

ASUREQUALITY ORGANIC STANDARD PRIMARY PRODUCTION

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VERSION 7



**GLOBAL EXPERTS
IN FOOD ASSURANCE.**

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ORGANIC CERTIFICATION WITH ASUREQUALITY

Organic certification status assures customers of much more than food that is just free of synthetic pesticides and fertilisers. It is a “whole system” approach to farming and food production that promotes and enhances biodiversity, fosters sustainable growing practices and ensures the ethical treatment of livestock.

THE ASUREQUALITY ORGANIC STANDARD

AsureQuality provides expert audit, inspection, verification, and certification services to organic producers, processors and retailers in the dairy, meat, seafood, horticulture, wine and arable sectors.

Accredited by the world’s leading organic organisations, IFOAM (International Federation Organic Agricultural Movement), AsureQuality can enable market access to the USA, European Union, Australia, South East Asia, the UK and Japan.

References may be made throughout this Standard to other organic standards that AsureQuality certifies to.

THE ASUREQUALITY ORGANIC MARK

Producers, processors and products that have been certified to AsureQuality’s Organic Standard can display the AsureQuality Organic Mark and will be given a unique customer number that guarantees traceability and accountability throughout the food supply chain.

The AsureQuality logo is available in a range of formats, both in colour and black and white. All the information regarding the use of the logo is in the license agreement that is requested and signed completed following a successful organic audit.

The AsureQuality Mark is a clear indication that the product has been organically certified. It does, however, not say anything about quality which is your responsibility.



THE ORGANIC CERTIFICATION PROCESS

The time taken to become fully organic depends on the nature of your business. A rough guideline would be up to two years for livestock, two years for annual horticulture crops and three years for perennials (subject to variables such as the nature of your property). Farms in a transitional stage and that have been using some organic practices for a period of 12 months or more may label their products as “conversion to organic” provided all requirements are met.

To begin the process you will need to:

1. Complete and return a registration form from the AsureQuality “Going Organic” registration pack.
2. Complete and return the organic management plan applicable to your business. This requires detailed information on how you operate and documents the audit trail of your business including both inputs and outputs.
3. Comply with the AsureQuality Organic Standard.

Complete an on-site assessment /audit to ensure that every aspect of your operation complies with the AsureQuality Organic Standard. If you are a livestock or horticulture operator intending to export, a multi-residue soil test is usually required.

Following the on-site audit, the auditor will submit a formal report on the findings. This will include (but may not be confined to) any non-conformance against the AsureQuality Organic Standard that needs to be addressed.

The organic auditor will agree with you on how to resolve any non-conformances and set the closing due date.

4. When all non-conformances are closed out, an organic certification status certificate will be issued covering the scope of your operation. Once a signed license agreement has been completed, the AsureQuality organic logo can be used in approved marketing materials.

MAINTAINING YOUR ORGANIC STATUS

An annual audit is required to renew and maintain your organic certification status.

SIGNS AND STICKERS

We have both “full organic” and “In-Conversion” status signs available to help you market your organic status. The signs are ideal for putting on your gates and boundaries, for taking to trade shows or putting in your organic store. Your first full, or in-conversion organic sign from AsureQuality is free.

MULTI-RESIDUE TESTING

AsureQuality carries out a wide range of residue analyses for the food and beverage, environmental and agricultural industries. We carry out physio-chemical, inorganic and organic testing to characterise soil, air, water and product samples, to determine properties, contaminant levels and compliance with regulatory and certification requirements. We provide full matrix services for pesticides, poisons and veterinary drugs.



Section 1

Introduction and Scope

I. INTRODUCTION AND SCOPE

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Introduction

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INTRODUCTION

This Standard has been prepared for the purpose of providing minimum requirements to be complied with to gain certification for the production of, and the labelling and claims for, organically produced foods.

The aims of this Standard are:

- To protect consumers against deception and fraud in the market place and against unsubstantiated product claims.
- To protect producers of organic produce against misrepresentation of other agricultural produce as being organic.
- To ensure that all stages of production, preparation, storage, transport and marketing are subject to inspection and comply with this Standard.

This Standard sets out the principles of organic production at farm, preparation, storage, transport, labelling and marketing stages, and provides an indication of accepted permitted inputs for soil fertilising and conditioning, plant pest and disease control, food additives and processing aids.

Organic agriculture is accomplished by using, where possible, cultural, biological and mechanical materials and methods, as opposed to using synthetic materials, to fulfil any specific function within the system.

An organic production system is designed to:

- Enhance biological diversity within the whole system
- Increase soil biological activity
- Maintain long-term soil fertility
- Recycle wastes of plant and animal origin in order to return nutrients to the land, thus minimising the use of non-renewable resource
- Rely on renewable resources in locally organised agricultural systems
- Promote the healthy use of soil, water and air as well as minimise all forms of pollution thereto that may result from agricultural practices
- Handle agricultural products with emphasis on careful processing methods in order to maintain the organic integrity and vital qualities of the product at all stages
- Become established on any existing farm through a period of conversion, the appropriate length of which is determined by site-specific factors such as the history of the land and type of crops and livestock to be produced

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Organic agricultural practices and this Standard cannot ensure that products are completely free of residues, due to general environmental pollution. However, the practices permitted within this Standard ensure the lowest possible risk of residues at the lowest possible levels.

Continued certification of all producers and operators, whether they are at the production, processing, handling, transport, storage or sale points of the chain, is contingent on accurate records of the enterprises concerned.

Recognising that organic production systems continue to evolve and that organic principles and Standards will continue to be developed, these Standards will be reviewed on a two-yearly basis by AsureQuality Limited, all stakeholders and/or interested parties will be included in any review. Control of this Standard will be in accordance with AsureQuality procedures. Implementation date will be the date of issue.

I.1 SCOPE

- I.1.1 This Standard applies to the following products, which carry, or are intended to carry, descriptive labelling referring to organic production methods:
- a) Unprocessed plant, animal or aquaculture products
 - b) Processed product derived mainly from (a) above
- I.1.2 A product will be regarded as bearing indications referring to organic production methods where, in the labelling or claims, including advertising material or commercial documents, the product or its ingredients is described by the terms:
- “organic”, “biodynamic”, “biological”, “ecological” or words of similar intent.
- I.1.3 Paragraph I.1.2 does not apply where these terms clearly have no connection with the method of production.
- I.1.4 All materials and/or the products produced from genetically engineered/modified organisms (GEO/ GMO) are not compatible with the principles of organic production (either the growing, manufacturing or processing and the use of ingredients, additives and processing aids) and therefore are not accepted under this Standard. Inputs, processing aids and ingredients shall be traced back one step in the biological chain to the direct source organism from which they are produced to verify that they are not derived from GMOs.
- I.1.5 Requirements outlined in the AsureQuality Standard are complementary and additional to other health, social, agricultural or food regulatory requirements within New Zealand.
- I.1.6 Social justice and social rights are an integral part of organic agriculture and processing. Refer to Section 8 for standards regarding Social Justice.
- Where production is based on violation of basic human rights and clear cases of social injustice, that product cannot be declared as organic
 - Operators are not allowed to use forced or involuntary labour
 - Employees and contractors of organic operations should have the freedom to associate, the right to organise and the right to bargain collectively
 - Operators shall provide their employees and contractors equal opportunity and treatments and shall not act in a discriminatory way
 - Children employed by organic operators shall be provided with educational opportunities

1.2 DESCRIPTION

Foods should only refer to Organic Production Methods if they come from an organic production system that employs management practices which seek to nurture those ecosystems that achieve sustainable productivity. These ecosystems will provide weed, pest and disease control through a diverse mix of mutually dependent life forms, recycling plant and animal residues, crop selection and rotation, water management, tillage and cultivation. Soil fertility is maintained and enhanced by a system which optimises soil biological activity and the physical and mineral nature of the soil as the means to provide a balanced nutrient supply for plant and animal life as well as to conserve soil resources. Production should be sustainable, with the recycling of plant nutrients an essential part of the fertilizing strategy. Pest and disease management is attained by means of encouraging a balanced host/predator relationship, the augmentation of beneficial insect populations, biological and cultural control and mechanical removal of pests and affected plant parts.

1.3 GENERAL REQUIREMENTS

- 1.3.1 The operator must prepare and maintain an Organic Management Plan (OMP) outlining the conversion, production, preparation, handling and management practices employed to meet this Standard, and any inputs used.
- 1.3.2 The OMP must be reviewed at least annually, and if there are changes these are to be sent to AsureQuality for approval prior to implementing. Requests for inputs and dispensations should be sent to AsureQuality for approval prior to use.
- 1.3.3 The OMP must include a description of the record keeping systems used to ensure the organic integrity of the product through traceability throughout the production cycle from raw material through to sale of the end product.
- 1.3.4 The OMP must include contingency plans that would be invoked in the event of extraordinary circumstances such as:
- Shortage of feed due to extreme weather conditions or a natural disaster
- 1.3.5 Operators must have access to a current version of the AsureQuality Organic Standard.
- 1.3.6 Operators must demonstrate that workers have had adequate training in the relevant organic requirements relative to the tasks they carry out within the organisation.
- 1.3.7 If you subcontract work to low risk operators you must have contracts with them to meet all the requirements of this Standard. A list of subcontractors along with their activities is to be included as part of the OMP. If the subcontractor is a sublicensee under the supervision of another certification body, then the written agreement must include provision for the sharing of information between certification bodies.

Interpretative Note:

Under USDA NOP, the growing of organic crops, rearing of organic livestock, slaughtering of organic animals, or processing of organic products, may not be contracted out to a party that is not certified to the USDA NOP, unless the activity occurs on the certified property itself and hence under the supervision of the certified operator (e.g. mobile bottling plant).

- 1.3.8 Records relating to organic certification must be kept for two years and be retrievable. NB. Retentive periods for other organic standards may be longer.
- 1.3.9 For any organic products, or ingredients used in organic production or processing, the operator must have documents to verify the organic status of such products. Details must enable verification of:

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- Standard(s) the product is certified to
- Organic or in-conversion status
- Organic category (i.e. "organic" versus "made with organic ingredients")
- Recipes and labels

Requests for changes to ingredients supplier, recipes or labels should be sent to AsureQuality for approval prior to implementing.

- I.3.10 The operator should give AsureQuality, for inspection purposes, access to the unit and to written accounts and relevant supporting documents. The operator should also provide the inspection body with any information necessary for the purposes of inspection including financial records.

I.4 MONITORING FOR CONTAMINATION

Testing is not recognised as a means of determining the organic status of an end product; however, it has a role in verifying that the production process has appropriate measures in place. Organic certification is based on full implementation of the organic production process. AsureQuality conducts random and targeted test of products both at retail and through the production process.

- I.4.1 Where operators do their own testing, any adverse residue results are to be reported to AsureQuality at the point of discovery.
- I.4.2 Where residues are found on or in certified products, reasons for the contamination will need to be investigated along with further testing.
- I.4.3 AsureQuality may require ongoing monitoring by the operator where residues have been detected in the soil or end product.

I.5 RECERTIFICATION OF PRODUCTION OR A PRODUCT

For a production or a product to be re-certified, it must be certified according to:

- An IFOAM accredited programme and there are no additional requirements needed to be recognised under the AsureQuality Programme, or
- Certified against EU Regulations (or equivalent) plus additional evaluation requirements depending on whether it is a plant based product or a livestock product.

If you wish to use certified ingredients for products intended for the USDA NOP market, then you must source USDA NOP specific organic certificates from each of the suppliers.

I.6 RECOGNITION OF A CERTIFICATION BODY

For recognition the certification body will be:

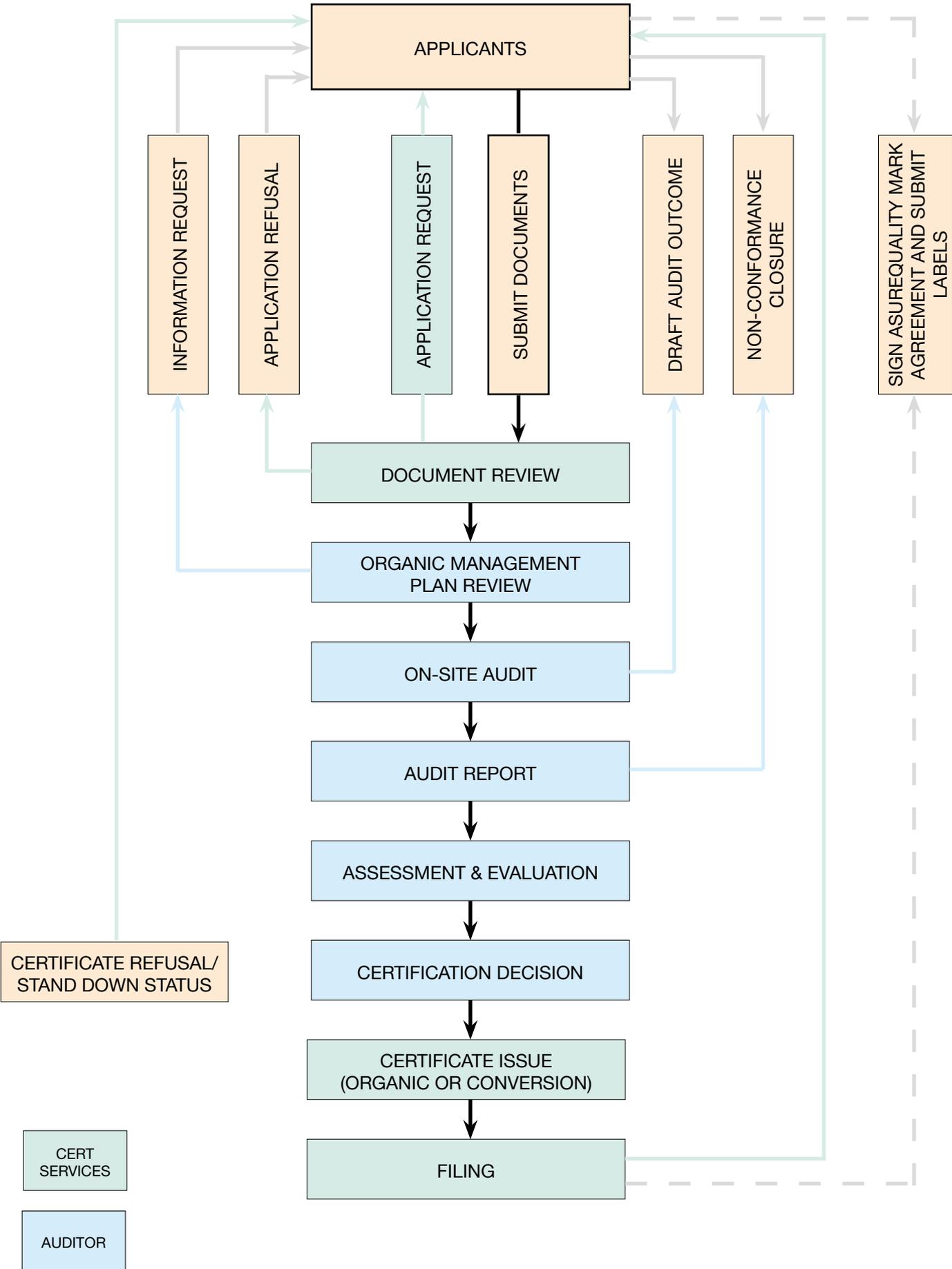
- IFOAM accredited and there are no additional requirements needed to be recognised under the AsureQuality Programme, or
- Accredited to ISO 17065 plus additional evaluation requirements.

I.7 DUAL CERTIFICATION AND TRANSFERENCE TO ANOTHER CERTIFICATION BODY

In cases where the operator (or subcontractor) has dual certification, or transfers certification to another certification body / control body (CB), AND the operator is certified to a programme for the purposes of exporting organic product to the European Union, AsureQuality requires written permission from the operator to:

- Provide an exchange of information with the other CB (dual certification)
- Provide copies of the appropriate control files to the new CB (transference)
- Written permission would normally be granted via an application form or OMP update form

I.8 CERTIFICATION FLOW DIAGRAM



1.9 OVERVIEW OF STANDARD

This table gives an overview of the sections which apply to the different listed activities.

Scope	Sections										Tables				
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5
Crops and Pasture	✓	✓	(✓)	✓				✓		✓	✓	✓			
Wild harvesting	✓	✓	(✓)	✓				✓		✓					
Livestock	✓	✓	✓	✓	✓			✓		✓	✓	✓		✓	✓
Apiculture	✓	✓	✓		✓			✓		✓	(✓)	✓			
Aquaculture	✓	✓	✓		✓			✓		✓		✓			
Repacking	✓	✓	✓			✓		✓		✓		✓	✓		
Processing	✓	✓	✓			✓		✓		✓		✓	✓		
Slaughter	✓	✓	✓			✓		✓		✓	✓	✓	✓		✓
Textiles	✓	✓	✓			✓		✓		✓			✓		
Importing	✓	✓					✓	✓							
Exporting	✓	✓	✓					✓							
Retail/Wholesaling			(✓)					✓	✓	✓			✓		
Input Certification			✓					✓		✓	✓	✓	✓		

* (✓) = in rare cases these sections may also apply)

Table showing the relationship between the Primary Producers and Processors Standards.

Scope	Sections										Tables				
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5
Standard for Primary Producers															
Standard for Processors															



Section 2

Glossary of Terms

2. GLOSSARY OF TERMS

FOR THE PURPOSE OF THESE STANDARDS

A

Agricultural product/product of agricultural origin means any product or commodity, raw or processed, that is marketed for human consumption (excluding water, salt and additives) or animal feed.

Allopathic treatment: Also called conventional medicine, and are treatments which produce effects different from those exhibited by the disease. This is the opposite of homeopathy.

Anthelmintic is a substance used to kill or expel internal parasites (subgroup of parasiticide)

Antibiotics are a class of drug which are usually synthesised by a living micro-organism and used at appropriate concentration inhibit the growth of other micro-organisms.

Aquaculture: The managed production of aquatic plants and/or animals in fresh, brackish or salt water in a circumscribed environment.

Audit is a systematic and functionally independent examination to determine whether activities and related results comply with planned objectives.

B

Background contamination: Also known as unavoidable residual environmental contamination (UREC). Background levels of naturally occurring or synthetic chemicals that are present in the soil, or present in organically produced products, that are below established tolerances.

Botanical pesticide means a pesticide derived from plants.

C

Canada Organic Regime (COR): Name of the National Standard of Canada covering organic food products sold in Canada, which is published by the Canadian General Standards Board.

Certification is the procedure by which written or equivalent assurance is given that foods or food control systems conform to requirements.

Certification body means a body which is responsible for verifying that a product sold or labelled as "organic" is produced, prepared, handled and imported according to this Standard.

Chain of Custody: The concept that all relevant steps in the production chain including the growing, handling, processing and other processes, have been inspected or certified as appropriate.

Competent authority means the official government agency having jurisdiction.

Commercially available: The ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan (USDA NOP definition). The cost of the organic ingredient(s) is not to be used as a criterion for commercially available.

D

Direct source organisms: The specific plant, animal, or microbe that produces a given input or ingredient, or that gives rise to a secondary or indirect organism that produces an input or ingredient.

E

Energy from renewable sources means renewable non-fossil energy sources: wind, solar, geothermal, wave, tidal, hydropower, landfill gas, sewage treatment plant gas and biogases.

Exception: Permission granted to an operator by a certification body to be excluded from the need to comply with normal requirements of the standards. Exceptions are granted on the basis of clear criteria, with clear justification and for a limited time period only.

F

Feed can have two different meanings depending on context. 1) Feed refers to the edible materials consumed by livestock for their nutritional value and may comprise; concentrates (such as grains, beans, and oilseed meals) or roughages (such as hay, silage, and fodder). 2) Feed can be a mix of agricultural supplements, commodities, and/ or additives. See section 6.9 for more detail.

G

Genetically engineered/modified organisms: The following provisional definition is provided for genetically/ modified organisms: Genetically engineered/modified organisms, and products thereof, are produced through techniques in which the genetic material has been altered in a way that does not occur naturally by mating and/ or natural recombination.

Techniques of genetic engineering/modification include, but are not limited to: recombinant DNA, cell fusion, micro and macro injection, encapsulation, gene deletion and doubling. Genetically engineered organisms will not include organisms resulting from techniques such as conjugation, transduction and hybridisation.

H

Hatchery means a place of breeding, hatching and rearing through the early life stages of aquaculture animals, finfish and shellfish in particular.

High Conservation Area means an area of high value relative to the following conservation priorities: biodiversity, landscapes, ecosystems, livelihoods or cultural identity. The concept was developed by the Forest Stewardship Council in 1999.

Homeopathic veterinary medicinal products means a veterinary medicinal product prepared by a process of solution, extraction or titration of an active ingredient followed by strict regimented serial dilution (Must be in compliance with the Agricultural Compounds and Veterinary Medicines Act 1997.)

Humates are stable decomposed organic matter.

Humic acid derivatives are acids extracted from humates.

I

IFOAM International Federation of Organic Agriculture Movements. IFOAM maintains an accreditation program, via the International Organic Accreditation Service (IOAS), which accredits certification bodies such as AsureQuality.

Ingredient means any substance, including a food additive, used in the manufacture or preparation of a food and present in the final product although possibly in a modified form.

Inspection is the examination of food or systems for control of food, raw materials, processing and distribution including in-process and finished product testing, in order to verify that they conform to requirements. For organic food, inspection includes the examination of the production and processing system.

J

JAS Japanese Agriculture System – Organic: The regulatory system for organics applied and regulated by the Japanese Ministry for Agriculture, Fisheries and Food (MAFF). (There are three different options for certification under this system).

L

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

M

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

Middlemen in the context of wild collection refers to agents or tribal authorities who may act as initial collection or storage points.

