class or species	Indoors area (net area available to animals)			Outdoors area (m ² of area available in rotation/head)
	No animals / m ²	cm perch / animal	nest	
Laying hens	6	18	7 laying hens per nest or in case of common best 120 cm ² / bird	4 [#]
Meat poultry (in fixed housing)	10 with a maximum of 21 kg live-weight / m ²	20 (for guinea fowl only)		4 broilers and guinea fowl [#] 4.5 ducks [#] 10 turkey [#] 15 geese [#]
Meat poultry (in mobile housing)	16 [#] in mobile poultry houses with a maximum of 30kg live-weight / m ²			2.5 [#]

[#] only in the case of mobile houses not exceeding 150m² floor space

Schedule 6: Permitted inputs in aquaculture and algae production

Table 6.1 Inputs permitted in aquaculture production

Substance	Specific conditions, and additional information
Nil	Nil

Table 6.2 Inputs permitted in algae production

Material	Specific conditions, and additional information
Nil	Nil

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