Mineral means the mineral salts and raw materials extracted from minerals except those obtained from fossil fuel.

N

Nanotechnology: Products intentionally manufactured, and processes involving the intentional manipulation of particles, at the size typically in the nanoscale area that create new properties and functions that are different from the properties and functions of the particles at the macro scale. This definition does not include nanoscale particles naturally occurring or incidentally created through normal processing such as flour grinding or homogenation.

Natural substance: A defined chemical substance which is obtained by appropriate physical processes (including distillation and solvent extraction using solvents listed in table 3) or enzymatic or microbiological processes from material of vegetable or animal origin either in the raw state or after processing for human consumption by traditional food-preparation processes (including drying, and fermentation). Reference in the sales description must only use the term 'natural' if it meets the above definition.

Nulliparous: A female mammal who has never given birth.

Nursery means a place where an intermediate farming system, between hatchery and grow-out stages is applied. The nursery stage is completed within the first third of the production cycle with the exception of species undergoing a smoltification process.

O

OOAP Official Organic Assurance Programme: The regulatory system for organics applied and regulated by Ministry for Primary Industries (MPI), which provides official assurances of organic production to importing countries. The applicable MPI Standards are OPI, OP2 & OP3. This programme incorporates the relevant EU Regulations. It is also able to include the JAS requirements for horticultural products. Certification to the United States National Organic Standard (USDA NOP) is also covered under this programme using the USDA NOP Std itself.

Organic is a labelling term that denotes products that have been produced in accordance with organic production Standards.

OMP Organic Management Plan: A document maintained by the operator which details the conversion, production, preparation, handling and management practices employed to meet this standard.

Organochlorines: Class of conventional pesticides, typically DDT and Dieldrin, prohibited for use under this Standard. MRLs are set to allow for environmental contamination from historic residues on organic farms, due to the persistent nature of these chemicals. Under the OOAP a soil test is required to determine background contamination. (In some cases on-going monitoring of soil &/or product may be required.)

Official accreditation is the procedure by which a government agency having jurisdiction formally recognises the competence of an inspection and/or certification body to provide inspection and certification services. For organic production the competent authority may delegate the accreditation function to a private body.

Officially recognised inspection systems/officially recognised certification systems are systems, which have been formally approved or recognised by a government agency having jurisdiction.

Operator means any person who produces, prepares or imports, with a view to the subsequent marketing thereof, products as referred to in Section 1.1, or who markets such products.

P

Parallel production: Any production where the same unit is growing, breeding, handling or processing the same products in both a certified organic system and a non-certified or non-organic system. A situation with “organic” and “in conversion” production of the same product is also parallel production. Parallel production is a special instance of split production.

Parasiticide means a substance used to kill parasitic organisms that live in or on livestock.

Plant protection product means any substance intended for preventing, destroying, attracting, repelling, or controlling any pest or disease including unwanted species of plants or animals during the production, storage, transport, distribution and processing of food, agricultural commodities or animal feeds.

Preparation means the operations of slaughtering, processing, preserving and packaging of agricultural products and also alterations made to the labelling concerning the presentation of the organic production method.

Production means the operations undertaken to supply agricultural products in the state in which they occur on the farm, including initial packaging and labelling of the product.

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

Section 2. Glossary of Terms

Production unit means all assets to be used for a production sector such as production premises, land parcels, pasturages, open air areas, livestock buildings, fish ponds, containment systems for seaweed or aquaculture animals, shore or seabed concessions, the premises for the storage of crops, crop products, seaweed products, animal products, raw materials and any other input relevant for this specific production sector

Prohibited: Means any substance that may not be used in organic production, processing, or handling. If used on animals as emergency treatment then these animals will lose their organic status. This will be permanent for meat animals, but in some cases the animals can be reconverted to supply milk.

Processing aid: Substance added during processing for its technical or functional effect that is either: removed, used up or converted to constituents normally present in food. This may end up in the finished food at insignificant levels. An example would be oil used to grease tins for baking.

Q

Quarantine area: A dedicated area of the farm used for the purposes of quarantine and/or withholding practices.

Quarantine period: Period of isolation of livestock from other animals (also see with-holding period).

S

Split production: Where only part of the farm or processing unit is certified as organic. The remainder of the property can be (a) non-organic, (b) in conversion or (c) organic but not certified. Also see parallel production.

Stillage: The grains and liquid effluent remaining after distillation.

Stocking density in the framework of aquaculture, means the liveweight of animals per cubic metre of water at any time during the grow-out phase and in the case of flatfish and shrimp the weight per square metre of surface.

Subcontracted Operator (also called a sub-licensee): A natural or legal person or business entity that performs services on behalf of an operator.

T

Trader: Entity trading with (i.e. buying and selling) certified organic goods in the supply chain between the producer of the organic goods and the retail merchant of the final product, regardless of whether the goods are physically received or not (e.g. an importer; exporter; or wholesaler). Agents that do not take ownership of the goods and retailers only selling to the end consumer are not considered as traders.

W

With-holding period: 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. NB normally double the legal with-holding period applies under organics see 5.8.3 & 5.9.1 for more detail.



Section 3

Labelling and Claims

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LABELLING AS ORGANIC

- 3.1 The labelling and advertising of a product specified in Section 1.1.1(a) may refer to organic production methods only where:
- Such labelling and advertising shows clearly that it relates to a method of agricultural production, or is imported under the arrangements laid down in Section 7
 - The product was produced in accordance with the requirements of Sections 4, 5 and 6 or imported under arrangements laid down in Section 7
 - The product was produced, imported or exported by an operator who was subject to an inspection system as set out in Section 7 as appropriate
- 3.2 The labelling and advertising of a product specified in Section 1.1.1(b) may refer to organic production methods only where all of the following are met:
- Such indications show clearly that they relate to a method of agricultural production and are linked with the name of the agricultural produce in question as obtained on the farm
 - All ingredients of agricultural origin of the product are, or are derived from, products obtained in accordance with the requirements of Sections 4, and 5 or imported under the arrangements laid down in Section 7
 - The same ingredient in a single product was not derived from an organic source and from a source not complying with this Standard
 - Only those substances listed in Section 10, Tables 2 (feed or feed additives) and/or 3 (ingredients or additives) may be used as ingredients of non-agricultural origin
 - The ingredients and their relative levels appear in descending order (mass/mass) in the list of ingredients
 - If herbs and/or spices constitute less than 2% of the total weight of the product they may be listed as “spices” or “herbs” without stating the percentage
 - All ingredients of agricultural origin of the product are, or are derived from, products obtained in accordance with the requirements of Sections 4, and 5 or imported under the arrangements laid down in Section 7
 - Only substances listed in Section 10 were used during the production phase
 - The same ingredient in a single product was not derived from an organic source and from a source not complying with this Standard

- Only those substances listed in Section 10, Tables 2 (feed or feed additives) and/or 3 (ingredients or additives) may be used as ingredients of non-agricultural origin
- The ingredients and their relative levels appear in descending order (mass/mass) in the list of ingredients

3.3 Organically derived ingredients must be used if available. However, notwithstanding Section 3.2, ingredients not satisfying the requirements may be used with authorisation from AsureQuality after a review in the preparation of certain products referred to in Section 1.1.1 (b) where such ingredients:

- Are of agricultural origin and cannot be sourced as certified organic (in sufficient quantities or quality (subject to periodic review and re-evaluation) and meet the requirements of sections 6.2 & 6.3, and
- Do not exceed 5% m/m of the content of the total ingredients of agricultural origin, additives and processing aids in the final product; and (water and salt is not included in the percentage calculation), and
- All ingredients of a multi-ingredient product shall be listed on the product label in order of their weight percentage. It shall be apparent which ingredients are of organic certified origin and which are not. All additives shall be listed with their full name, and
- Water is excluded from the percentage calculation. This relates to added water and water content in a multi-ingredient product. To be specific this excludes from the calculation water added to reconstitute a dehydrate, but does not relate to ingredients that when found in nature include water such as milk or juice

USDA NOP: You must not claim or infer that a product is “100% organic”, if there are any non-organic ingredients (however small), or if any processing aids have been used.

LESS THAN 95% ORGANIC (70 - 95%)

3.4 Where there is no organic source of ingredients available, the labelling and advertising of a product (as referred to in Section 1.1.1 (b)), which has been prepared partly from, (greater than 5% m/m) non-organic ingredients, may not be called organic. However, the word “organic” may be used on the principal display in statements like “made with organic ingredients” provided there is a clear statement of the proportion of the organic ingredients. An indication that the product is covered by the certification body may be used, close to the indication of proportion of organic ingredients.

3.5 The above is allowed provided that all of the following are met:

- At least 70% m/m of the total ingredients of agricultural origin, additives and processing aids in the final product ; and (water and salt is not included in the percentage calculation) must be certified organic
- Only those substances listed in Section 10, Tables 2 (feed or feed additives) and/or 3 (ingredients or additives) may be used as ingredients of non-agricultural origin
- All ingredients including non-organic ingredients and additives must meet the requirements of sections 6.2 & 6.3
- The reference to organic production methods is included only in conjunction with the name of the ingredient or ingredients, which are certified organic (i.e. not on the front panel)
- Any ingredients that are not certified organic must be clearly indicated as such
- All ingredients and their relative levels appear in descending order (m/m) in the list of ingredients. It shall be apparent which ingredients are of organic certified origin and which are not. All additives shall be listed with their full name
- All ingredients appear in the same colour and with an identical style and size of lettering
- The label must show the percentage of organic ingredients in the product title
 - “In the product title” is interpreted as within or right under the product name and in the same style and size

Section 3. Labelling and Claims

- NB There may be restrictions on the size of such a declaration for some regulatory standards such as the USDA NOP which restricts such a declaration to half the size of the largest font. In such cases a dispensation may be granted
 - The product was produced by an operator who is subject to the regular inspection system as set out in Sections 4.1.1, 5.1.6 or 6.7
 - Gel coatings for capsules would be calculated as non-organic components unless a certified source was used
- NB there are market restrictions to this category on both the use of the term “organic” and use of organic logos. Check market requirements. NB. The EU has phased out this category.

Note: there are market restrictions to this category on both the use of the term “organic” and use of organic logos. Check market requirements. The EU has phased out this category. Wine sent to the EU may not be labeled as “made with organic grapes”.

3.6 FIBRE, TEXTILES AND APPAREL

3.6.1 Labelling of textiles follows all above standards regarding labelling of organic food with the exceptions in this section:

- Only substances allowed by the certification body based upon the criteria for textile processing in section 6.10.1.1 shall be used to process fibre products labelled as “organic”
- Apparel and other textile products labelled as organic consist of at least 95% by weight organic fibre as described in section 6.10 *
- Textiles may be labelled “made with (...%) organically produced fibres” only if at least 70% of the fibres are organic as described in section 6.10 *

*(Percentages in the 2nd and 3rd points above refer to the total weight of the fibres, and do not include the weight of the non-textile accessories such as buttons and zippers.)

3.6.2 Wool bales are labelled as per 5.1.2.1.1: Farm name and address, organic status and name of Certification Body.

3.7 LABELLING CLAIMS

3.7.1 It is not recommended to make absentee claims such as “antibiotic-free” or “no pesticides”, or “GMO-Free”, or make health claims. AsureQuality will assess the organic aspects of a label, however it is the operators responsibility to ensure that labeling meets importing country requirements, and in the case of OOAP, labelling must also meet New Zealand requirements.

Note: MPI has published guidance on the labeling of manuka honey

3.8 CONVERSION TO ORGANIC

3.8.1 Products of farms in transition to organic production methods may only be labelled as “conversion to organic” after 12 months of production using organic methods providing that:

- The requirements referred to in paragraphs 3.1 and 3.2 are fully satisfied.
- The indications referring to conversion do not mislead the purchaser of the product regarding its difference from products obtained from farms and/or farm units, which have fully, completed the conversion period.
- Such an indication takes the form of words, such as “product under conversion to organic farming”, or similar words or phrase accepted by the competent authority of the country where the product is marketed, and

must appear in a colour, size and style of lettering which is not more prominent than the sales description of the product.

- The product contains only one crop ingredient of agricultural origin.
- Products labeled as “inconversion” may not be exported to Europe.
- Your labelling must comply to AsureQuality and/or the registration issued by AsureQuality as the most recent certification body that has certified the product. If you use the AsureQuality Mark in such cases it would be the “in-conversion” type used (see below).



3.8.2 Crops harvested less than 36 months after the application of a prohibited input to the crop, or soil, must not be labeled or sold as organic.

3.8.3 Labelling of Feed - Where the formulation includes in-conversion feed this must be clearly shown in the ingredients list. NB. Under some standards there may not be an option to sell formulations which include in-conversion feed.

3.9 IDENTIFYING THE CERTIFIER AND LEGAL RESPONSIBILITY

3.9.1 Your label must identify the organic certification body. This can be achieved through the use of the AsureQuality Mark which incorporates your organic registration number. Alternatively it may be in words in the form: “Certified organic by AsureQuality Limited” plus your organic registration number as “Registration number XXXX” or “Reg. # XXXX”. NB. For certain markets it is compulsory to use the wording irrespective of whether the logo is used. AsureQuality will issue your personalised AsureQuality Mark after you sign the applicable License Agreement.

3.9.2 If using the EU Logo, then you must use the appropriate description for where the product was farmed and AsureQuality Code Number in the same visual field as the EU Logo (e.g. both on back panel). The code number is in the format NZ-BIO-XX.

The indication of the place where the agricultural raw materials were farmed is to be one of the following forms:

- “New Zealand Agriculture”, where the agricultural raw material has been farmed in New Zealand
- “Non-EU Agriculture”, where the agricultural raw material has been farmed in third countries
- “EU Agriculture”, where the agricultural raw material has been farmed in the EU
- “EU/non-EU Agriculture”, where part of the agricultural raw material has been farmed in the EU and part in a third country

For the above farming origin statement, the origin of small quantities may be disregarded provided the total quantity of the disregarded ingredients does not exceed 2% of the total quantity by weight of raw ingredients of agricultural origin. The farming origin indication must not appear in a colour, size and style of lettering more prominent than the sales description of the product.

The logo, code number and requirements for the use of the logo are available on request from AsureQuality. Approval is subject to the operator signing an agreement on the use of the logo, code number and farming origin.

3.9.3 The label must identify the person or company legally responsible for the product.

3.10 IFOAM PRODUCTS

- 3.10.1 The IFOAM logo may only be used on IFOAM certified products. The IFOAM accredited certification programme does not include all organic categories. For example it does not include marine products or health & beauty products.
- 3.10.2 For a particular product to be within the IFOAM accredited programme it must be of the appropriate category, and percentage of organic ingredients:
- An individual non-IFOAM ingredient must not exceed 10% of the total organic ingredients in a product.
 - The cumulated non-IFOAM ingredients must not exceed 20% of the total organic ingredients in a product.

3.11 APPROVAL OF ARTWORK

- 3.11 To avoid misuse of the AsureQuality Mark, IFOAM logo, EU logo, Canadian logo, or the USDA NOP logo, artwork must be approved by AsureQuality before printing. In the case of the AsureQuality Mark, or IFOAM logo, use is subject to signing a license agreement. Approval will also check whether any claims made are clear and not misleading. If you do not get written approval from AsureQuality before printing, and the artwork does not comply with these Standards, you may be asked to reprint it.

3.12 NON-RETAIL CONTAINERS

- 3.12.1 The labelling of non-retail containers of product should meet the following requirements:
- The name and address of the person responsible for the production or preparation of the product AND where different the name and address of the owner or seller of the product
 - The name of the product, or in the case of feed, a description of the compound feeding stuff
 - That the product is of organic status
 - The name of the certification body
 - The consignment reference number (lot or batch number), if accompanied by an export/ transaction certificate
- 3.12.2 Multi- component products – live or unprocessed agricultural products (e.g. vege boxes) may be sold or marketed as organic only if all components are organic.

3.13 IRREGULARITIES AND INFRINGEMENTS

- 3.13 AsureQuality will take the following action when irregularities and infringements are found:
- Where the irregularity is found in the implementation of Sections 3, 4 or 5, the indications provided for in paragraph 1.2 referring to the organic production method are removed from the entire lot of production run affected by the irregularity concerned.
 - Where a manifest infringement or an infringement with prolonged effects is found, prohibit the operator concerned from marketing products with indications referring to the organic production method for a period agreed with AsureQuality.

3.14 LABELLING ADDITIVES

- 3.14.1 If you fortify your product with minerals or vitamins, you must provide evidence that the mineral or vitamin is legally required in the product, in the country in which it is intended for sale.
- 3.14.2 If fortification is legally required, then the additive may be labeled as a fortified additive e.g. "vitamin C".
- 3.14.3 If you use ascorbic acid as an antioxidant (or other use as an additive) you must label it as ascorbic acid rather than vitamin C.
- 3.14.4 If you use tocopherol as an antioxidant (or other use as an additive) you must label it as tocopherol rather than vitamin E.



Section 4

Crop and Pasture Production

- Conversion
- Seeds and Reproductive Material
- Pest, Disease and Weeds
- Soils and Soil Management
- Soil and Water Conservation
- Contamination Control
- Harvesting Crops
- Storage and Transport
- Cleaning, Disinfecting and Sanitising
- Genetic Engineering
- Additional Certification Requirements
- Parallel Production

4. CROP AND PASTURE PRODUCTION

This section covers: pasture, animal feed crops as well as vegetable crops and fruit crops.

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4.1	Conversion
4.2	Seeds and Reproductive Material
4.3	Pest, Disease and Weeds
4.4	Soils and Soil Management
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4.6	Contamination Control
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4.9	Cleaning, Disinfecting and Sanitising
4.10	Genetic Engineering
4.11	Additional Certification Requirements
4.12	Parallel Production

4.1 CONVERSION

- 4.1.1 The principles set out in this Section must normally have been applied on the parcels of land during a conversion period of at least two years before sowing or, in the case of perennial plants other than grassland, at least three years before the first harvest of products as referred to in paragraph 1.1.1 (a). AsureQuality may (with MPI approval in the case of OOAP) decide, in certain cases, to extend or reduce that period having regard to previous parcel use, but the period must equal or exceed 12 months prior to the start of the production cycle in the case of plant products from annual production. In the case of perennials (excluding pastures and meadows) a period of at least 18 months prior to harvest shall be required. The reduction in the conversion period must take account of the following points:
- The parcels were already converted or were undergoing conversion to organic production
 - The degradation of the plant protection product concerned must result in a level of residue in the soil, and in the plant where the plant is a perennial, which is undetectable using current methods.
 - Products of the harvest following treatment are not eligible for certification under the official organic assurance programme.
 - In case of newly developed fields or fields not farmed for no less than two years, approval may be granted to appropriately reduce the conversion period only after careful consideration, provided that AsureQuality confirms that prohibited substances have not been applied to those fields for two years.
- 4.1.2 Whatever the length of the conversion period, it may only begin once a production unit has been placed under an inspection system and once the unit has started the implementation of the production rules in this Standard. We calculate the point when supervision commences as the date at which a compliant Organic Management Plan and application are submitted.
- 4.1.3 In cases where a whole property is not converted at one time, it may be done progressively whereby this Standard is applied from the start of conversion on the relevant land parcels. Conversion from conventional to organic production should be effected using permitted techniques as defined in this Standard. In cases where a whole property is not converted at the same time, the holding must be split into units as referred to in Section 4.1.2.
- 4.1.4 You must not switch areas in conversion as well as areas converted to organic production back and forth between organic and conventional production methods.

Regional or other exception

An exception may be granted in cases where prohibited inputs must be used as a result of a Government directive as part of a biosecurity response. Affected land would be subject to the conversion periods specified in 4.1.1.

- 4.1.5 The use of organic scionwood, buds, or plants, does not require a conversion period. However, if it is not possible to source organic material, then with our permission you may source such materials. In such cases the conversion period is 12 months for the trees and resulting crop. Such material must be identified during conversion.

4.2 SEEDS AND REPRODUCTIVE MATERIAL

- 4.2.1 You must use organic seeds and plant material (including rootstocks and budwood).

Regional or other exception

AsureQuality may grant you a dispensation to use non-organic seed and plant material when there is no suitable organic varieties available. It must be demonstrated that suitable organic varieties are unavailable and in such cases AsureQuality may support:

- In the first instance, use of untreated seeds or vegetative reproductive material
- If the seed is coated or treated then the material must meet the requirements of Section 10.
- Perennial plants and vegetative propagating material must be managed organically for at least twelve months before organic products can be harvested (Note: some plants such as strawberries may be classed as annuals for crop production)
- Where only imported propagative material is available and a specific post-harvest treatment is prescribed by law for phytosanitary purposes, then treated seed and/or plant material may be approved by AsureQuality (In the case of OOAP approval is required by MPI)

Where a national register of organic seeds exists, then confirmation from the appropriate listed suppliers must be sought on the availability of organic seed of the requested variety(ies).

- 4.2.2 To produce organic seeds or vegetative material, you must grow the mother plant to organic standards for at least one generation for annuals, or two generations for perennials.

4.3 PEST, DISEASE AND WEEDS

Diversity in plant production and activity shall be assured by minimum crop rotation requirements and/or variety of plantings. Minimum rotation practices for annual crops shall be established unless the operator demonstrates diversity in plant production by other means. Operators are required to manage pressure from insects, weeds, diseases and other pests while maintaining or increasing soil organic matter, fertility, microbial activity and general soil health.

For perennial crops you must maintain ground cover and a diversity of plants in the orchard.

All organic production systems shall display a set of positive processes capable of accounting for management of significant pests, weeds and diseases under normal circumstances.

- 4.3.1 For pest management and control you should use the following measures, in order of preference:

- Preventative methods, such as disruption and elimination of habitat and access to facilities by pest organisms, should be the primary methodology of pest management.
- If preventative methods are inadequate, the first choice for pest control should be mechanical/ physical and biological methods.

- If mechanical/physical methods are inadequate for pest control, pesticidal substances appearing in Section 10, Table 1 (or other substances allowed for use by AsureQuality in accordance with Section 10.1) may be used, provided they are accepted for use in handling, storage, transportation or processing facilities by the competent authority and so that contact with organic products is prevented.

4.3.2 Pests should be avoided by good manufacturing practice. Pest control measures within storage areas or transport containers may include physical barriers or other treatments such as sound, ultra-sound, light, ultra-violet light, traps (pheromone traps and static bait traps), controlled temperature, controlled atmosphere (carbon dioxide, oxygen, nitrogen) and diatomaceous earth.

4.3.3 You may control pests, diseases and weeds by any one, or a combination, of the following measures:

- Choice of appropriate species and varieties.
- Appropriate rotation programmes
- Mechanical cultivation
- Protection of natural enemies of pests through provision of favourable habitat, such as hedges and nesting sites, ecological buffer zones which maintain the original vegetation to house pest predators
- Diversified ecosystems. These will vary between geographical locations. For example, buffer zones to counteract erosion, agro-forestry, rotating crops etc
- Flame weeding/steam weeding (mobile units only)
- Natural enemies including release of predators and parasites
- Biodynamic preparations from stone meal, farmyard manure or plants
- Mulching and mowing
- Grazing of animals
- Biological control
- Soil solarisation (plastic to be re-used and picked up once deteriorated)
- Mechanical controls such as traps, barriers, light and sound

4.3.4 If there is imminent or serious threat to the crop and where the measures identified in 4.3.3 (above) are, or would not be effective, products referred to in Section 10, Table 1 may be used. Wetting and sticking agents must also meet these requirements. Approval must be received from AsureQuality before use of inputs. There must be records of purchase and use of such inputs.

Interpretative Note:

Under USDA NOP, the operator should consult its certifier prior to using any new input in order to ensure that the material complies with the USDA NOP. The use of an unapproved material may be considered an application of a prohibited substance, which would remove the operation's land for three years.

4.3.5 You may use rodenticides if in tamper-proof stations and in locations where there is no risk of product contamination. Such products must be labelled and stored securely and to local legislation. NB. Under the Canada Organic Regime it is prohibited to use rodenticides not specifically listed in the COR list of permitted products, within organic processing or production areas. Under USDA NOP further conditions also apply.

4.3.6 Use of pesticides not identified in Section 10, Table 1 as suitable for post-harvest or quarantine purposes should for that purpose on products prepared in accordance with this Standard and would cause organically produced foods to lose their organic status.

4.4 SOILS AND SOIL MANAGEMENT

Material of microbial, plant or animal origin shall form the basis of the fertility programme.

- 4.4.1 The fertility and biological activity of the soil should be maintained or increased, where appropriate, by:
- Cultivation of legumes, green manures or deep-rooting plants in an appropriate multi-annual rotation programme.
 - Incorporation in the soil of organic material, composted or not, from holdings producing in accordance with this Standard. By-products from livestock farming, such as farmyard manure, may be used if they come from livestock holdings producing in accordance with this Standard.
 - The measure of success will be based on maintenance, or increase, in soil carbon content over time.

- 4.4.2 Substances, as specified in Section 10, Table 1, may be applied only to the extent that adequate nutrition of the crop or soil conditioning are not possible by the methods set out in 4.4.1 above, or, in the case of manures, they are not available from organic farming. Use of trace elements is restricted to cases where soil/plant nutrient deficiency is documented by soil or tissue testing, or diagnosed by an independent expert. Micronutrients in either chloride or nitrate forms are prohibited. Micronutrients may not be used as a defoliant, herbicide or desiccant.

You may use appropriate microorganisms or plant-based preparations for compost activation. Biodynamic preparations from stone meal, farmyard manure or plants may also be used for the purpose covered by Section 4.4.1.

- 4.4.3 You must not use animal residues and manures from battery poultry systems.

- 4.4.4 You should document a farm waste management plan which details how you will manage manure and crop residues to:
- Minimise nutrient losses
 - Recycle nutrients

NB Application of fertility substances in Section 10, Table 1 must be based on soil fertility test results and a fertiliser recommendation.

4.5 SOIL AND WATER CONSERVATION

- 4.5.1 You must manage soil and water resources in a sustainable manner:
- Relevant measures must be taken to prevent, salinisation of soil and water
 - The clearing of primary forest and ecosystems or High Conservation Areas is prohibited
 - Crop production, processing and handling systems must return nutrients, organic matter and other resources removed from the soil through harvesting by recycling, regeneration and addition of organic materials and nutrients
 - You must take measures to maintain and improve landscape and enhance biodiversity quality
- 4.5.2 You must not clear land through the means of burning organic matter; e.g. slash and burn, straw burning must be restricted to a minimum.

Regional or other exception

Exceptions may be granted in cases where burning is used to suppress the spread of disease, to stimulate seed germination, to remove intractable residues, or other such exceptional cases.

4.5.3 You must take measures to maintain and improve landscape and enhance biodiversity quality, by maintaining on-farm wildlife refuge habitats, or establishing them where none exist.

Interpretative Note:

Examples of such habitats would include:

- areas not under rotation and not heavily fertilised/manured: extensive pastures, hedgerows, edges between agriculture and forest, groups of trees and/or bushes, and forest
- ecologically rich fallow land or arable land
- ecologically diversified field margins
- waterways, pools, wetlands and other water rich areas not used for intensive agriculture or aquaculture production
- wildlife corridors connecting native habitat

4.5.4 You must not deplete or excessively exploit water resources, and must seek to preserve water quality and prevent the pollution of ground water. Where possible you must recycle rainwater and monitor water extraction.

4.5.5 You must take defined and appropriate measures to prevent soil erosion and minimise the loss of topsoil. The removal of soil is not permitted aside from incidental removal associated with harvesting crops.

Interpretative Note:

Examples of such measures would include: minimum tillage, contour plowing, crop selection, diverse permanent planting of riparian strips, and maintenance of soil plant cover.

4.6 CONTAMINATION CONTROL

4.6.1 You must ensure that all equipment from conventional farming systems is properly cleaned and free from residues before being used on your organically managed areas.

4.6.2 Contamination control: All relevant measures should be taken to minimise contamination. The following are considered as background contamination:

DDT Levels should not exceed:

- Meat 5.0mg/kg
- Milk fat 1.25mg/kg
- Eggs 0.5mg/kg

Lindane in food 2.0mg/kg

Heavy metals in compost shall not exceed the following levels:

- | | |
|---------------------|-------------------|
| • Arsenic 20mg/kg | • Lead 200mg/kg |
| • Cadmium 3mg/kg | • Mercury 1 mg/kg |
| • Chromium 400mg/kg | • Nickel 60mg/kg |
| • Copper 270mg/kg | • Zinc 575mg/kg |

NB the allowable levels are lower if the source material is from household refuse (see Section 10, Table 1).

Section 4. Crop and Pasture Production

- 4.6.3 You must employ measures including barriers and buffer zones to avoid potential contamination and exclude contaminants in organic products. Depending on the circumstances, these measures may include a combination of distance, physical barriers and procedures. You must formally notify your neighbours of your intention to farm organically. It is recommended that you work with your neighbour on how they will ensure there is no chemical trespass.

Interpretative Note:

The US National Standards do not specify specific dimensions for buffer zones, but leaves the determination of their size to the organic producer and the certifying agent on a case-by-case basis. In the US it has always been the responsibility of organic operations to manage potential contact of organic products with other substances not approved for use in organic production systems. The Organic Management Plan must outline steps that an organic operation will take to avoid drift from neighboring operations, particularly drift of synthetic chemical pesticides. While the US National Organic Standards provide significant discretion in establishing buffer zone dimensions, buffer zones should not be sized at distances, which attempt to achieve a zero tolerance for prohibited substances. The intent of the regulations in the US are to foster a collaborative effort between the certifying agents and their grower clients to determine an appropriate buffer zone with each party being fully cognisant of the process-based nature of the organic label claim.

- 4.6.4 You must not store prohibited crop inputs within the organic production site.
- 4.6.5 Potentially contaminated areas on a property, such as dip sites, should be excluded from certified areas.
- 4.6.6 In the case of reasonable suspicion of contamination, AsureQuality will make sure that an analysis of the relevant products and possible sources of pollution (soil, water, air and inputs) takes place to determine the level of contamination and takes measures accordingly.
- 4.6.7 For protected structure coverings, plastic mulches, insect netting and silage wrapping, only products based on polyethylene and polypropylene or other polycarbonates are allowed. You must remove these from the soil after use and you must not burn them on the farmland. The use of polychloride (PVC) based products is prohibited.
- 4.6.8 In situations where mandatory controls are required for noxious pests, or other instances that require the use of prohibited substances on certified land, then land to be affected must be withdrawn from certification. Notification must be made to AsureQuality prior to the use of such substances, and the OMP outline plans for re-certification and management strategies to ensure certified areas are not contaminated. Where such land comes under regulatory organic certification then approval may be required by the Regulator or Competent Authority in advance.
- 4.6.9 Where land has been contaminated through environmental or unforeseen circumstances, or as a result of mandatory treatments dictated by Government, the minimum period before recertification will be 12 months, combined with residue testing to confirm no contamination remains within the affected area. AsureQuality must be notified of such events as required by the Terms and Conditions of Certification. The switching of land in and out of certification on an ongoing basis is not permitted except in the case of a biosecurity directive. Also refer to Section 1.4 Monitoring for Contamination.

4.7 HARVESTING CROPS

- 4.7.1 You must not use treated timber for harvesting containers.
- 4.7.2 You must ensure organic produce is clearly identified from harvesting to dispatch.

- 4.7.3 You must keep harvest records recording: crop, field ID, harvest date, and quantities
- 4.7.4 You must confirm that a minimum of 36 months has passed between the last use of a prohibited substance and the harvest of any organic crop.

4.8 STORAGE AND TRANSPORT

- 4.8.1 Product integrity should be maintained during any storage and transportation and handling by use of the following precautions:
- Organic products must be protected at all times from co-mingling with non-organic products.
 - Organic products must be protected at all times from contact with materials and substances not permitted for use in organic farming and handling.
 - Separation between organic and non-organic products must be in time and/or space.
- 4.8.2 The certified operator owning the product at the point of transport is responsible for maintaining the organic integrity during the transport process, unless transport operator is certified in their own right.
- 4.8.3 Plant products which are not in retail packaging should be transported in a closed manner which should prevent contamination or substitution and be labelled as per 3.12.

4.9 CLEANING, DISINFECTING AND SANITISING

- 4.9.1 Horticulture operators shall take all necessary precautions to protect organic plant products against contamination by substances prohibited in organic farming and handling, pests, disease-causing organisms, and foreign substances. Horticulture operators should design facilities, plant layout, install equipment, and devise a cleaning, disinfecting and sanitising system that prevents the contamination of plant products and food contact surfaces.
- 4.9.2 Horticulture operations using cleaners, sanitisers, and disinfectants on food contact surfaces shall use them in a way that maintains the food's organic integrity. Approved maintenance products must be used according to their specific conditions of use, such as, but not limited to, specified intervening measures. Substances other than those appearing in Table 3 are only allowed if they are legally required.
- NB. For operators certified under COR, only sanitisers comprised of the generic ingredients listed in that Standard may be used.
- 4.9.3 The operator shall perform an intervening event between the use of any cleaner, sanitiser, or disinfectant and the contact of organic food with that surface sufficient to prevent residual contamination of that organic food.
- 4.9.4 Operators should not use persistent cleansers and/or sanitisers that are not easily removed by an intervening event (e.g. quaternary ammonia) or have an adverse impact on the environment (e.g. halogenated compounds). These may be approved if there is testing to verify the sanitizer can be effectively removed before food contact.

4.10 GENETIC ENGINEERING

- 4.10.1 You must not use genetically engineered organisms or their derivatives. This includes seed and farm inputs such as fertilisers, soil conditioners, vaccines or crop protection materials.
- 4.10.2 The use of genetically engineered seeds, pollen, transgene plants or plant material is not allowed.

4.11 ADDITIONAL CERTIFICATION REQUIREMENTS

- 4.11.1 Production should take place in a unit where the land parcels, production areas and storage facilities are clearly separate from those of any other unit which does not produce according to this Standard; preparation and/or packaging workshops may form part of the unit, where its activity is limited to preparation and packaging of its own agricultural produce.
- 4.11.2 When the inspection arrangements are first implemented, the operator must draw up and sign an Organic Management Plan which includes:
- A full description of the unit and/or collection areas, showing the storage and production premises and land parcels and, where applicable, premises where certain preparation and/or packaging operations take place
 - A map and associated land parcel identifier (i.e. Land Valuation number)
 - In the case of collection of wild plants, the guarantees given by third parties, if appropriate, which the producer can provide to ensure that the provisions of Section 4.13 are satisfied.
 - All the practical measures to be taken at the level of the unit to ensure compliance with this Standard
 - The date of the last application on the land parcels and/or collection areas concerned of products the use of which is not compatible with this Standard
 - An undertaking by the operator to carry out operations in accordance with Sections 3, 4 and 5 and to accept, in event of infringements, implementation of the measures as referred to in Section 3.13
 - Details of any inputs to be used
- 4.11.3 Each year, before the date indicated by AsureQuality, you must notify the schedule of production of crop products (OMP Update form), giving a breakdown by land parcel. This date would normally be the anniversary date of your certification.
- 4.11.4 You must keep written and/or documentary accounts, which enable AsureQuality to trace the origin, nature and quantities of all raw materials bought, and the use of such materials; in addition, written and/or documentary accounts should be kept of the nature, quantities and consignees of all agricultural products sold. Quantities sold directly to the final consumer should preferably be accounted for on a daily basis.
- 4.11.5 AsureQuality must undertake a full physical inspection, at least once a year of the unit. Samples for testing of products not listed in this Standard may be taken where their use is suspected. An inspection report should be drawn up after each visit. Additional occasional unannounced visits may also be undertaken according to need or at random.

4.12 PARALLEL PRODUCTION

- 4.12.1 Where you manage several horticultural holdings in the same region, the units which produce horticultural or horticultural products not covered by Section 1.1 will also be subject to the inspection system. This relates to the first, second and third indents of point 4.11.2 of this Section on horticultural and horticultural products, and as regards the provisions on horticultural management, horticultural records and the principles governing storage of horticultural products used.
- 4.12.2 Where you run several production units in the same area producing plants or plant products not covered in Section 1 (Scope), together with storage premises for input products (such as fertilisers, plant protection products, seed), these must all also be included in the OMP. GE crops will not be allowed to be grown on the non-organic part of the property. Plants of the same variety as those produced at the unit referred to in 4.11.1 may not be produced at these units.

Regional or other exception

An exemption to 4.12.2 applies on approval by AsureQuality (or in the case of OOAP, MPI must approve).

Producers are exempt from the requirement in the last sentence of 4.12.2 in the following cases:

- (a) In production of perennial plant products (fruit growing, vines and hops) provided the following conditions are met:
1. The production in question forms part of a conversion plan for which the producer gives a firm undertaking and which provides for the beginning of the conversion of the last part of the area concerned to organic production, in the shortest possible period, which may not in any event exceed a maximum of five years.
 2. Appropriate measures have been taken to ensure the permanent separation of the products obtained from each unit concerned.
 3. AsureQuality has been notified of the harvest of each of the products concerned with at least 48 hours' notice.
 4. AsureQuality has been notified immediately upon completion of the harvest, of the exact quantities harvested on the units concerned together with any particular distinguishing features (such as quality, colour, average weight, etc.), and confirm that the measures described in the OMP to separate the products have been applied.
 5. Your conversion plan and the measures referred to in points 1 and 2 have been approved by AsureQuality each year after the start of the conversion plan.
- (b) In the case of areas intended for agricultural research agreed by national authorities, provided that conditions 4.12.2 (a) (2), (3), and (4). and the relevant part of condition 5 are met.
- (c) In the case of production of seed, vegetative propagating material and transplants, provided that conditions 4.12.2 (a) (2), (3), and (4). and the relevant part of condition 5. are met.

4.13 COLLECTION FROM THE WILD

This section covers the harvesting of plants, plant products and fungi from the wild and intended for sale as organic, and may include certain marine environments. For harvesting of wild seaweed see section 5.19.14.

- 4.13.1 The collection of edible plants and parts thereof, growing naturally in natural areas, forests and agricultural areas, is considered an organic production method provided that:
- The products are from a clearly defined collection area that is subject to the inspection/ certification measures set out in Section 7 of this Standard.
 - The collection does not disturb the stability of the whole ecosystem, natural habitat, the maintenance of the species in the collection area, or threaten the existence of plant, fungal or animal species, including those not directly exploited.
 - The products are from an operator managing the harvesting or gathering of the products, who is clearly identified and familiar with the collection area.
 - The collection area shall be at an appropriate distance from conventional farming, pollution and contamination.
 - Operators shall take measures to ensure that wild, sedentary aquatic species are collected only from areas where the water is not contaminated by substances prohibited in these standards.
 - You must not violate the land holder rights.
- 4.13.2 You must not use areas that have received treatments with products other than those referred to in Section 10 for a period of at least three years before the collection.
- 4.13.3 You must ensure that the collection area is at a satisfactory distance from conventional farming to prevent contamination to the collected product.
- 4.13.4 You must have a documented organic management plan to cover this activity.
- 4.13.5 You must send us maps with your application that clearly identifies your collection areas.
- 4.13.6 It must be possible for AsureQuality to inspect the collection area.
- 4.13.7 You must keep a record of all collections, and the quantities bought from each collector.
- 4.13.8 You must maintain a record system that enables material to be traced from harvest to point of sale.
- 4.13.9 You must provide any collectors or middlemen with instructions that define the collection area, relevant parts of the organic standards, and any other certification requirements needed to carry out the activity.

<p>Interpretative Note: Collectors must sign statements that they have followed instructions</p>

- 4.13.10 You must have a contract in place for any subcontractors involved in wild collection.

4.14 LANDLESS PRODUCTION SYSTEMS

CONTENTS

- 4.14.1 Sprouts Production
- 4.14.2 Substrates for the Production of Mushrooms
- 4.14.3 Hydroponics
- 4.14.4 Container Growing

4.14.1 SPROUTS PRODUCTION

- 4.14.1.1 Operators shall use organic seed produced according to this Standard.
- 4.14.1.2 Seeds not obtained by organic production cannot, under any circumstance, be used to harvest edible sprouts.
- 4.14.1.3 Where necessary, seeds shall be sanitised with the following products; Hydrogen peroxide (subject to market requirements), Sodium hypochlorite (no residue on product at dispatch), Ozone (subject to market requirements).
- 4.14.1.4 Growing areas shall be dedicated to organic production.
- 4.14.1.5 Equipment or trays used in the growing and harvesting of such products shall be new or thoroughly sanitised using permitted sanitisers and cleaning products as listed in Table 3.
- 4.14.1.6 Substances for pest and disease management shall only be those listed in this Standard.
- 4.14.1.7 Growing media for:
 - (a) Sprouts require the use of potable water.
 - (b) Wheat or barley grass require the use of compost made from materials produced according to this Standard.
- 4.14.1.8 Where necessary, sprouts and other final products may be cleaned and sanitised using potable water and the products listed for seed sanitisation.

4.14.2 SUBSTRATES FOR THE PRODUCTION OF MUSHROOMS

- 4.14.2.1 You must ensure food safety requirements are met and ensure the end product meets acceptable microbiological limits. This may require microbiological testing as the substrates may harbour pathogens.
- 4.14.2.2 For the production of mushrooms, substrates may be used, if they are composed only of the following components:

Farmyard manure and animal excrements (including the products referred to in Section 10, Table 1).

 - (a) Either from holdings producing according to the organic production method, or
 - (b) Satisfying the requirements referred to in Section 10, Table 1 as follows:
 - Farmyard manure
 - Liquid animal excrements
 - Composted animal excrements, including poultry manure and composted farmyard manure
 - Dried farmyard manure and dehydrated poultry manure

Section 4. Crop and Pasture Production

Only up to 25 %(*), and only when the product under 4.14.2.2 is not available.

(*) This percentage is calculated on weight of total components of the substrate (excluding the covering material and any added water) before composting.

4.14.2.3 Products of agriculture origin, other than those covered under 4.14.2.2 (e.g. straw), from holdings producing according to organic production methods:

- Peat not chemically treated
- Wood not treated with chemical products after felling
- Mineral products of Section 10, Table 1, water and soil

NB for mushrooms collected from wild or farmed land refer to wild collection.

4.14.3 HYDROPONICS

The production of terrestrial plants must be soil-based, meaning that apart from the propagation or seedling stage, a plant must spend its life in the soil.

4.14.3 The following is not a permitted process:

Hydroponics uses an inert material (degrades only slightly or not at all or does not react) that does not have the capacity to exchange ions with the liquid phase and which is not able to provide a suitable habitat (breeding ground) for a wide range of micro-organisms or to support enzymes. This means that it is not permitted to use media such as those described as below:

- Mineral wool
- Media consisting solely of baked clay granules, both expanded and non-expanded; consisting of pure sand, such as Fugzand

This category also includes production systems that use no growth media at all, such as root sprinkler irrigation.

4.14.4 CONTAINER GROWING

The following is a permitted practice:

4.14.4 For pot plants or planting material it is permitted to use potting compost or other growth media that is comprised solely of one or more substances for soil fertilising or conditioning that are specified in Section 10, Table 1.



Section 5

Livestock

- General Requirements
- Genetic Engineering
- Conversion
- Origin of the Animals
- Access to Pasture
- Feed
- Quarantine of Stock
- Animal Health
- Veterinary Treatments
- Specific Veterinary Treatments & Specific Health Issues
- Husbandry
- Slaughter and Transport of Livestock or Organic Products
- Milking Operations
- Manure
- Housing and Facility Pest Management
- Additional Certification Measures
- Poultry Products
- Beekeeping and Beekeeping Products
- Aquaculture Production

5. LIVESTOCK

Livestock production shall mean the production of domestic or domesticated terrestrial animals (including insects) and aquatic species farmed in fresh, salt or brackish water. The products of hunting and fishing of wild animals shall not be considered as from organic production.

This section includes: livestock and livestock products from the following species; bovine (including bubalus and bison species) porcine, ovine, caprine, equidae, cervine, poultry, ratites, honey bees (*Apis mellifera*) and aquaculture production.

CONTENTS

- 5.1 General Requirements
- 5.2 Genetic Engineering
- 5.3 Conversion
- 5.4 Origin of the Animals
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- 5.11 Husbandry
- 5.12 Slaughter and Transport of Livestock or Organic Products
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- 5.14 Manure
- 5.15 Housing and Facility Pest Management
- 5.16 Additional Certification Measures
- 5.17 Poultry Products
- 5.18 Beekeeping and Beekeeping Products
- 5.19 Aquaculture Production

5.1 GENERAL REQUIREMENTS

- 5.1.1 Livestock production must contribute to the equilibrium of agricultural production systems by providing for the nutrient requirements of crops and by improving the soil's organic matter. It can thus help establish and maintain soil-plant, plant- animal and animal-soil interdependence.

By utilising renewable natural resources (e.g. livestock manure, legumes and fodder crops), the cropping/stock farming system and the pasturage systems allow soil fertility to be maintained and improved in the long term and thus contributes to the development of sustainable agriculture.
- 5.1.2 In order to minimise environmental pollution of natural resources, in particular, soil and water, organic production of livestock must in principle provide for a close relationship between such production and the land. Suitable multi annual rotation systems and the feeding of livestock with organic crop products produced on the holding itself is desired.
- 5.1.3 In order to prevent pollution of water by nitrogenous compounds, organic livestock holdings must have appropriate storage capacity and plans for the spreading of solid and liquid livestock effluents.
- 5.1.4 A wide biological diversity should be encouraged and the choice of breeds must take account of their capacity to adapt to local conditions.

- 5.1.5 In organic stock farming, all livestock on one and the same production unit must be reared in accordance with the rules laid down in this Standard.
- 5.1.6 However, livestock not reared in accordance with the provisions of this Standard may be present on the holding provided they are reared on units where the buildings and land parcels are separated clearly from the units producing in accordance with the rules of this Standard, and a different species is involved.

Regional or other exception

Animals not reared in accordance with these Rules can use, for a limited period of time each year, the pasture of complying organic units, provided that such animals have had normal access to pastoral grazing (and not intensive husbandry). Other animals reared for organic production are not to be present on this pasture at the same time. This procedure must be authorised beforehand by AsureQuality. Guidelines on stocking density where animal manure from the operation is spread on pasture are set out in Table 5.

- 5.1.7 Systematic operations, which lead to stress, harm, disease or the suffering of animals during the production, handling, transport or slaughtering stages, should be reduced to the minimum. However, specific interventions essential to certain types of production can be permitted. The use of certain substances to stimulate growth or modify their breeding cycles is not compatible with the principles of organic farming.
- 5.1.8 All operators marketing products of organically reared livestock must be subject to regular and uniform inspections; records should be kept accessible at the holding and updated with details of livestock arriving at and leaving the holding and any treatments administered to the livestock and the organic status of animals or flocks.
- 5.1.9 You must not use construction materials and methods and production equipment that might significantly harm human or animal health.

5.2 GENETIC ENGINEERING

- 5.2.1 Genetically modified organisms (GMOs) and products derived from them are not compatible with the organic production methods. In order to maintain consumer confidence in organic production, genetically modified organisms, parts thereof and products derived there from must not be used in products labelled as from organic production.
- 5.2.2 The deliberate use or negligent introduction of genetically engineered organisms or their derivatives to organic farming systems or products is prohibited. This shall include animals, seed, propagation material, and farm inputs such as fertilisers, soil conditioners, vaccines or crop protection materials.
- 5.2.3 The use of genetically engineered organisms or their derivatives is prohibited. This shall include animals, seed and farm inputs such as fertilisers, soil conditioners, or crop protection materials.
- 5.2.4 The use of genetically engineered seeds, pollen, transgene plants or plant material is not allowed.

5.3 CONVERSION

- 5.3.1 When converting your livestock, you must manage all the land for the stock to these Standards. This includes both pasture for grazing and areas for feed.

You may:

- (i) Convert your stock to organic after you have converted your land; or
- (ii) Convert your land and stock to organic simultaneously, this is known as simultaneous conversion

5.3.2 CONVERSION OF LAND ASSOCIATED WITH ORGANIC LIVESTOCK PRODUCTION

Where a production unit is converted, the whole area of the unit used for animal feed must comply with the rules on organic farming, using the conversion periods established relating to plants and plant products (Section 4.1).

The conversion period may be reduced to one year for pasturages, open air runs and exercise areas used by non-herbivore species (e.g. pigs).

5.3.3 CONVERSION OF LIVESTOCK AND LIVESTOCK PRODUCTS

Animals on a farm that is converting to organic production may undergo a one-time minimum conversion period according to the following schedule.

- in the case of equidae and bovines (including bubalus and bison species):
 - 12 months
- in the case of small ruminants and pigs for meat production:
 - Six months (EU but not IFOAM)
- in the case of animals for milk production:
 - Six months (EU)
 - 12 months (IFOAM)
- IFOAM – Animals must be born organic to have an organic meat status. Offspring may be considered organic only if their mother has been organically managed throughout the pregnancy.

5.3.4 SIMULTANEOUS CONVERSION

If there is simultaneous conversion of the complete production unit, including livestock, pasturage and/ or any land used for animal feed, the total combined conversion period for both livestock, pasturage and/or any land used for animal feed shall be reduced to 24 months subject to the following conditions:

- The exception applies only to the existing animals and their offspring and at the same time also to the land used for animal feed/pasturage before starting the conversion.
- The animals are mainly fed with products from the production unit.

For additional rules specific to the USA market please refer to USDA NOP 205.236 b 2 ii & 3

5.4 ORIGIN OF THE ANIMALS

5.4.1 When selecting breeds or strains, you must take into account the capacity of animals to adapt to local conditions, their vitality, and their resistance to disease. You must also select breeds or strains of animals to avoid specific diseases or health problems associated with some breeds or strains used in intensive production (e.g. porcine stress syndrome, PSE Syndrome, sudden death, spontaneous abortion, difficult births requiring caesarean operations etc.).

5.4.2 Livestock must come from production units, which comply with the rules on the various types of livestock production laid down in this Standard. Throughout their life, this system of production must be applied.

Regional or other exception – 1st Derogation

Subject to the prior approval by AsureQuality, livestock existing on the livestock production unit, not complying with the rules of this Standard can be converted.

Regional or other exception – 2nd Derogation

When a herd is constituted for the first time and organically reared animals are not available in sufficient numbers, non-organically reared livestock may be brought into an organic livestock production unit, subject to the following conditions:

- Dairy calves must be less than four weeks old have received colostrum and are fed a diet consisting mainly of full milk
- Piglets up to six weeks and after weaning

This exception, which must be authorised beforehand by AsureQuality.

Regional or other exception – 3rd Derogation

The renewal or reconstitution of the herd or flock shall be authorised by AsureQuality when organically reared animals are not available, and in the following cases:

- High mortality of animals caused by health or catastrophic circumstances

Regional or other exception – 4th Derogation

Subject to a yearly maximum livestock may be brought in as female (nulliparous - having never given birth) animals, from non organic-production stock farms per year; for supplementing natural growth and for the renewal of the herd, when organically reared animals are not available, and only when authorised by AsureQuality.

The yearly maximum for this derogation is as follows:

- 10% of adult horses or cattle (including bubalus and bison species)
- 20% of adult pigs, sheep or goats (max 10% for IFOAM)

Non-organic animals brought in under derogation for breeding purposes may not be sold as organic.

This percentage may be increased to 40% due to:

- Unforeseen severe natural or man-made events
- Considerable enlargement of the farm
- Establishment of a new type of animal production on the farm
- Holdings with less than 10 animals
- Specific time limits will be set for any derogations

NB. Certification under OOAP requires approval from MPI if the increased percentage exception is used

Regional or other exception – Non-IFOAM

Where livestock come from units not complying with sections 5.1.1 to 5.1.9, 5.5, 5.8, 5.11 & 5.15, the periods laid down in paragraph 5.3.3 must be observed if the products are to be sold as being from organic production and during these periods all the rules set out in this Standard must be complied with.

- 5.4.3 Preference should be given to using males for breeding purposes that have come from production units, which comply with the rules on the various types of livestock production laid down in this Standard. However, males for breeding may be brought in from non-organic production stock farms provided that the animals are subsequently reared and fed in accordance with the rules laid down in this Standard. Conventional animals brought in for breeding purposes may not be represented or sold as organic.

5.5 ACCESS TO PASTURE

- 5.5.1 Organic livestock farming is a land-related activity, except where authorised by way of exception in this Standard. Livestock must have access to a free-range area and the number of animals per unit of area must be limited to ensure integrated management of livestock and crop production on the production unit, so minimising any form of pollution, in particular of the soil and of surface and ground water. The number of livestock must be closely related to the area available in order to avoid problems of over-grazing and erosion and to allow for the spreading of livestock manure so that any adverse effect on the environment can be avoided. Detailed rules on the use of livestock manure are set out in Section 5.14. The certification body may allow the feeding of animals with carried fresh fodder if this is a more sustainable way to use land resources than grazing. Animal welfare shall not be compromised.

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- 5.5.2 Free-range (which means access to pasture), open-air exercise areas, or open-air runs must if necessary, provide sufficient protection against rain, wind, sun and extreme temperatures, depending on the local weather conditions and the breed concerned. Landless systems of livestock production are prohibited. The maximum hours of artificial light used to prolong day length shall not exceed a maximum that respects the natural behaviour, geographical conditions and general health of the animals.
- 5.5.3 Stocking densities and husbandry methods must be managed to avoid over grazing.
- 5.5.4 Herd animals shall not be kept individually, unless due to health or behavioural issues.
- 5.5.5 In the case of herbivores, stock must have access to pasture for a minimum of 150 days per annum.

5.6 FEED

- 5.6.1 Feed is intended to ensure quality production rather than maximising production, while meeting the nutritional requirements of the livestock at various stages of their development. Animals must have ample access to feed and water. Force-feeding is forbidden. Animals must be offered a balanced diet that provides all the nutritional needs of the animals in a form allowing them to exhibit their natural feeding and digestive behaviour.
- 5.6.2 You must feed livestock 100% organically produced feeding stuffs, preferably using feed from the unit, or when this is not possible, using organic feed equivalent to this Standard. The prevailing part (at least more than 60%) of the feed shall come from the farm unit itself or be produced in co-operation with other organic farms in the region.

Regional or other exception

AsureQuality can authorise for a limited period a percentage of conventional feed where such an exception is warranted in the following cases:

- a. Organic feed is of inadequate quantity or quality
- b. Areas where organic agriculture is in early stages of development
- c. Grazing of non-organic grass or vegetation during seasonal migration
- d. When forage production is lost, in particular as a result of exceptional weather conditions

Conventional feed materials of agricultural origin can be used for animal feeding only if listed as feed materials in Section 10, Table 2. In no such case may the percentage of non-organic feed exceed 10% dry matter per ruminant and 15% dry matter per non-ruminant calculated on an annual basis. The maximum percentage authorised of conventional feed in the daily ration is 25% calculated as a percentage of the dry matter. To be approved by AsureQuality prior to use.

NB. For certification to OOAP Technical Rules, reference must be made to that Standard for conditions relating to use of non-organic feed and approval must be granted by MPI. There is no option under USDA NOP for approval to use feed which is not certified to USDA NOP.

- 5.6.3 For the calculation of feeding allowances only, feed produced on the farm unit during the first year of organic management (stand down year) may be classed as organic. This refers only to feed for animals that are being produced within the farm unit. Such feed may not be sold or otherwise marketed as organic.
- 5.6.4 Up to 30% of the feed formula of rations on average may comprise in-conversion feeds (i.e. C1 onwards). When the in-conversion feeds come from the unit of the own holding up to 100% can be in-conversion.

For the calculation of feeding allowances only, feed produced on the farm unit during the first year of organic management, may be classed as organic. This refers only to feed for animals that are being produced within the farm unit. Such feed may not be sold or otherwise marketed as organic.

5.6.5 The feeding of young mammals must be based on natural milk, provided by maternal milk or organic milk from their own species. All mammals must be fed on natural milk for a minimum period, depending on the species concerned:

- Three months for cattle and horses
- 45 days for sheep and goats
- 40 days for pigs

Operators may provide non-organic milk when organic milk is not available, but this is subject to prior approval by AsureQuality.

5.6.6 All animals should have access to roughage. For herbivores a minimum of 60% of feed must come from pasture, and ruminants must be grazed throughout the grazing season.

5.6.7 Roughage, fresh or dried fodder, or silage must be added to the daily ration for pigs.

Regional or other exception - IFOAM

When weather conditions do not allow for grazing, ruminants may be fed with organic carried fresh fodder of up to 20% of the amount grazed during the grazing season.

NB. This exception is not applicable to an EU programme

5.6.8 Only the following products may be used as preservatives for silage:

- Bacteria, fungi and enzymes
- Natural products of food industry
- Plant based products
- Vitamins and minerals
- Listed processing aids for feed in Section 10, Table 2

Regional or other exception

When weather conditions do not allow for adequate fermentation, AsureQuality may authorise the use of the following synthetic chemical fodder preservatives:

- E236 Formic acid
- E260 Acetic acid
- E270 Lactic acid
- E280 Propionic Acid

5.6.9 In order to satisfy nutritional requirements of livestock, only the following types of non-agricultural natural products listed in Section 10, Table 2 may need to be used under well-defined conditions to supplement animal feeding:

- Feed materials from mineral origin
- Trace elements
- Vitamins, pro-vitamins and chemically well-defined substances having a similar effect

Regional or other exception

Synthetic vitamins, minerals and supplements may be approved by AsureQuality when natural sources are not available in sufficient quantity and quality.

NB the conditions of approval vary by standard.

5.6.10 Feeds, feed materials, compound feedstuffs, feed additives, processing aids for feeds and certain products used in animal nutrition must not have been produced with the use of genetically modified organisms, or products derived from GMOs.

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5.6.11 You must not use the following ingredients in feeds:

- Sawdust
- Synthetic colouring agents
- Urea or other synthetic nitrogen compounds
- Materials that have been solvent extracted (except those extracted using ethanol or water) or the addition of chemical agents
- All types of excrements including droppings, dung or manure
- Synthetic amino-acids and amino-acid isolates
- Synthetic growth promoters or stimulants
- Synthetic appetisers
- Preservatives, except when used as a processing aid

For additional rules specific to the USA market please refer to: USDA NOP 205.237.

5.6.12 You must maintain feed manufacturing / production records.

5.7 QUARANTINE OF STOCK

5.7.1 You must have a clearly defined quarantine area on the farm and farm map, and it must be part of the certified area (i.e. managed organically). It is recommended that this area is shifted over time.

When not in use for quarantine purposes, the quarantine area may be returned to organic production following a two week stand down period. It is not recommended to use such areas for growing crops for at least 12 months.

5.7.2 Certified stock must not mingle with any non-organic stock held in quarantine.

5.7.3 Where livestock is obtained from units not complying with this Standard the animals must be held in a quarantine area for twice the withholding period of any treatment that they have received, or a minimum of 48 hours. For additional rules specific to the USA market please refer to: USDA NOP 205.236 (3)

5.7.4 Sick animals may need to be isolated from other stock, in such cases the quarantine area may be the most appropriate location to hold such animals.

5.8 ANIMAL HEALTH

5.8.1 Animal health management must mainly be based on prevention. Disease prevention in organic livestock production shall be based on the following principles:

- (a) The selection of appropriate breeds or strains of animals as detailed in Section 5.4
- (b) The application of animal husbandry practices appropriate to the requirements of each species, encouraging strong resistance to disease and the prevention of infections.
- (c) The use of high quality feed, together with regular exercise and access to pasturage, having the effect of encouraging the natural immunological defence of the animal.
- (d) Ensuring an appropriate density of livestock, thus avoiding overstocking and any resulting animal health problems.
- (e) Clean livestock housing
- (f) Appropriate husbandry practices

- 5.8.2 The principles set out above should limit animal health problems so that they can be controlled mainly by prevention. If despite all of the above preventative measures, an animal becomes sick or injured, it must be treated immediately, if necessary in isolation, and in suitable housing. Preference is to be given to phytotherapeutic or homeopathic medicinal products, and by limiting to a strict minimum the use of chemically synthesised allopathic treatments (see 5.9.1). Products used must meet local regulations with regards to product registration or be exempt.
- 5.8.3 For homeopathic treatments with no legal withdrawal period then a nil withdrawal period applies For vaccines with no legal withdrawal period then a nil withdrawal period applies. For herbal, glucose, mineral and vitamin preparations:
- With no legal withdrawal period specified then a two day withdrawal period applies
 - With a nil withdrawal period then a nil withdrawal period applies
 - With a one day to three day withdrawal period then a two times withdrawal period applies There is no withdrawal period for herbal repellents, or disinfectants.

For additional rules specific to the USA market please refer to: USDA NOP 205.238

5.9 VETERINARY TREATMENTS

- 5.9.1 Unless an exception is granted, use of synthetic allopathic veterinary drugs or antibiotics will cause the animal to lose its organic status. Producers shall not withhold such medication where doing so will result in unnecessary suffering of the livestock.

If granted, the use of veterinary medicinal products must meet the following requirements:

Regional or other exception

The animal may retain its organic status if:

- a. You can demonstrate that all the requirements of 5.8.2 have been met
- b. Natural and alternative medicines and treatments are unlikely to be effective to cure sickness or injury, or are not available to the operator
- c. The chemical allopathic veterinary drugs or antibiotics are used under the supervision of a veterinarian
- d. Withdrawal periods shall not be less than twice that required by legislation, or a minimum of 14 days, whichever is longer (IFOAM). If no legal withholding period is specified then a minimum of 48 hours applied (Non-IFOAM)
- e. Chemically synthesised allopathic veterinary medicinal products, or antibiotics, are not administered in the absence of illness
- f. This exception is not granted more than 3 times on a given animal, or if so, the animal will permanently lose IFOAM status

- 5.9.2 You must not use substances to promote growth or production (including antibiotics, coccidiostatics and other artificial aids for growth promotion purposes), and the use of hormones or similar substances to control reproduction (e.g. induction or synchronisation of oestrus) or for other purposes, is prohibited. However, hormones may be administered to an individual animal, as a form of therapeutic veterinary treatment.
- 5.9.3 You must not use of organo-chlorines, or organo-phosphates, for treating livestock external parasites.
- 5.9.4 Veterinary treatments to animals, or treatments to buildings, equipment and facilities which are compulsory under national legislation shall be authorised.

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5.9.5 Whenever veterinary medicinal products are used the type of product must be recorded clearly (including an indication of the active pharmacological substances involved), together with details of:

- The diagnosis
- The posology (i.e. the dosage rate)
- The method of administration (e.g. drench, injection, dip)
- The duration of the treatment,
- The legal withdrawal period

This information is to be declared to AsureQuality before the livestock or livestock products can be marketed as organically produced (e.g. Emergency Treatment Notification form). Livestock treated must be clearly identified, individually in the case of large animals, individually or by batch in the case of poultry and small animals.

5.9.6 You may store allopathic veterinary medicinal products and antibiotics on holdings provided:

- That they have been prescribed by a your veterinarian in connection with treatments as referred to in these Standards
- That they are stored in a supervised location
- They are entered in the farm register

5.9.7 With the exception of vaccinations, and any compulsory eradication schemes established by MPI, where an animal or group of animals receive more than three courses of treatments with chemically- synthesised allopathic veterinary medicinal products or antibiotics within one year (or more than one course of treatment if their productive lifecycle is less than one year), the livestock concerned, or produce derived from them, may not be sold as being products produced in accordance with this Standard.

Interpretative Note:

A course of treatments shall mean all the necessary measures taken to restore the animal to health following a particular disease episode, and may include treatment with multiple drugs or include repeat treatments.

Regional or other exception – Non-IFOAM

Animals may undergo a re-conversion period if they exceed the maximum number of treatments relative to their lifecycle as per 5.9.7. In such cases approval is required from AsureQuality, using a “Reconversion of livestock” request form, and the conversion period is:

- 12 months for beef for meat
- 4 months for pigs, sheep or goat for meat and fibre/wool
- 3 months for dairy production

Interpretative Note:

If animals are administered vet treatments prohibited under USDA NOP the following applies:

- Slaughter and breeding animals lose USDA NOP certification permanently
(Ref: USDA NOP 205.238 (c) (1))

5.9.8 For wool to be organic, the sheep must:

- Be managed to these Standards, on organic land, for at least 12 months before shearing
- Have had a period of at least three months since an external allopathic parasite treatment or
- Meets at least two times the with-holding period for a biological parasite treatment

For additional rules specific to the USA market please refer to USDA NOP 205.238 (6b)

5.10 SPECIFIC VETERINARY TREATMENTS & SPECIFIC HEALTH ISSUES

This section is to be read in conjunction with Table 2 in Section 10.

5.10.1 ANTIBIOTICS

- 5.10.1.1 You may not use antibiotics on a whole herd or flock to prevent disease. You must only use antibiotics under the advice of your vet and subject to 5.9.1. NB Certain markets prohibit the use of antibiotics, or specific types of antibiotics.
- 5.10.1.2 You must not use fluoroquinolone antibiotics except with permission from AsureQuality and only to treat individual animals.
- 5.10.1.3 You should list the types of antibiotics that you would use in an emergency in your Organic Management Plan so AsureQuality can give you an indication as to whether the selected products are suitable.

5.10.2 HORMONE TREATMENTS

You must only treat individual animals and only if:

- You need to induce parturition for veterinary reasons

You must not use hormones for:

- Synchronising heat
- Stimulating production
- Promoting growth

5.10.3 VACCINES

You may use vaccines:

- If there is a known disease risk in the specific region of your farm
- The disease cannot be controlled by other management techniques
- If vaccination is legally required
- You need to ensure control of a disease communicable to humans
- If it is the simplest form available
- It is GMO-free

NB. For some markets (e.g. USDA NOP) excipients must be compliant also.

Specific Health Issues - This section is to be read in conjunction with the conditions in Table 2 in Section 10. Please note specific products may need to be approved if you are also certified under USDA NOP &/or COR. You will need to use approved products only.

5.10.4 BLOAT

You may use:

- Vegetable oils
- Poloxalene (subject to the limitations on 5.9.1)

5.10.5 FLIES

You may use:

- Herbal repellents
- Spinosad (not under USDA NOP or COR)

5.10.6 FACIAL ECZEMA

You may:

- Treat animals with zinc sulphate or liquid zinc supplements

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5.10.7 GRASS STAGGERS

You may:

- Treat animals with magnesium sulphate or liquid magnesium supplements
- Dust pasture with non-synthetic magnesium salts

5.10.8 HOOF PROBLEMS

You may use:

- Copper Sulphate
- Zinc Sulphate (check market suitability)
- Iodine

Provided these are documented in your Organic Management Plan and approved by AsureQuality.

5.10.9 MASTITIS

You may use:

- Homeopathic remedies
- Manuka honey

Interpretive note

The "Own Use" exception under ACVM only relates to oral and external use. If honey is inserted into a teat then the product must be either ACVM registered for that use, or else the treatment must be under the supervision of your veterinarian.

5.10.10 MILK FEVER

You may use:

- Phosphorus and Magnesium salts
- Calcium Burogluconate (CBG)

5.10.11 PARASITE – EXTERNAL

NB: Market restrictions apply to synthetic antiparasite treatments or ingredients. Prohibited under USDA NOP

5.10.11.1 You may use treatments on individual animals if:

- Infestation has been confirmed

5.10.11.2 You may use:

- Biological treatments or repellents (Biological treatments should be used in preference to synthetic pesticides)
- Topical minerals such as Diatomaceous earth or elemental sulphur

5.10.11.3 You must not use:

- Organo-chlorines
- Organo-phosphates
- Pyrethrum

5.10.12 PARASITES – INTERNAL

NB: Market restrictions apply to synthetic anti-parasite treatments or ingredients. Prohibited for slaughter animals under USDA NOP and very restrictive for dairy animals. Refer to USDA NOP 205.603 (a)17 for current generic active ingredients and with-holding periods.

5.10.12.1 Prevent by:

- Animal selection for resilience or resistance
- Pasture rotation

- Stocking rates
- Mixed stocking

5.10.12.2 You may use worm drenches on individual animals if:

- Infection has been confirmed (e.g. by faecal egg count)
- You observe restriction on numbers of treatments and organic with-holding periods

5.10.12.3 You must have a plan to reduce future use

5.10.13 TUBERCULOSIS (TB)

- TB testing is an allowable practice
- You should source cattle stock that have been screened and tested negative for TB

5.11 HUSBANDRY

5.11.1 In principle, the reproduction of organically reared livestock should be based on natural methods. Nevertheless artificial insemination is permitted. Other forms of artificial or assisted reproduction (for example embryo transfers and cloning) are prohibited.

5.11.2 Mutilations in general are prohibited. Cutting of teeth, hot beak trimming are not permitted under any circumstances.

Regional or other exception

Operations such as attaching elastic bands to the tails of sheep, tail-docking, infra-red beak (IRB) tipping at the Hatchery for day old chicks and dehorning are exceptions and must not be carried out systematically in organic farming. Some of these operations may, however, be authorised by AsureQuality for reasons of safety (for example dehorning in young animals and IRB beak trimming for laying hens) or if they are intended to improve the health, welfare or hygiene of the livestock. Such operations must be carried out at the most appropriate age by qualified personnel and any suffering to the animals must be reduced to a minimum and where appropriate anaesthetics used.

Regional or other exception

Physical castration is allowed in order to maintain the quality of products and traditional production practices (meat-type pigs, bullocks, capons, etc). Castrations must be carried out at the most appropriate age by qualified personnel and any suffering to the animals must be reduced to a minimum.

5.11.3 You must not tether livestock.

Regional or other exception

AsureQuality can authorise tethering of individual animals upon justification by the operator that this is necessary for safety or welfare reasons, and that such tethering is only for a limited period of time.

For additional rules specific to the USA market please refer to: USDA NOP 205.238 (1-5)

5.11.4 Where livestock are reared in groups, the size of the group must depend upon their stage of development and the behavioural needs of the species concerned. The keeping of livestock in conditions, or on a diet, which may encourage anaemia is prohibited.

5.11.5 Livestock and livestock products are to be identified at all stages of their production, preparation, transport, slaughter and marketing.

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- 5.11.6 The livestock must be identified permanently using techniques adapted to each species, individually in the case of large mammals and individually or by batch in the case of poultry and small mammals.
- 5.11.7 The use of electric prods or electronic stimulation to coerce livestock is prohibited.

5.12 SLAUGHTER AND TRANSPORT OF LIVESTOCK OR ORGANIC PRODUCTS

- 5.12.1 Transport of livestock must be carried out so as to limit the stress suffered by the animals in accordance with the relevant legislation in force. Loading and unloading must be carried out with caution and without the use of any type of electronic or chemical stimulation to coerce the animals. The use of any allopathic tranquilliser, prior to and during transport, is prohibited.
- 5.12.2 The journey time to the slaughter must not exceed eight hours. NB. Farm transfer journey times also should not exceed eight hours.

Regional exception

When there is no certified organic slaughterhouse within eight hours travel time, then permission must be sought from AsureQuality. In such cases, animals must be given a rest period and access to water.

- 5.12.3 The operator must ensure an adequate food and water supply during transport and at the slaughterhouse.
- 5.12.4 Animals must be provided with conditions during transport and slaughter that reduce and minimise the adverse effects of:
- Stress
 - Loading and unloading
 - Mixing different groups of animals or animals of different sex
 - Quality and suitability of mode of transport and handling equipment
 - Temperatures and relative humidity
 - Hunger and thirst
 - The specific needs of each animal
- 5.12.5 During the period leading up to and at the time of slaughter, livestock must be handled in such a way that stress to the animals is reduced to a minimum.
- 5.12.6 Throughout the transportation and slaughtering, there shall be a person(s) responsible for the wellbeing of the animals. Their responsibilities include ensuring each live animal avoids contact (sight, sound or smell) with dead animals or animals in the killing process.
- 5.12.7 National Codes of recommendations and minimum standards for the welfare of animals transported and / or slaughtered must be adhered to at all times.
- 5.12.8 Each animal shall be effectively stunned before being bled to death. The equipment used for stunning shall be in good working order. The use of electric prods and other such instruments is prohibited.
- 5.12.9 Product integrity should be maintained during any storage and transportation and handling by use of the following precautions:
- Organic products must be protected at all times from co-mingling with non-organic products.
 - Organic products must be protected at all times from contact with materials and substances not permitted for use in organic farming and handling.

- Separation between organic and non-organic products must be in time and/or space.

5.12.10 The certified operator owning the product at the point of transport is responsible for maintaining the organic integrity during the transport process, unless the transport operator is certified in their own right.

5.12.11 Livestock & feed products which are not in retail packaging (e.g. wool & bagged compound feed) should be transported in a closed manner which should prevent contamination or substitution and be labelled with the following as a minimum:

- The farm name and/or address of the person responsible for the production or preparation of the product AND where different the name and address of the owner or seller of the product
- The name of the product, or in the case of compound feed, a description of the compound feeding stuff
- That the product is of organic status
- The name of the certification body

5.13 MILKING OPERATIONS

5.13.1 Dairy Operators shall take all necessary precautions to protect organic milk against contamination by substances prohibited in organic farming and handling, pests, disease-causing organisms, and foreign substances. Dairy Operators should design milking facilities, plant layout, install equipment, and devise a cleaning, disinfecting and sanitising system that prevents the contamination of milk and food contact surfaces.

5.13.2 Milking operations using cleaners, sanitisers, and disinfectants on food contact surfaces shall use them in a way that maintains the food's organic integrity. Approved dairy maintenance products must be used according to their specific conditions of use, such as, but not limited to, specified intervening measures. Substances other than those appearing in Table 3 are only allowed if they are legally required.

NB. For operators certified under COR, only sanitisers comprised of the generic ingredients listed in that Standard may be used.

5.13.3 The operator shall perform an intervening event between the use of any cleaner, sanitiser, or disinfectant and the contact of organic food with that surface sufficient to prevent residual contamination of that organic food.

5.13.4 Operators should not use persistent cleansers and/or sanitisers that are not easily removed by an intervening event (e.g. quaternary ammonia) or have an adverse impact on the environment (e.g. halogenated compounds). These may be approved if there is testing to verify the sanitiser can be effectively removed before milk contact.

Interpretive note: MPI Approved Maintenance compounds have been approved based on being able to be effectively removed if label directions are followed.

5.13.5 Product integrity should be maintained during any storage and transportation and handling by use of the following precautions:

- Organic products must be protected at all times from co-mingling with non-organic products.
- Organic products must be protected at all times from contact with materials and substances not permitted for use in organic farming and handling.
- Separation between organic and non-organic products must be in time and/or space.

5.13.6 The certified operator owning the product at the point of transport is responsible for maintaining the organic integrity during the transport process, unless the transport operator is certified in their own right.

5.14 MANURE

- 5.14.1 Where the spreading of animal manure on to pasture is undertaken, determine the appropriate density of livestock equivalent to 170kg of Nitrogen per year/hectare of agricultural area used for the various categories of animals. As a guide, use the figures as outlined in Section 10, Table 4.
- 5.14.2 Organic-production holdings may establish cooperation with other holdings and enterprises, which comply with the provisions of this Standard, with the intention of spreading surplus manure from organic production. The maximum limit of 170 kg of Nitrogen from manure per year/hectare of agricultural area used will be calculated on the basis of all of the organic-production units involved in such a cooperation.
- 5.14.3 Storage facilities for livestock manure must be of a capacity to preclude the pollution of water by direct discharge, or by run-off and infiltration of the soil.
- 5.14.4 To ensure sound fertiliser management, the capacity of such storage facilities for the animal manure must exceed the storage capacity required for the longest period of the year in which any application of fertiliser to the land is either inappropriate (in accordance with good agriculture practice) or when such application is prohibited.
- 5.14.5 You should document a farm waste management plan which details how you will manage manure and crop residues to:
- Minimise nutrient losses
 - Recycle nutrients

For additional rules specific to the USA market please refer to: USDA NOP 205.239 (4c).

5.15 HOUSING AND FACILITY PEST MANAGEMENT

GENERAL PRINCIPLES

Housing conditions for livestock must meet the livestock's biological and ethological needs (e.g. behavioural needs as regards appropriate freedom of movement and comfort). The livestock must have easy access to feeding and watering. Insulation, heating and ventilation of the building must ensure that air circulation, dust level, temperature, relative air humidity and gas concentration, are kept within limits which are not harmful to the animals. The building must permit plentiful natural ventilation and light to enter. No construction materials or production equipment shall be used in a way that may significantly harm human or animal health.

- 5.15.1 Housing for all species of livestock must satisfy the needs of the animals concerned as regards ventilation, light, space and comfort. Sufficient area must accordingly be provided to permit ample freedom of movement for each animal and to develop the animals' natural social behaviour.
- 5.15.2 You must not keep rabbits and pigs in cages.
- 5.15.3 You must not house calves in individual boxes after the age of one week.
- 5.15.4 The stocking density in buildings shall provide for the comfort and wellbeing of the animals, which, in particular, shall depend on the species, the breed and the age of the animals. It shall also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animal's sex. The optimum density will seek to ensure the animals welfare by providing them with sufficient space to stand naturally, lie down easily, turn round, groom themselves, assume all natural postures and make all natural movements such as stretching and wing flapping.

- 5.15.5 The minimum surface areas for indoor housing and outdoor exercise areas, and other characteristics of housing for different species and categories of animals, are laid down in Section 10, Table 5.
- 5.15.6 The outdoor stocking density of livestock kept on pasturage, other grassland, wetland, and other natural or semi-natural habitats, must be low enough to prevent poaching of the soil and over grazing of vegetation.
- 5.15.7 Housing, pens, equipment and utensils must be properly cleaned and disinfected to prevent cross- infection and the build-up of disease carrying organisms. Only the cleaning and sanitising products listed in Section 10, Table 2.8 can be used for such cleaning and disinfection of livestock buildings and installations. Faeces, urine and uneaten or spilt food must be removed as often as necessary to minimise smell and to avoid attracting insects or rodents. Only pheromone preparations can be used for the elimination of insects and other pests in buildings and other installations where livestock is kept.
- 5.15.8 Subject to the provisions in Section 5.5, all animals must have access to pasturage or an open- air exercise area or an open-air run, which may be partially covered. They must be able to use those areas whenever the physiological conditions of the animal, the weather conditions and the state of the ground permit. Herbivores must have access to pasturage whenever conditions allow.
- 5.15.9 Livestock housing must have smooth, but not slippery floors. At least half of the total floor area must be solid, that is, not of slatted or grid construction.
- 5.15.10 The housing must provide a comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction, which is not slatted. Ample dry bedding strewn with litter material must be provided in the rest area. The litter must comprise straw or other suitable natural material.

The litter may be improved and enriched with any mineral product authorised for use as a fertiliser in organic farming in accordance with Section 10, Table 1. In addition to 5.15.1 requirements, in particular, animal welfare provisions relating to the rearing of calves and pigs must be complied with.

Interpretive note

If bedding material is edible it must meet organic feed requirements.

- 5.15.11 Sows must be kept in groups, except in the last stages of pregnancy and during the suckling period. Pigs shall not be kept in cages. Piglets may not be kept on flat decks or in piglet cages. Exercise areas must permit dunging and rooting by the animals. For the purposes of rooting different substrates can be used.
- 5.15.12 Good production practices shall be adopted to prevent pests. Pest management practices shall first involve the removal of pest habitat and food; second, the prevention of access and environmental management (light, temperature and atmosphere) to prevent pest intrusion and reproduction; third, mechanical and physical methods (traps); and fourth, lures and repellents listed in Table 2 – Substances for use in livestock production.
- 5.15.13 If the practices given in Subsection 5.15.12 are ineffective, the operator may use pest control substances listed in Table 2. The operator shall record the use and disposition of all such substances.
- 5.15.14 If the practices given in Subsections 5.15.12 and 5.15.13 are ineffective, alternative substances not listed in Table 2 may be used in on-farm facilities where there is no risk to production status, or livestock, or feed integrity. When alternative substances are used indoors, the operator shall ensure that no organic livestock, feed or packaging materials for those products are present.

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Operators must clearly document:

- a. Why listed substances were not suitable for pest management
- b. How contact of organic products with alternative substances has been avoided
- c. All activity involving the use, storage and disposal of alternative substances

5.15.15 Operators shall monitor and document the use of substances not listed in table 2 under any governmental programme for the treatment of pests and diseases.

Note: In the event of an emergency pest or disease treatment, the operator is required to notify the certification body without delay of any change that may affect organic product certification

5.15.16 When animals are housed, the operator must ensure the animals are regularly visited and monitored, and in the event where welfare and health problems occur, appropriate management adjustments are implemented (e.g. reducing stocking density).

5.16 ADDITIONAL CERTIFICATION MEASURES

5.16.1 When the inspection system applying specifically to livestock production is first implemented, the producer must draw up an Organic Management Plan including:

- A full description of the livestock buildings, pasturages, open-air exercise areas, open air runs, etc. and, where applicable, the premises for the storage, packaging and processing of livestock, livestock products, raw materials and inputs
- A map and associated land parcel identifier (i.e. Land Valuation number)
- A full description of the installations for the storage of livestock manure.
- Plan for spreading such manure agreed with AsureQuality, together with a full description of the areas given over to crop production
- Where appropriate, the arrangements laid down by contract with other farms as regards the spreading of manure
- Management plan for the organic-production livestock unit (e.g. management for feeding, reproduction, health, etc.)
- All practical measures to be taken on the livestock farm to ensure compliance with this Standard
- Details of transport operators handling bulk organic products who are not covered by organic certification, and who are therefore under the responsibility of the livestock operator. Details of any inputs to be used.

5.16.2 Where a producer manages several livestock holdings in the same region, the units which produce livestock or livestock products not covered by Section 1 will also be subject to the documentation and inspection system as regards the first, second and third points of 5.16.1 on livestock and livestock products and as regards the provisions on livestock management, livestock records and the principles governing storage of animal husbandry products used.

5.16.3 Livestock records must be compiled in the form of a register and made available to the inspection authorities at all times at the address of the holding.

5.16.4 Such records, which are to provide a full description of the herd or flock management system, must contain the following information:

- **Livestock arriving at the holding:** origin and date of arrival, conversion period, identification mark and veterinary record
- **Livestock leaving the holding:** age, number of head, weight in case of slaughter, identification mark and destination
- **Losses:** Details of any animals lost and reasons

- **Feed:** type, including feed supplements, proportions of various ingredients of rations and periods of access to free-range areas, periods when restrictions apply
- **Disease prevention and treatment and veterinary care:** as per Sections 5.9., 5.17.6, 5.18.6

5.16.5 The general requirements of crop production stated in 4.11 also apply to livestock production.

5.17 POULTRY PRODUCTS

CONTENTS

- 5.17.1 Origin of Birds & Conversion Requirements
- 5.17.2 Age at Slaughter
- 5.17.3 Poultry Feed
- 5.17.4 Poultry Housing
- 5.17.5 Stocking Rates
- 5.17.6 Poultry Health Management
- 5.17.7 Identification
- 5.17.8 Documents and Records

These Standards are applicable for products to be sold on the New Zealand market or under AsureQuality certification to unregulated markets. Poultry products intended for sale as end products, or as ingredients in products, exported to Europe, or a country under an equivalence scheme must meet the requirements of the OOAP Technical Rules. Products sold in other regulated markets must be assessed and certified to those respective market requirements. These requirements are not in lieu of any regulatory requirements.

5.17.1 ORIGIN OF BIRDS & CONVERSION REQUIREMENTS

- 5.17.1.1 Birds must come from production units, which comply with the rules on the various types of livestock production laid down in this Standard. Throughout their life, this system of production must be applied.

Regional or other exception

When a flock is constituted at the initial set up, or renewed for full replacement of the flock, and organically reared birds are not available in sufficient numbers, non-organically reared birds may be brought into an organic livestock production unit, subject to the following conditions:

- Pullets for the production of eggs must be less than 18 weeks old (NB these birds do not gain an organic meat status). IFOAM: Pullets must be managed to organics from 2 days old
- Chicks for broiler production must be less than three days old at the time they leave the hatchery (NB written declaration required of any vaccines given and corresponding GM status)

This exception is considered authorised by AsureQuality until such time as New Zealand has the capability to raise certified organic hens to 16 weeks.

- 5.17.1.2 The period of conversion for non-organic birds is six weeks.
- 5.17.1.3 The period of conversion for the land may be reduced to one year for pasturages, open air runs and exercise areas used by poultry

5.17.2 AGE AT SLAUGHTER

- 5.17.2.1 For poultry, the minimum age at slaughter will ensure that the conversion period of six weeks has been completed and at least one third of their life has been with access to pasture. For chickens this would normally be a minimum of 51 days.

NB. This age is less than that which is applicable to EU Regulations.

5.17.3 POULTRY FEED

- 5.17.3.1 Poultry must be fed on organically produced feeding stuffs.

Regional or other exception

AsureQuality can authorise for a limited period a percentage of conventional feed where such an exception is warranted in the following cases:

- Organic feed is of inadequate quantity or quality
- When forage production is lost, in particular as a result of exceptional weather conditions

In no such case may the percentage of non-organic feed exceed 15% dry matter per bird calculated on an annual basis. Taking this into account the maximum percentage authorised of conventional feed in the daily ration is 25% calculated as a percentage of the dry matter. This must be approved by AsureQuality prior to use.

NB. For certification to OOAP Technical Rules, reference must be made to that Standard for conditions and approval granted by MPI. There is no option under USDA NOP for approval to use feed which is not certified to USDA NOP.

NB The percentage calculation excludes non-agricultural ingredients such as: vitamins, minerals, & limestone

- 5.17.3.2 Roughage, fresh or dried fodder, or silage must be added to the daily ration for poultry.
- 5.17.3.3 Up to 30% of the feed formula of rations on average may comprise in-conversion feeds. If you produce feed from your own holding from land that is in its second year of conversion you may feed your birds 100% of their diet from this source and still sell the end products as organic, provided you have some land that is fully certified.
- 5.17.3.4 Feeds, feed materials, compound feedstuffs, feed additives, processing aids for feeds and certain products used in animal nutrition must not have been produced with the use of genetically modified organisms, or products derived from GMOs.
- 5.17.3.5 In order to satisfy nutritional requirements of poultry, only the following types of non-agricultural natural products listed in Section 10, Table 2 may need to be used under well-defined conditions for to supplement feeding:
- Feed materials from mineral origin
 - Trace elements
 - Vitamins, pro-vitamins and chemically well-defined substances having a similar effect

Regional or other exception

Synthetic vitamins, minerals and supplements may be used when natural sources are not available in sufficient quantity and quality. NB the conditions of approval vary by standard.

- 5.17.3.6 You must not use the following ingredients in feeds:
- Sawdust
 - Synthetic colouring agents
 - Urea or other synthetic nitrogen compounds
 - Materials that have been solvent extracted (except those extracted using ethanol or water) or the addition of chemical agents
 - All types of excrements including droppings, dung or manure
 - Synthetic amino-acids and amino-acid isolates
 - Synthetic growth promoters or stimulants
 - Synthetic appetisers
 - Preservatives, except when used as a processing aid

For additional rules specific to the USA market please refer to: USDA NOP 205.237.

Regional or other exception – Non-IFOAM

Where the use of the synthetic amino acid methionine, is required for bird health reasons, then the operation may be certified outside of the IFOAM accredited programme according to the following restrictions:

- Methionine used must be of the correct form and from non- GMO sources.

Acceptable forms

- DL-Methionine (CAS 59-51-8), DL- Methionine-hydroxy analog(CAS 583-91-5) & DL- Methionine-hydroxy analog calcium (CAS 63-68-3)

Prohibited forms

- D- Methionine (CAS 348-67-4) & L- Methionine (CAS 63-68-3)

From 2 Oct 2012 – 1 Oct 2015 the maximum level per ton of acceptable methionine is as follows:

- Laying chickens - 1kg/1000kg. Broiler chickens - 1kg/1000kg.

5.17.3.7 You must maintain feed manufacturing / production records, and records of any brought in feed.

5.17.3.8 Land used for grazing poultry must be rested between batches of birds, to allow the vegetation to grow back.

5.17.4 POULTRY HOUSING

5.17.4.1 Buildings for all poultry must meet the following minimum conditions:

- At least one third shall be solid, that is, not of slatted or grid construction, and covered with a litter material such as straw, wood shavings, sand or turf.
- In poultry houses for laying hens, a sufficiently large part of the floor area available to the hens must be available for the collection of bird droppings.
- They must have exit/entry pop-holes of a size adequate for the birds, and these pop-holes must have a combined length of at least 4m per 100m² area of the house available to the birds.
- The total usable area of poultry houses for meat production on any single production unit must not exceed 1600 m².

5.17.4.2 In the case of laying hens 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.

5.17.4.3 For health reasons, buildings must be emptied of livestock between each batch of poultry reared. The buildings and fittings are to be cleaned and disinfected during this time.

5.17.4.4 Poultry must be reared in open-range conditions and cannot be kept in cages.

5.17.4.5 Poultry must have access to an open-air run whenever weather conditions permit and, whenever possible must have such access for at least one third of their life. These open-air runs must be mainly covered with vegetation, be provided with protective facilities, and permit birds to have easy access to adequate numbers of drinking and feeding troughs.

5.17.4.6 Water fowl must have access to a stream, pond or lake whenever the weather conditions permit in order to respect animal welfare requirements or hygienic conditions.

5.17.5 STOCKING RATES

5.17.5.1 The stocking density for laying birds in housing shall not exceed:

- 6 birds/m²

5.17.5.2 The stocking density for meat chickens in fixed housing shall not exceed:

- 10 birds/m²
- more than 21kg liveweight/m²
(NB. For birds up to two weeks old, only the second bullet point applies)

5.17.5.3 A higher stocking density for meat chickens in mobile housing is permitted, provided the houses do not exceed 150m² and are open at night.

The density shall not exceed:

- 16 birds/m²
- No more than 30kg live weight/m²

5.17.5.4 Perches shall be provided to allow a minimum of 18cm per bird.

5.17.5.5 Sufficient nests must be provided for laying hens:

- To ensure a maximum of 7 birds per nest
- In the case of a common nest 120 cm²/bird

5.17.5.6 Each poultry house must not contain more than:

- 4800 meat chickens
- 3000 laying hens
- 2000 guinea fowl
- 1000 Muscovy or Peking ducks or other ducks
- 1000 capons, geese or turkeys

Regional or other exception – Non-IFOAM

Stocking density in each poultry house shall not exceed 3,500 layers, or 6,000 meat chickens.

5.17.5.7 The total stocking density at any given time for layers shall not exceed 3,000 birds per hectare where stock or forage rotations are practiced, and shall not exceed 2,000 birds per hectare for set stocking systems.

5.17.5.8 Meat chickens shall have access to areas not exceeding 2,500 birds per hectare for set stocking systems, or 4,800 birds per hectare for rotational systems. Rotational systems are defined whereby housing is either moveable, or whereby rotation and resting of range areas ensures recovery of forage areas between production cycles.

Regional or other exception – Non-IFOAM

Stocking density shall not exceed 3,500 layers, or 6,000 meat chickens per hectare.

Section 5. Livestock

- 5.17.5.9 Where the spreading of manure to pasture from poultry houses occurs, it must be done in a manner that ensures it does not exceed the equivalent to 170kg nitrogen/ha/year. For meat chickens this could equate to 580 chickens/ha and for laying hens 230 chickens/ha. However, more chickens per hectare can be carried if the producer can show that less than 170kg/ha/year is being added to the land. (see Table 4)
- 5.17.5.10 The requirements of 5.17.5.9 can be met by having a grazing area for the chickens plus additional land set aside for the spreading of manure to ensure that the nitrogen limit is not exceeded. For the maximum of 3000 layer hens per hectare this would require 1 hectare production area PLUS an additional 9.9 hectares. Alternatively manure would need to be removed from the farm.

5.17.6 POULTRY HEALTH MANAGEMENT

- 5.17.6.1 Poultry health management must mainly be based on prevention. Disease prevention in organic poultry production shall be based on the following principle:
- The selection of appropriate breeds or strains of animals as detailed in Section 5.4
 - The application of animal husbandry practices appropriate to the requirements of each species, encouraging strong resistance to disease and the prevention of infections
 - The use of high quality feed, together with regular exercise and access to pasturage, having the effect of encouraging the natural immunological defence of the animal
 - Ensuring an appropriate density of livestock, thus avoiding overstocking and any resulting animal health problems
 - Clean livestock housing
 - Appropriate husbandry practices
- 5.17.6.2 The principles set out above should limit animal health problems so that they can be controlled mainly by prevention. If despite all of the above preventative measures, an animal becomes sick or injured, it must be treated immediately, if necessary in isolation, and in suitable housing. Preference is to be given to phytotherapeutic or homeopathic medicinal products, and by limiting to a strict minimum the use of chemically synthesised allopathic treatments (see 5.17.7.3).
- 5.17.6.3 Use of synthetic allopathic veterinary drugs or antibiotics will cause the animal to lose its organic status. Producers shall not withhold such medication where doing so will result in unnecessary suffering of the livestock.

Regional or other exception

The bird may retain its organic status if:

- You can demonstrate that all the requirements of 5.17.6.2 have been met
- Natural and alternative medicines and treatments are unlikely to be effective to cure sickness or injury, or are not available to the operator
- The chemical allopathic veterinary drugs or antibiotics are used under the supervision of a veterinarian
- Chemically synthesised allopathic veterinary medicinal products, or antibiotics, are not administered in the absence of illness
- This exception is not granted more than three times on a given flock, or if so, the flock will permanently lose IFOAM status

- 5.17.6.4 The withdrawal period between the last administration of an allopathic veterinary medicinal product to a bird under normal conditions of use and slaughter, or the production of organically produced eggs, is to be
- Double the legal withdrawal period
 - In a case in which this period is not specified, then a minimum of 48 hours

- If specified as zero days then zero days is applied

If granted, the use of veterinary medicinal products must meet the following requirements:

- 5.17.6.5 You must not use substances to promote growth or production (including antibiotics, coccidiostats and other artificial aids for growth promotion purposes)
- 5.17.6.6 You must not use of organo-chlorines or organo-phosphates for treating livestock external parasites.
- 5.17.6.7 Veterinary treatments to animals, or treatments to buildings, equipment and facilities which are compulsory under national legislation shall be authorised.
- 5.17.6.8 Whenever veterinary medicinal products are used the type of product must be recorded clearly (including an indication of the active pharmacological substances involved), together with details of:
- The diagnosis
 - The posology (i.e. the dosage rate)
 - The method of administration (e.g. drench, injection, dip)
 - The duration of the treatment,
 - The legal withdrawal period

This information is to be declared to AsureQuality before the birds, meat or eggs are marketed as organically produced. Treated birds must be clearly identified by batch.

- 5.17.6.9 You may store allopathic veterinary medicinal products and antibiotics on holdings provided:
- That they have been prescribed by a veterinarian in connection with treatments as referred to in these Standards
 - That they are stored in a supervised location
 - They are entered in the farm register
- 5.17.6.10 With the exception of vaccinations, and any compulsory eradication schemes established by MPI, where a group of birds receive more than two courses of treatments with chemically-synthesised allopathic veterinary medicinal products or antibiotics within one year (or more than one course of treatment if their productive lifecycle is less than one year), or a maximum of three courses, the livestock concerned, or produce derived from them, may not be sold as being products produced in accordance with this Standard.
- 5.17.6.11 Birds must undergo a re-conversion period of 10 weeks for poultry reared for meat, and 6 weeks for laying hens, if they exceed the maximum number of treatments relative to their lifecycle as per 5.17.6.10. In such cases, approval is required from AsureQuality, and the flock will lose IFOAM status.

Interpretative Note:

A course of treatments shall mean all the necessary measures taken to restore the animal to health following a particular disease episode.

- 5.17.6.12 Operations such as trimming of beaks is prohibited, however this does not exclude infra-red beak tipping which is not considered a mutilation.

5.17.7 IDENTIFICATION

5.17.7.1 Poultry and poultry products are to be identified at all stages of their production, preparation, transport, slaughter and marketing.

5.17.7.2 The poultry must be identified permanently by batch using techniques adapted to each species.

5.17.8 DOCUMENTS AND RECORDS

5.17.8.1 When the inspection system applying specifically to poultry production is first implemented, the producer and the inspection body must draw up an Organic Management Plan including:

- A full description of the livestock buildings, pasturages, open-air exercise areas, open air runs, etc. and, where applicable, the premises for the storage, packaging and processing of poultry, poultry products, feed, raw materials and inputs.
- A map and associated land parcel identifier (i.e. Land Valuation number).
- A full description of the installations for the storage of livestock manure.
- Plan for spreading such manure agreed with AsureQuality, together with a full description of the areas given over to crop or grain production.
- Where appropriate, the arrangements laid down by contract with other farms as regards the spreading of manure.
- Management plan for the organic-production livestock unit (e.g. management for feeding, reproduction, health, etc.)
- All practical measures to be taken on the livestock farm to ensure compliance with this Standard.

5.17.8.2 Where a producer manages several poultry holdings in the same region, the units which produce livestock or livestock products not covered by Section 1 will also be subject to the documentation and inspection system as regards the first, second and third points of 5.17.8.1 on livestock and livestock products and as regards the provisions on livestock management, livestock records and the principles governing storage of animal husbandry products used.

5.17.8.3 Poultry records must be compiled in the form of a register and kept available to the inspection authorities at all times at the address of the holding.

Such records, which are to provide a full description of the flock management system, must contain the following information:

- Birds/chicks arriving at the holding; origin and date of arrival, conversion period, identification mark and veterinary record
- Birds leaving the holding; age, number of birds, weight in case of slaughter, identification mark and destination
- Losses: Details of any birds lost and reasons
- Feed: type, including feed supplements, proportions of various ingredients of rations and periods of access to free-range areas, periods when restrictions apply
- Disease prevention and treatment and veterinary care: record details as per 5.17.6.8

5.17.8.4 The general requirements of crop production stated in 4.11 also apply to pasture, or grain crops, grown for poultry production.

5.17.9 EGG PACKING AND TRANSPORTING POULTRY PRODUCTS

- 5.17.9.1 Egg Operators shall take all necessary precautions to protect organic eggs against contamination by substances prohibited in organic farming and handling, pests, disease-causing organisms, and foreign substances. Egg Operators should design packing facilities, plant layout, install equipment, and devise a cleaning, disinfecting and sanitising system that prevents the contamination of eggs, milk and food contact surfaces.
- 5.17.9.2 Egg operations using cleaners, sanitisers, and disinfectants on food contact surfaces shall use them in a way that maintains the food's organic integrity.
- 5.17.9.3 The operator shall perform an intervening event between the use of any cleaner, sanitiser, or disinfectant and the contact of organic food with that surface sufficient to prevent residual contamination of that organic food.
- 5.17.9.4 Operators should not use persistent cleansers and/or sanitisers that are not easily removed by an intervening event (e.g. quaternary ammonia) or have an adverse impact on the environment (e.g. halogenated compounds). These may be approved if there is testing to verify the sanitizer has been effectively removed before food contact
- 5.17.9.5 Product integrity should be maintained during any storage and transportation and handling by use of the following precautions:
- Organic products must be protected at all times from co-mingling with non-organic products.
 - Organic products must be protected at all times from contact with materials and substances not permitted for use in organic farming and handling.
 - Separation between organic and non-organic products must be in time and/or space.
- 5.17.9.6 The certified operator owning the product at the point of transport is responsible for maintaining the organic integrity during the transport process, unless transport operator is certified in their own right.
- 5.17.9.7 If not in retail packaging, labelling of organic products during transport is as per 3.12.

5.18 BEEKEEPING AND BEEKEEPING PRODUCTS

CONTENTS

- 5.18.1 General Requirements
- 5.18.2 Conversion Period
- 5.18.3 Origin of the Bees
- 5.18.4 Siting of the Apiaries
- 5.18.5 Feed
- 5.18.6 Disease Prevention and Veterinary Treatments
- 5.18.7 Husbandry Management Practices and Identification
- 5.18.8 Honey Handling and Transportation
- 5.18.9 Characteristics of Hives and Materials Used in Beekeeping
- 5.18.10 Parallel Production

5.18.1 GENERAL REQUIREMENTS

- 5.18.1.1 Beekeeping is an important activity that contributes to the protection of the environment and agricultural and forestry production through the pollination action of bees.
- 5.18.1.2 The qualification of beekeeping products as being from organic production is closely bound up both with the characteristic of the hive treatments and the quality of the environment. This qualification also depends on the conditions for extraction, processing and storage of beekeeping products.

5.18.2 CONVERSION PERIOD

- 5.18.2.1 Beekeeping products can be sold with references to the organic production method only when the provisions laid down in this Standard have been complied with for at least one year. During the conversion period the wax has to be replaced according to the requirements laid down in paragraph 5.18.9.3.

5.18.3 ORIGIN OF THE BEES

- 5.18.3.1 In the choice of breeds, account must be taken of the capacity of animals to adapt to local conditions, their vitality and their resistance to disease. Preference shall be given to the use of European breeds of *Apis mellifera* and their local ecotypes.
- 5.18.3.2 Apiaries must be constituted by means of the division of colonies or the acquisition of swarms or hives from units complying with the provisions laid down in this Standard.

Regional or other exception

Subject to the prior approval by AsureQuality, apiaries existing in the production unit not complying with the rules of this Standard can be converted.

Regional or other exception

The reconstitution of the apiaries shall may be authorised by AsureQuality, when apiaries complying with this Standard are not available, in case of a high mortality of animals caused by health or catastrophic circumstances, subject to the conversion period. (In the case of OOAP Technical Rules, this exception is subject to approval by MPI).

Regional or other exception

For the renovation of the apiaries 10% per year of the queen bees and swarms not complying with this Standard can be incorporated into the organic-production unit provided that the queen bees and swarms are placed in hives with combs or comb foundations coming from organic-production units. In such cases, clause 5.18.2.1 will apply.

5.18.4 SITING OF THE APIARIES

- 5.18.4.1 A map on an appropriate scale listing the location of hives as provided for in Section 4.1 1.2, first indent shall be provided to AsureQuality by the beekeeper. Where no such areas are identified, the beekeeper must provide AsureQuality with appropriate documentation and evidence, including suitable analyses if necessary, that the areas accessible to the colonies meet the conditions required in this Standard.
- 5.18.4.2 The siting of the apiaries must:
- (a) Ensure enough natural nectar, honeydew and pollen sources for bees and access to water.
 - (b) Be such that, within a radius of 3kms from the apiary site, nectar and pollen sources consist essentially of organically produced crops and/or spontaneous vegetation, according to the requirements of Section 4 Rules of Production of this Standard, and crops not subject to the provisions of this Standard but treated with low environmental impact methods which cannot significantly affect the qualification of beekeeping production as being organic.
 - (c) Maintain enough distance (min 5kms) from any non-agricultural production sources possibly leading to contamination, for example: urban centres, motorways, industrial areas, waste dumps, waste incinerators etc.

The above requirements do not apply to areas where flowering is not taking place, or when the hives are dormant.

Regional or other exception – Non-IFOAM

Where the siting of the apiaries meets point 5.18.4.2 (b) but not (c), then the honey may be certified outside of the IFOAM accredited programme.

- 5.18.4.3 The zone where the apiary is situated must be registered together with the identification of the hives. AsureQuality must be informed of the moving of apiaries with a deadline agreed on with AsureQuality.

NB. Additional requirements for the forage area may be in place for other international standards. Please note that for supply to the UK, honey is residue tested by floral type so additional costs apply.

5.18.5 FEED

- 5.18.5.1 At the end of the production season, hives must be left with reserves of honey and pollen sufficiently abundant to survive the winter.

Regional or other exception

The artificial feeding of colonies is authorised where the survival of the hives is endangered due to due to unexpected need (for example, when it is required by climatic conditions that provoke crystallisation of honey). Artificial feeding shall be made with organically produced honey, preferably from the same organic-production unit.

Regional or other exception

AsureQuality can authorise the use of organically produced sugar syrup, or organic sugar molasses instead of organically-produced honey in artificial feeding. NB. Certification under OOAP Technical Rules requires approval granted by MPI directly against the conditions specified in the Technical Rules.

- 5.18.5.2 Artificial feeding may be carried out only between the last honey harvest and before the start of the next nectar or honeydew flow period.
NB. For time periods under OOAP refer to OOAP Technical Rules.

Regional or other exception

For queen bee production, the feeding of organic sugar outside the period in 5.18.5.2 may be approved by AsureQuality, when the survival of the bees is endangered. In such cases the honey from these hives cannot be presented as organic and the operator would no longer be operating under the IFOAM accredited programme. NB. Under OOAP Technical Rules approval must be granted by MPI.

- 5.18.5.3 The following information shall be entered in the register of the apiaries with regard to the use of artificial feeding: Type of product, dates, quantities and hives where it is used.
- 5.18.5.4 Other products different from those indicated in paragraphs 5.18.5.1 cannot be used in organic beekeeping.

5.18.6 DISEASE PREVENTION AND VETERINARY TREATMENTS

- 5.18.6.1 Disease prevention in beekeeping shall be based on the following principles:
- (a) The selection of appropriate hardy breeds
 - (b) The application of certain practices encouraging strong resistance to disease and the prevention of infections, such as: regular renewal of queen bees, systematic inspection of hives to detect any health anomalies, control of male brood in the hives, disinfecting of materials and equipment at regular intervals, destruction of contaminated material or sources, regular renewal of beeswax and sufficient reserves of pollen and honey in hives.
- 5.18.6.2 If despite all the above preventive measures, the colonies become sick or infested, they must be treated immediately and, if necessary, the colonies can be placed in isolation apiaries.
- 5.18.6.3 The use of veterinary medicinal products in beekeeping, which complies with this Standard, shall respect the following principles:
- (a) Only veterinary medicinal products that are authorised for the specific uses under National Legislation (e.g. In New Zealand under the Animal Remedies Act and/or the ACVM Act, HSNO Act).
 - (b) Phytotherapeutic and homeopathic products shall be used in preference to allopathic products chemically synthesised, provided that their therapeutic effect is effective for the condition for which the treatment is intended.
 - (c) If the use of the above mentioned products should prove to be, or is unlikely to be effective to eradicate a disease or infestation which risks destroying colonies, allopathic chemically synthesised medicinal products may be used under the responsibility of a veterinarian, or other persons authorised by AsureQuality, without prejudice to the principles laid down in paragraph (a) above.
 - (d) The use of allopathic chemically synthesised medicinal products for preventive treatments is prohibited.
 - (e) Without prejudice to the principle in (a) above formic acid, lactic acid, acetic acid and oxalic acid and the following substances: menthol, thymol, eucalyptol or camphor can be used in cases of infestation with *Varroa jacobsoni*.

- 5.18.6.4 In addition to the above principles, veterinary treatments or treatments to hives, combs etc, which are compulsory under national legislation shall be authorised.
- 5.18.6.5 If a treatment is applied with chemically-synthesised allopathic products during such a period, the colonies treated must be placed in isolation apiaries, the products shall not be sold as organic and all the wax must be replaced with wax complying with the conditions laid down in this Standard. Subsequently, the conversion period of one year will apply to those colonies.
- 5.18.6.6 The requirements laid down in the previous paragraph do not apply to products mentioned in paragraph 5.18.6.3 (e).
- 5.18.6.7 Whenever veterinary medicinal products are to be used, the type of product (including the indication of the active pharmacological substance) together with details of the diagnosis, the posology, the method of administration, the duration of the treatment and the legal withdrawal period must be recorded clearly and declared to AsureQuality before the products can be marketed as organically produced.

5.18.7 HUSBANDRY MANAGEMENT PRACTICES AND IDENTIFICATION

- 5.18.7.1 The destruction of bees in the combs as a method associated with the harvesting of beekeeping products is prohibited.
- 5.18.7.2 Mutilation such as clipping the wings of queen bees is prohibited.
- 5.18.7.3 The replacement of the queen bees involving the killing of the old queen is permitted.
- 5.18.7.4 The practice of destroying the male brood is permitted only to contain the infestation with *Varroa jacobsoni*.
- 5.18.7.5 The use of chemical synthetic repellents is prohibited during honey extraction operations. The use of smoke should be kept to a minimum. Acceptable smoking materials should be natural or from materials that meet the requirements of these standards.
- 5.18.7.6 The dates of removal of the supers and the honey extraction operations must be documented in the records of the apiary.

5.18.8 HONEY HANDLING AND TRANSPORTATION

- 5.18.8.1 Particular care shall be taken to ensure adequate extraction, processing and storage of beekeeping products. All the measures to comply with these requirements shall be recorded.
- 5.18.8.2 The use of combs, which contain brood, is prohibited for honey extraction.
- 5.18.8.3 Honey temperatures should be maintained as low as possible during extraction and processing and must not exceed 45°C.
- 5.18.8.4 If not in retail packaging, labelling of organic products during transport is as per 3.12.

5.18.9 CHARACTERISTICS OF HIVES AND MATERIALS USED IN BEEKEEPING

- 5.18.9.1 The hives must be made basically of natural materials presenting no risk of contamination to the environment or the apiculture products.
- 5.18.9.2 With the exception of products mentioned in paragraph 5.18.9.6, only natural products such as propolis, wax and plant oils can be used in the hives.
- 5.18.9.3 The beeswax for new foundations must come from organic production units. During the conversion period the wax shall be replaced by organically produced wax. Where no prohibited products have been previously used in the hive and there is no risk of contamination of wax, replacement wax is not necessary. In cases where all the wax cannot be replaced during a one-year period, the conversion period may be extended with the approval of AsureQuality.
- 5.18.9.4 For the purposes of protecting materials (frames, hives and combs) in particular from pests, only appropriate products listed in Section 10, Table 2 are permitted.
- 5.18.9.5 Physical treatments such as steam or direct flame are permitted.
- 5.18.9.6 For pest and disease control and for hive disinfection the following products may be allowed:
- Caustic soda
 - Lactic, oxalic, acetic acid
 - Formic acid
 - Sulphur
 - Etheric oils
 - Bacillus thuringiensis

5.18.10 PARALLEL PRODUCTION

- 5.18.10.1 When an operator runs several beekeeping units in the same area all the units must comply with the requirements of this Standard.

Regional or other exception – Non-IFOAM

An operator can run units not complying with this Standard provided that all the requirements of this Standard are fulfilled with the exception of the provisions laid down in paragraph 5.18.4.2 (b) for the siting of the apiaries. In that case, the product cannot be sold with references to organic production methods.

Where an exception has been granted AsureQuality will undertake inspections more frequently than once per year and at critical times. This will normally include inspections at the time of harvest or during processing. Such inspections would also include non-organic areas, particularly the storage of inputs.

This is a form of parallel production.

- 5.18.10.2 In cases of Parallel Production the operator will ensure:
- That the documentation regarding the production or processing, storage and sales is well managed and makes clear distinctions between certified and non-certified products

- The measures taken to safeguard against the risk to the organic integrity is understood at all levels of the operation
- Accurate production estimates are recorded and shall be checked against sales records

5.18.10.3 Parallel production may only occur under the IFOAM accredited programme where the bees are of a different species.

5.19 AQUACULTURE PRODUCTION

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- 5.19.11 Specific Aquaculture Production - Fish
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5.19.1 SCOPE

Aquaculture includes the farming of many different species using diverse forms of production in fresh-, brackish- and saltwater.

This Standard covers aquatic plants (seaweed) and fish, carnivorous, omnivorous and herbivorous organisms of all types and at all stages of growth, grown in any form of enclosure such as earthen ponds, tanks and cages (open and closed systems). Wild, stationary organisms in open collecting areas can be certified as organic. Organisms that are moving freely in open waters, and/or that are not capable of inspection according to general procedures for organic production, are not covered by these Standards.

Wild, sedentary organisms in open collecting areas may be able to be certified as organic, refer to Section 4.13 Collection from the Wild and specifically to the seaweed section 5.19.14.

Organic aquaculture is based on:

- High quality water entering the system
- Sound management practices
- The use of appropriate stocking rates
- Consideration of stock welfare
- The use of approved inputs

Operators shall comply with all relevant general requirements of Section 4 and 5 and Aquatic ecosystems shall be managed to comply with relevant requirements of the introduction section of this Standard.

Aquatic plant production shall comply with the relevant requirements of the introduction section and Section 4 of this Standard.

5.19.2 GENERAL REQUIREMENTS

GENERAL PRINCIPLES

Management techniques must be governed by the physiological and ethological needs of the organisms in question. The organisms should be allowed to meet their basic behavioural needs. Management techniques, especially when applied to influence production levels and speed of growth, must maintain and protect the good health and welfare of the organisms.

When introducing non-native species, special care must be to avoid permanent disruption to natural ecosystems. Production will maintain the aquatic environment and surrounding aquatic and terrestrial ecosystem, by using a combination of production practices which:

- Encourage and enhance biological cycles
- Use a wide range of methods for disease control e.g. emptying ponds between batches to light kill bacteria
- Prohibit synthetic fertilisers and avoid chemotherapeutic agents
- Provide for polyculture where possible

Converting material of plant and animal origin into animal production results in nutrient and energy losses. Where possible farms should have settling ponds for recycling nutrients and to ensure that the water quality leaving the farm is equal to the quality arriving to the farm.

STANDARDS

- 5.19.2.1 Operators must comply with all the relevant general requirements listed in Section 4 and 5 of this standard for fish and aquatic plants.
- 5.19.2.2 There must be adequate room in cages or ponds for the fish to exhibit natural behaviour; such as forming shoals. Stocking densities shall not compromise animal welfare. Operators shall routinely monitor water quality, stocking densities, health and behaviour or of each school and manage the operation to maintain water quality, health, and natural behaviour.
- 5.19.2.3 AsureQuality may allow artificially prolonged light periods, appropriate to the species and geographical location. Day length shall not be artificially prolonged beyond 16 hours per day. Abrupt changes in light intensity must be avoided, this may be achieved through the use of dimmable lights or background lighting.
- 5.19.2.4 Ultraviolet light and ozone may only be used in hatcheries and nurseries.
- 5.19.2.5 Natural bore water may be used to heat or cool water at all stages of production, however artificial heating or cooling must only be used in hatcheries and nurseries.
- 5.19.2.6 For biological control of ectoparasites preference shall be given to the use of cleaner fish.

CONSTRUCTION AGENTS

- 5.19.2.7 Construction and operation of the production unit must not have a significant adverse effect on the surrounding aquatic or terrestrial ecosystems, the environment or local communities in accordance with the Resource Management Act.

Construction materials and production equipment must not contain compounds that could detrimentally affect the environment or contaminate the certified product, e.g. paints, materials impregnated with synthetic/ chemical agents etc. Where cages are used the design, construction and maintenance must be appropriate to the operating conditions.

- 5.19.2.8 Adequate measures must be taken to prevent escapes of introduced or cultivated species, from enclosures and document any that are known to occur. Appropriate actions must be taken to reduce the impact on the local ecosystem, including recapture where appropriate. Such escapes and action taken are to be documented.
- 5.19.2.9 Adequate measures must be taken to prevent predation on species living in enclosures. The poisoning of predators is not permitted.
- 5.19.2.10 Environmental parameters such as temperature, dissolved oxygen, salinity and suspended solids must not fluctuate drastically within the system.

Section 5. Livestock

Operators shall take verifiable and effective measures to minimise the release of nutrients and waste into the aquatic ecosystem.

For land based operations - Continuous addition of ample unpolluted water is essential in preventing stress and sickness in farmed fish and is a cornerstone of organic aquaculture. If O₂ levels at the outflow of the farm fall below 50% of the incoming level for more than 24 hours action needs to be taken to lift the O₂ levels either by reducing fish numbers or increasing water flow.

Where possible farms should have settling ponds for recycling nutrients and to ensure that the water quality leaving the farm is equal to the quality arriving on the farm. In the case of filter feeding molluscs the water leaving the unit is likely to contain less nutrient and be of higher quality than water entering the farm.

Fertilisers and pesticides are prohibited unless they appear in Table 1 of Section 10.

- 5.19.2.11 The aeration of water must be documented if it is carried out. Mechanical aeration is permitted to ensure animal welfare and health and should be powered by renewable sources.
- 5.19.2.12 The use of oxygen is only permitted for animal health requirements and critical periods of production and transport, in the following cases:
- Exceptional cases of temperature rise or drop in atmospheric pressure or accidental pollution
 - Occasional stock management procedures such as sampling and sorting, or
 - In order for the survival of the farm stock
- 5.19.2.13 An environmental assessment report must be prepared if production exceeds 20 tonnes of aquaculture products per year. As a minimum the content of this is to be based on Annex IV of Council Directive 85/337/EEC. This is not in lieu of any regulatory requirements for an environmental assessment.
- 5.19.2.14 A sustainable management plan must be prepared that is proportionate to the production unit for aquaculture and seaweed harvesting. The sustainable Organic Management Plan must be updated annually and detail the environmental effects of the operation, the environmental monitoring to be undertaken, and a list of measures to be taken to minimise negative impacts on the surrounding aquatic and terrestrial environments. Where applicable the plan will detail nutrient discharge into the environment either per annum or per production cycle.
- 5.19.2.15 For aquaculture animal production in fishponds, tanks or raceways, farms shall be equipped with either natural filter beds, settlement ponds, biological filters or mechanical filters to collect waste nutrients or use seaweeds and/or animals (bivalves and algae) which contribute to improving the quality of the effluent. Effluent monitoring shall be carried out at regular intervals where appropriate.
- Closed recirculation systems are prohibited, with the exception of hatcheries and nurseries, or for the production of species used for organic feed organisms.
- 5.19.2.16 You must draw up a waste reduction schedule to be implemented at the start of operations. This will by preference use renewable energy sources and include the re-cycling of materials.
- 5.19.2.17 You must record the maintenance and repair of technical equipment.
- 5.19.2.18 On marine facilities, you may only remove bio-fouling organisms by physical means, and where appropriate return this material to the sea at a distance from the farm.

You may prevent bio-fouling on holding facilities by using non-toxic anti-foulants provided they are approved by the national authority for aquaculture use. You must not use copper-based or other toxic anti-foulants.

- 5.19.2.19 Holding systems, equipment and utensil must be properly cleaned and disinfected. In the first instance this must be carried out by physical or mechanical measures. Where this is not satisfactory, only substance listed as cleaners and sanitisers in Section 2.7 of Table 2 may be used.
- 5.19.2.20 You must fallow open water containment structures if required by Regulatory requirements. It is recommended that both land and sea based structures are fallowed after harvesting. Fallowing would occur after the emptying (land based facilities) and, disinfection of structures. This does not apply to the farming of bivalve molluscs as per 5.19.12.14.
- 5.19.2.21 To minimise the risk to water quality, disease risk and likelihood of attracting pests sanitation must be maintained by removing uneaten fish-feed, faeces and dead animals.

5.19.3 LAND BASED PRODUCTION UNITS

GENERAL PRINCIPLES

Location of organic production units maintains the health of the aquatic environment and surrounding aquatic and terrestrial ecosystem.

Production units shall be at appropriate distances from contamination sources and conventional aquaculture. Aquaculture production will minimise negative environmental impact.

STANDARDS

- 5.19.3.1 For sedentary or sessile organisms not living in enclosures the area shall be at an appropriate distance from pollution or harmful influence from conventional aquaculture/agriculture.
- 5.19.3.2 For land based production systems, the land-water interface must have natural vegetation for at least five percent of the perimeter.
- 5.19.3.3 Any organic and mineral fertilisation of the ponds must meet the requirements of Annex I of Regulation (EC) No 889/2008 with a maximum application of 20 kg of nitrogen per hectare.
- 5.19.3.4 You must not use synthetic chemicals to control aquatic plants.
- 5.19.3.5 You must maintain areas of natural vegetation around inland water units as a buffer zone for external land areas not farmed organically.
- 5.19.3.6 You must locate the pond(s) in sterile clay areas to minimise environmental impact of pond construction. Ponds are to be built with the natural pre-existing clay. The destruction of mangroves in order to build ponds is not permitted.
- 5.19.3.7 You must include in your conversion plan confirmation of your ownership and control of the land.

5.19.4 LOCATION OF COLLECTING AREAS

GENERAL PRINCIPLES

Wild, sedentary/sessile organisms in open collecting areas may be certified as organic if they are derived from an unpolluted, stable and sustainable environment.

Collecting areas should be at appropriate distances from contamination and conventional aquaculture. Negative environmental impact from aquaculture production or harvesting shall be minimised.

STANDARDS

- 5.19.4.1 The harvesting/production area shall be clearly defined and shall be capable of inspection with respect to water quality, feed, medication, input factors and other relevant sections of these Standards.
- 5.19.4.2 You must provide a full description and a map of shore and sea collection area and the land areas where post collection activities will take place.
- 5.19.4.3 Collecting areas shall be at appropriate distances from pollution and possible harmful influences from non-organic aquaculture.

5.19.5 CONVERSION TO ORGANIC AQUACULTURE

GENERAL PRINCIPLES

The total production in each farming unit or under each operator's control should be converted to organic aquaculture over a specified period of time. Aquaculture production methods can vary widely according to biology of the organisms, technology used, geographical conditions, ownership structure, time span etc. These aspects need to be considered when determining the length of conversion. If a production unit is not converted all at once, part of the aquaculture unit may be converted and certified, as long as organically managed stock can be clearly defined and a designated area is set aside for organic production only.

Independent sections of the production unit should be converted in such a way that these Standards are completely met on each section before it is certified as organic.

There should be a clear plan of how to proceed with the conversion. This plan shall be updated as necessary and should cover all aspects relevant to these Standards.

STANDARDS

- 5.19.5.1 The operation must comply with basic organic standards throughout the conversion period. Calculation of the conversion period may not start before the date of the last non-complying input or practice.
- 5.19.5.2 Organisms shall be raised organically from birth. Organisms of conventional origin may be brought in if organic stock is not available provided they are not genetically engineered. Brought in organisms shall meet the following conversion periods:
- 12 months in the case of three-year-old fish for meat production or at least three quarters of their lifetime
 - 12 months in the case of caviar production
 - 6 months in the case of small fish under two years
 - 3 months before using for breeding purposes
 - 10 weeks for the production of pansize brought in before they are 20grams of weight
- 5.19.5.3 The length of the conversion period of the production site shall take into account, life cycle and species, environmental factors, and past use of the site with respect to waste, sediments and water quality.
- Where the facilities cannot be drained, cleaned and disinfected the conversion period will be 24 months
 - Where the facilities have been drained, or fallowed the conversion period will be 12 months
 - Where the facilities have been drained, cleaned and disinfected the conversion period will be six months
 - For open water facilities including those farming bivalve molluscs, the conversion period will be three months
 - For IFOAM shall be minimum 12 months or at least one life cycle, whichever is shorter
- 5.19.5.4 No conversion period for the production site is required in the case of:

- Open collecting areas for wild, sedentary organisms where the water is free-flowing and not directly or indirectly contaminated by substances prohibited in these standards
- Where the collecting area can be inspected with respect to water quality, feed, medication, input factors or any other relevant sections of these standards and all requirements are met

5.19.5.5 If the aquaculture animals are brought in for breeding purposes or for improving genetic stock such animals shall be kept under organic management for at least three months before they may be used for breeding.

5.19.5.6 For on-growing purposes the collection of wild aquaculture juveniles is specifically restricted to the natural influx of fish or crustacean larvae and juveniles when filling ponds, containment systems and enclosures. For specific rules for bivalve molluscs see section 5.19.12.

5.19.6 BREEDS AND BREEDING

GENERAL PRINCIPLES

Breeding strategies and practices in organic aquaculture interfere as little as possible with natural behaviour of the animals. Natural breeding methods should be used whenever possible.

Production systems that do not provide for natural breeding, for instance collection of fish eggs and sperm and their combination under human control leading to hatching of fish eggs may be used.

Organisms shall be raised organically from birth. If organic organisms are not available brought in conventional aquatic organisms should spend at least 2/3 of their life in the organic system before being acceptable for certification.

Brought in conventional aquatic organisms should spend at least two thirds of their life in the organic system before being acceptable for certification.

STANDARDS

5.19.6.1 Aquatic animal production systems must use breeds and breeding techniques suited to the region and the production method.

5.19.6.2 Where available brought in aquatic organisms shall come from organic sources.

5.19.6.3 The minimum length of time brought in aquatic organisms must be managed organically before certification is permitted see sections 5.19.5.2 - 5.19.5.5.

5.19.6.4 Artificially polyploid organisms and genetically engineered species or breeds, and sex-reversed fish are prohibited.

5.19.6.5 You must not:

- Induce polyploidy artificially
- Use artificial hybridisation, cloning and production of monosex strains except by hand sorting

5.19.7 HEALTH AND WELFARE

GENERAL PRINCIPLES

Living aquatic organisms should be handled as little as possible. Operators shall ensure that they meet legislative requirement as appropriate. Note refer to Animal Welfare Act.

Section 5. Livestock

The cause of outbreaks of disease or infection should be identified, and management practices implemented to prevent the causative events and future outbreaks. When treatment is necessary the use of natural methods and medicines should be a first choice.

Disease treatment should be carried out so that it minimises harmful effects on the environment.

STANDARDS

5.19.7.1 If a health problem arises despite the use of preventative measures to ensure animal health, then veterinary treatments may be used in the following order of preference:

- a) Substances from plants, animals or minerals in homeopathic dilution
- b) Plants and their extracts not having anaesthetic effect and
- c) Substances such as: trace elements, metals, natural immunostimulants or authorised probiotics

Conventional, veterinary medicinal products may only be used if the above justifiable alternatives are unavailable, and/or if the treatment is required by legislation. If an organism becomes sick or injured despite preventive measures that animal shall be treated promptly and adequately. Operators shall not withhold medication where it will result in the unnecessary suffering of the organism, even if the use of such medication will cause the organism to lose its organic status.

If veterinary medicinal products are used, the length of the withholding periods shall be not less than double of that required by legislation, or a minimum of 48 hours, whichever is longer.

The use of allopathic treatments is limited to two courses of treatment per year, with the exception of vaccinations. However, if the aquaculture animal has a life cycle of less than 18 months, a limit of one allopathic treatment applies. Any aquaculture animal exceeding these amounts cannot be sold as organic products.

5.19.7.2 The use of chemical allopathic veterinary drugs and/or antibiotics is prohibited for invertebrates.

5.19.7.3 Prophylactic use of veterinary drugs, except vaccinations in certain cases, is prohibited. The use of malachite green or formalin is not permitted as fungal treatment of eggs.

5.19.7.4 Vaccinations are permitted if diseases that cannot be controlled by other management techniques are known to exist in the region. Vaccinations are also permitted if mandatory under applicable legislation. Genetically engineered vaccines are prohibited.

5.19.7.5 You may store allopathic veterinary medicinal products and antibiotics on holdings provided:

- That they have been prescribed by a veterinarian in connection with treatments as referred to in these Standards
- That they are stored in a supervised location
- They are entered in the farm register

5.19.7.6 Current, accurate disease management records shall be kept. The records shall include:

- Identification of the infected and infecting organisms concerned
- Details of treatment and duration, including application rate, method of application, frequency of repetition, concentration of organisms
- Brand names of drugs used and active ingredients

5.19.7.7 Synthetic hormones and growth promoters are prohibited.

- 5.19.7.8 You must not store prohibited inputs within the organic production facility.
- 5.19.7.9 In case of irregular behaviour by the organisms, the water quality shall be analysed and adjusted as necessary according to the needs of the organisms.
- 5.19.7.10 Aquatic animals shall not be subject to any kind of mutilation.
- 5.19.7.11 Handling of aquatic animals shall be minimised, undertaken with greatest care and proper equipment and protocols used to avoid stress and physical damage associated with handling procedures, Broodstock shall be handled in a manner to minimise physical damage and stress under anaesthesia where appropriate. Grading operations shall be kept to a minimum and as required to ensure fish welfare.

5.19.8 NUTRITION

GENERAL PRINCIPLES

Organic aquaculture production provides a good quality diet balanced according to the nutritional needs of the organism. Feed is only offered to the organisms in a way that allows natural feeding behaviour, with minimum loss of feed to the environment. This section applies mainly to fish production, but also applies to other aquaculture hatcheries and nurseries.

STANDARDS

- 5.19.8.1 Aquaculture feeds shall generally contain 100% certified organic components.

Priority is given first to sourcing feed products of aquaculture origin, then fishmeal and fish oil from organic aquaculture trimming, then fishmeal and fish oil from non-organic aquaculture trimmings of fish caught for human consumption, then failing that up to a maximum of 60% can be from organic plant based products.

- 5.19.8.2 If 100% organic ingredients are not available then wild feed resources may be used subject to approval by AsureQuality. When supplying food collected from the wild, then any regulatory requirements must be met and records maintained to demonstrate compliance. Also the "Code of Conduct for Responsible Fisheries" (FAO, 1995) shall be followed.
- 5.19.8.3 When feed described in 5.19.8.1. or 5.19.8.2 is not available in adequate quantity or quality, AsureQuality may allow feed of conventional origin up to a maximum of 5% (by dry weight). Permission from AsureQuality must be sought.

Operators may use non-organic aquatic animal protein and oil sources provided they:

- Are harvested from independently verified sustainable sources
- Are from independently verified sustainable sources and verified to have contamination levels below limits established by AsureQuality
- Do not constitute 100% of the diet

AsureQuality Operators may feed a limited percentage of non-organic feed under specific conditions for a limited time in the following cases:

- Organic feed is of inadequate quantity or quality
- Organic aquaculture is in early stages of development

At least 50% of the diet should be organic ingredients by 2020. For salmon intended to be certified to EU Regulations:

- Fishmeal and fish oil from non-organic aquaculture trimmings of fish caught for human consumption can be used up until 31 December 2014 and shall not exceed 30% of the daily ration.

Section 5. Livestock

- 5.19.8.4 Feed rations should be designed taking into account paragraph's 5.19.8.1 to 5.19.8.3 above, so that animal or plant sources, or both, supply most of the nutritional needs of the organism.
- 5.19.8.5 The following products shall not be included in or added to the feed or in any other way be given to the organisms:
- Material from the same species/genus/family as the one being fed
 - Feedstuffs subjected to solvent (e.g. hexane) extraction
 - Pure amino acids
 - Urea
 - Synthetic growth promoters and stimulants
 - Synthetic appetisers
 - Synthetic antioxidants and preservatives
 - Artificial colouring agents
 - Genetically engineered organisms or products thereof
 - Water containing human excrement
- 5.19.8.6 For Salmon: The following natural colouring may be added to feed:
- Astaxanthin from organic sources, or if unavailable then astaxanthin from natural sources (such as *Phaffia* yeast) may be approved by AsureQuality.
- 5.19.8.7 Vitamins, trace elements and supplements used shall be from natural origin when available.
- The use of mineral supplements if they are applied in their natural composition is permitted
 - The use of substances from synthesised or unnatural sources will only occur under conditions established by the standard-setting organisation.
- 5.19.8.8 The following feed preservatives may be used:
- Bacteria, fungi and enzymes
 - By-products from the food industry (e.g. molasses)
 - Plant based products
 - Salt if appropriate

Synthetic chemical feed preservatives may be permitted in response to severe weather conditions. The standard-setting organisation shall establish conditions for their use.

Feed for Land Based Aquaculture

Organic production of fish in inland waters, penaeid shrimps and freshwater prawns and tropical fresh water fish.

- 5.19.8.9 Aquaculture animals shall be fed with feed naturally available in ponds and lakes
- 5.19.8.10 Where the feed referred to in 5.19.8.9 is unavailable, then feed of plant origin, preferable grown on the farm itself may be used, and records kept
- 5.19.8.11 In the case of Siamese catfish, where clause 5.19.8.10 is used, then the feed ration may include a maximum of 10% fishmeal or fish oil derived from sustainable fisheries

5.19.9 HARVESTING OF AQUACULTURE ANIMALS

GENERAL PRINCIPLES

Harvesting certified organic aquatic organisms from enclosures or collecting areas creates minimum stress to the organisms. The act of collection does not negatively affect natural areas.

Harvesting or gathering of products shall not exceed the sustainable yield of the ecosystem, or threaten the existence of other species or negatively affect wild areas.

STANDARDS

- 5.19.9.1 Aquatic vertebrates shall be stunned before killing. Operators shall ensure that equipment used to stun fish is sufficient to remove sensate ability and or kill the fish and is maintained and monitored.
- Ice/ice slurry and clove oil for pre slaughter sedation of fish is permitted
 - Fish must not be slaughtered in a pond or a cage containing live fish
 - The process must be managed so as to avoid stress to the fish prior to slaughter and to avoid suffering during slaughter
 - Must be in compliance with the Agricultural Compounds and Veterinary Medicines Act 1997
- 5.19.9.2 The species will only be certified if the sustainable yield of the ecosystem is not exceeded, and that the existence of any other species is not threatened.
- 5.19.9.3 You must keep an operations logbook/register as the record of inputs and outputs for each production unit. It must record:
- The origin, date of arrival and conversion period of animals arriving at the holding
 - The number and source of fingerlings introduced to ponds/cages
 - The type, source (including batch number) and quantity of food used in each fish-raising unit
 - Records of escapes of fish
 - Fish deaths and estimated mortality in each unit
 - The diagnosis for significant mortalities
 - Veterinary treatments giving details of the purpose, date of application, method of application, type of product and withdrawal period
 - Disease prevention measures giving details of fallowing, cleaning and water treatment
 - The number of lots, the age, weight and destination of animals leaving the holding
 - The data obtained from environmental monitoring undertaken by the manager or Regional Council, e.g. water temperature, oxygen content and pH
- 5.19.9.4 You may only use additives and processing aids to:
- Maintain product quality and keeping ability
 - Enhance composition, consistency and appearance
- You may use:
- Unrefined sea salt with no additives, and rock salt
- 5.19.9.5 Preserving products by smoking may be permitted depending on the materials and process used. Prior written approval must be obtained from AsureQuality.

5.19.10 TRANSPORTATION OF LIVE FISH

GENERAL PRINCIPLES

The transportation medium should be appropriate for the species with regards to water quality including salinity, temperature, oxygen etc. Transportation distance, duration and frequency should be minimised.

Transport of living aquatic animals should be minimised and be done in the most considerate manner. Living animals should be monitored regularly and maintained in a healthy state during transportation.

The operator shall implement defined measures to ensure that organic aquatic animals are provided with conditions during transport and slaughter that meet animal specific needs and minimise the adverse effects of:

- Diminished water quality
- Time spent in transport
- Stocking density
- Toxic substances
- Escape

For general requirements for transportation and handling of organic products also see 6.8.1 - 6.8.5.

STANDARDS

- 5.19.10.1 Live fish must be transported in suitable tanks with clean water which meets their physiological needs in terms of temperature and dissolved oxygen.
- 5.19.10.2 Before transport of organic fish and fish products, tanks shall be thoroughly cleaned, disinfected and rinsed.
- 5.19.10.3 Transportation shall not cause avoidable stress or injury to the animals. Transportation equipment and/or construction materials shall not have toxic effects. Any sorting or moving of fish stock must be recorded. During transport, the density shall not reach a level which is detrimental to the species.
- 5.19.10.4 Records must be kept for points 5.19.10.1 - 5.19.10.3.
- 5.19.10.5 Chemically synthesised tranquillisers or stimulants shall not be given to the animals prior to or during transport or at any time. Oil of cloves and ice/ice slurry is permitted for transport.
- 5.19.10.6 There shall be a minimum of one person specifically responsible for the well-being of the animals during transport.
- 5.19.10.7 Each organism or groups of organisms shall be identified at each step in the transport and slaughter process.
- 5.19.10.8 If not in retail packaging, labelling of organic products during transport is as per 3.12.

5.19.11 SPECIFIC AQUACULTURE PRODUCTION - FISH

Includes salmon, species of the carp family and other associated species in the context of polyculture, including perch, pike, catfish, coregonids and sturgeon.

- 5.19.11.1 Fallowing must be for a period of at least that specified by the Regulatory Authority.
- 5.19.11.2 Production systems and maximum stocking rates must be applicable to the farming method for the species of fish.

SALMONIDS IN FRESH WATER - SALMON (SALMO SALAR)

5.19.11.3 On-growing farm systems must be fed from open systems. The flow rate must ensure a minimum of 60% oxygen saturation for stock and must ensure their comfort and the elimination of farming effluent.

5.19.11.4 The maximum stocking rate for Salmon in fresh water is 20 kg/m³.

SALMONIDS IN SEA WATER - SALMON (SALMO SALAR)

5.19.11.5 The maximum stocking rate for Salmon in sea water is 10 kg/m³ in net pens.

CARP FAMILY AND OTHER ASSOCIATED SPECIES FARMED IN INLAND WATERS

5.19.11.6 You may farm fish in fishponds provided they are periodically drained or you may farm lakes provided they are exclusively devoted to organic production including the growing of crops on dry areas.

5.19.11.7 Your fishery capture area must be equipped with a clean water inlet which is of sufficient size to provide optimal comfort to the fish. You must store the fish in clean water after harvest.

5.19.11.8 You may only represent other species present other than carp, if they have also been managed organically.

5.19.11.9 You must not exceed the total production of 1,500 kg of fish per hectare per year.

5.19.11.10 The bottom of fishponds shall be as close as possible to natural conditions, which in the case of carp means natural earth.

5.19.12 SPECIFIC AQUACULTURE PRODUCTION - BIVALVE MOLLUSCAN SHELLFISH

Includes mussels and oysters and other species not fed by man but feed on natural plankton.

5.19.12.1 Shellfish shall be raised organically from birth, however wild seed may be brought-in if organic stock is not available. Brought in seed shall meet the following conversion period:

- 6 months for shellfish seed

5.19.12.2 Wild seed of bivalve shellfish may be collected from outside the boundaries of the production area provided:

- There is no significant damage to the environment
- It is permitted by local legislation and the conditions of any permits are met
- It is from settlement beds which are unlikely to survive winter weather or are surplus to requirements
- There is natural settlement of shellfish seed on collectors

5.19.12.3 The maximum number of non-organic aquaculture juveniles or seed from non-organic bivalve hatcheries introduced to the farm shall be:

- 80% by 31 December 2011
- 50% by 31 December 2014
- 0% by 31 December 2015

Regional or other exception

Where there are no available organic, or wild sources, of pacific oyster spat (*Crassostrea gigas*) as a result of Ostreid herpesvirus-1 (OsHV-1),ASUREQuality may allow brought-in conventional spat to be sourced. The conversion period for such animals is to be a minimum of 6 months. The resultant oysters may not be exported to the EU if represented as organic.

Section 5. Livestock

- 5.19.12.4 Records must be kept of how, where and when wild seed was collected to allow traceability back to the collection area.
- 5.19.12.5 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.
- 5.19.12.6 Bivalve mollusc farming may be carried out in the same area of water as organic finfish and seaweed farming in a poly culture system, but this must be fully documented in the Organic Management Plan. Bivalve molluscs may also be grown together with gastropod molluscs.
- 5.19.12.7 Organic bivalve mollusc production must take place within areas delimited by posts, floats or other clear markers, and shall as appropriate be restrained by net bags, cages or other man made means.
- 5.19.12.8 Organic shellfish farms shall minimise risks to species of conservation interest. If predator nets are used their design must not permit diving birds to be harmed.
- 5.19.12.9 Production shall use a stocking density less than or equal to that used for non-organic shellfish in the locality. Sorting, thinning and stocking density adjustments shall be made according to the biomass and to ensure animal welfare and high product quality.
- 5.19.12.10 Shellfish may be treated once during the production cycle with a lime solution to control competing fouling organisms.
- 5.19.12.11 For operations certified to EU Regulations where the biomass fluctuates over the harvest period, you must agree on inspection dates with AsureQuality, so that inspection dates can take place both before AND during maximum biomass production.
- 5.19.12.12 You may use the following systems: long-lines, rafts, bottom culture, net nags, cages, trays, lantern nets, bouchet poles and other containment systems.
- 5.19.12.13 Bottom cultivation of molluscs is only permitted where no significant environmental impact is caused at the collection and growing sites. The evidence of minimal environmental impact must be supported by a survey and report which is to be included as a separate chapter in the Sustainable Management Plan.
- 5.19.12.14 Fallowing for bivalve mollusc cultivation is only required if it is a regulatory requirement.
- 5.19.12.15 Bivalve molluscs must receive all their nutritional requirements from nature, except for juveniles reared in hatcheries and nurseries.
- 5.19.12.16 Transportation of live bivalve molluscs must be in a manner that keeps the shellfish cool and moist.

MUSSELS

5.19.12.17 For mussel cultivation where raft production systems are used:

- The number of drop ropes shall not exceed one per square metre of surface area
- The maximum drop-rope length shall not exceed 20 metres
- Thinning out of drop-ropes shall not take place during the production cycle, however at the onset you may sub-divide the drop ropes without increasing the stocking density

OYSTERS PACIFIC OYSTER (CRASSOSTREA GIGAS)

5.19.12.18 Cultivation in bags on trestles is permitted. These or other structures in which the oysters are contained shall be set out so as to avoid the formation of a total barrier along the shoreline. Stock shall be positioned carefully on the beds in relation to tidal flow to optimise production.

5.19.12.19 You should use stock which is selectively bred to reduce spawning in the wild.

5.19.13 SPECIFIC AQUACULTURE PRODUCTION - CRUSTACEANS

Includes penaeid shrimps and freshwater prawns (*Macrobrachium* spp.)

5.19.13.1 You must observe a conversion period of six months per pond, corresponding to the normal lifespan of a farmed shrimp.

5.19.13.2 You must ensure that a minimum of half the brood stock is domesticated after three years of farming. The remainder is to be pathogen free wild brood stock originating from sustainable fisheries. A compulsory screening is to be implemented on the first and second generation prior to introduction to the farm.

5.19.13.3 You must not use eyestalk ablation.

5.19.13.4 You must keep within the following stocking densities and production limits:

- Seeding: maximum 22 post larvae/m²
- Maximum instantaneous biomass: 240 g/m²

5.19.14 SPECIFIC AQUACULTURE PRODUCTION - SEAWEED

5.19.14.1 For seaweed harvesting, the Sustainable Management Plan referred to in 5.19.2.14 must include measures taken to ensure seaweed can regenerate.

5.19.14.2 A biomass estimate is to be carried out at the start of organic operations.

5.19.14.3 Seaweed production records shall be compiled in the form of a register which includes the following:

- List of species, date & quantity harvested
- Date of application, type & amount of fertiliser used

5.19.14.4 For collection of wild seaweeds the register shall also contain:

- History of harvesting activity for each species
- Harvest estimates (volumes) per season
- Sources of possible pollution for harvest beds
- Sustainable annual yield for each collection area and that total amounts harvested were within the permitted amounts

5.19.14.5 If the final product is fresh seaweed, then flushing of freshly harvested seaweed must use seawater.

5.19.14.6 If the final product is dehydrated seaweed, potable water may also be used for flushing. Salt may be used for removal of moisture.

Section 5. Livestock

5.19.14.7 To dry the seaweed, you must not use flames that come in direct contact with the seaweed. Ropes or other equipment used for drying must be free of prohibited inputs.

SUSTAINABLE HARVESTING OF WILD SEAWEED

The requirements of 4.13 Collection from the Wild are to be followed plus:

5.19.14.8 The conversion period for a seaweed harvesting site shall be six months.

5.19.14.9 Records must be maintained to confirm that only wild seaweed produced in accordance with these rules has been harvested.

SEAWEED CULTIVATION

5.19.14.10 The conversion period for a seaweed cultivation unit shall be the longer of six months or one full production cycle.

5.19.14.11 Seaweed culture at sea must only utilise nutrients naturally occurring in the environment, or from organic aquaculture production, preferably co-located.

5.19.14.12 Production density/intensity shall be recorded and must maintain the integrity of the aquatic environment by ensuring that the maximum quantity of seaweed which can be supported without negative effects on the environment is not exceeded.

5.19.14.13 Ropes and other supporting equipment shall be re-used or recycled where possible.

5.19.14.14 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.

5.19.15 PARALLEL PRODUCTION

5.19.15.1 Where the entire aquatic production is not converted the following is required:

- Physical separation between conventional and organic production units including the water distribution system.
- Organic production can be inspected with respect to water quality, feed, medication, input factors or any other relevant sections of these standards. Adequate documentation including financial accounting is available for both production systems.
- Accurate production estimates are recorded and shall be checked against sales records.
- There are clear distinctions between certified and non-certified products.
- The measures taken to safeguard against the risk to the organic integrity are understood at all levels of the operation.
- Converted units are not switched between organic and conventional management.



Section 8

Social Justice

8. SOCIAL JUSTICE

8.1 You should have a policy on social justice.

Regional or other exception – Non-IFOAM

If you hire fewer than 10 persons for labour and you operate under a government system that enforces social laws you may not be required to have such a policy in writing.

For example an operation in New Zealand operating to the minimum employment rights covered by the Employment Relations Act 2000, Holidays Act 2003, Minimum Wage Act 1983 and the Equal Pay Act 1972.

A policy on social justice should include the following criteria:

The policy must comply with the minimum national requirements and with all International Labour Organisation conventions relating to labour welfare and the United Nations Charter of Rights for Children. The rights covered by this fall within the following types: individual rights at work, collective labour rights, right to equal treatment, and rights which promote job security. This policy shall ensure that all permanent employees and their families shall have access to potable water, food and housing.

8.2 You may not represent your product as organic if your production is based on violation of basic human rights and clear cases of social injustice including a recent violation of indigenous land rights.

8.3 You must not use forced or involuntary labour, or apply any pressure such as retaining part of workers' wages, property of documents.

8.4 You must not interfere with your employees', suppliers' and contractors' rights to have the freedom to associate, the right to organise and the right to bargain collectively, free from interference, intimidation and retaliation.

8.5 You must provide your employees and contractors with equal opportunity and treatment, and you must not act in a discriminatory way. You must have a disciplinary procedure with a system of warning before any suspension or dismissal. Workers dismissed shall be given full details of reasons for dismissal.

8.6 You must not use child labour. Children are allowed to experience work on their family's farm business, or a neighbouring farm provided that:

- Such work is not dangerous or hazardous to their health and safety
- It does not jeopardise the children's educational, moral, social, and physical development
- Children are supervised by adults or have authorisation from a legal guardian

8.7 Workers shall be provided with adequate protection from noise, dust, sunlight and exposure to chemicals in all production and processing operations, and access to potable water.

8.8 You must provide written terms and condition of employment to both permanent and temporary employees. The terms and conditions must specify at least: wages, frequency and method of payment, location and type of work, hours of work and overtime, holiday pay, sick pay or sickness benefit and other benefits such as maternity and paternity leave, and worker's right to terminate employment.

Operators shall ensure that the workers understand the terms of their employment contract. Operators shall respect the terms of the contract in good faith, including timely payment of wages.

Regional or other exception

In cases where:

- The certified operator is unable to write
- Workers are hired for periods of less than 6 days
- Emergency labor is needed to address unpredictable problems

Where written agreements are not legally required, oral mutual agreements on terms and conditions of employment are sufficient.

- 8.9 Employees shall be granted the right to take at least one day off after six consecutive days of work. Operators shall not require workers to work more than the contracted hours and the national or regional sectorial legislation. Overtime workers shall be remunerated in the form of supplementary payments or time off in lieu.
- 8.10 Operators shall never require an employee to work who is ill or requiring medical attention and shall not sanction an employee for the sole fact of missing work due to illness.



Section 10

Restricted Permitted Substances for the Production of Organic Foods

Precautions

10.1 Inclusion Requirements

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Table 2 - Substances for Use in Livestock Production

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10. RESTRICTED PERMITTED SUBSTANCES FOR THE PRODUCTION OF ORGANIC FOODS

CONTENTS

Precautions

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Table 3 - Substances for Use in Processing

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Table 5 - Minimum Surface Areas

PRECAUTIONS

Any substances used in an organic system for soil fertilisation and conditioning, pest and disease control, for the health of livestock and quality of the animal products, or for preparation, transport, preservation and storage of the food product, should comply with the relevant New Zealand law.

Conditions for use, in organic production, processing, cleaning, packaging and other processes, of certain inputs contained in the lists in Tables 1 to 3 may be specified by AsureQuality, e.g. its use only in case of absolute necessity, volume, frequency of application, specific purpose etc.

Where substances are required for primary production they should be used with care and with the knowledge that even permitted substances may be subject to misuse and may alter the ecosystem of the soil or farm.

10.1 INCLUSION REQUIREMENTS

Requirements for the inclusion of substances into Section 10.

10.1.1 The following criteria will be used for amending Section 10:

- (a) They are consistent with principles of organic production (see Section 1)
- (b) Use of the substance is necessary/essential for its intended use
- (c) Use of the substance does not result in, or contribute to harmful effects on the environment.
- (d) They have the lowest negative impact on human or animal health and quality of life
- (e) Approved alternatives are not available in sufficient quantity and /or quality
- (f) With regard to minerals and trace elements used in animal nutrition, additional sources for these products may be included in Table 2 provided that they are of natural origin or failing that, synthetic in the same form as natural products

The above criteria are intended to be evaluated as a whole in order to protect the integrity of organic production. In addition, the following criteria should be applied in the evaluation process:

- (a) If they are used for fertilisation, soil conditioning purposes:
 - They are essential for obtaining or maintaining the fertility of the soil or to fulfil specific nutrition requirements of crops, or specific soil-conditioning and rotation purposes, which cannot be satisfied by the practices, included in Section 4, or other products included in Section 10, Table 1

Section 10. Restricted Permitted Substances for the Production of Organic Foods

- The ingredients will be plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g., mechanical, thermal), enzymatic, microbial
- Their use does not have harmful impact on soil organisms and/or physical characteristics of the soil

(b) If they are used for the purpose of plant disease, pest control or weed control:

- They should be essential for the control of a harmful organism or a particular disease for which other biological, physical, or plant breeding alternatives and/or effective management practices are not available
- Substances should be plant, animal, microbial, or mineral origin and may undergo the following processes: physical (e.g. mechanical, thermal), enzymatic, microbial (e.g. composting, digestion)

However:

- If they are used, in exceptional circumstances, in traps and dispensers such as pheromones, which are chemically synthesised, they will be considered for addition to the lists if the products are not available in sufficient quantities in their natural form, provided that the conditions for their use do not directly or indirectly result in the presence of residues of the product in the edible product

(c) If they are used as additives or processing aids in the preparation or preservation of the food:

- These substances are found in nature and may have undergone mechanical/physical processes (e.g. extraction, precipitation), biological/enzymatic processes and microbial processes (e.g. fermentation)
- If these substances mentioned above are not available from such methods and technologies in sufficient quantities, then those substances that have been chemically synthesised may be considered for inclusion in exceptional circumstances
- They are essential to prepare such products because there are no other available technologies
- The consumer will not be deceived concerning the nature, substance and quality of the food

10.1.2 Proposal for inclusion of products to Section 10.

The following should be submitted with any proposal to include substances in Section 10:

- (a) A detailed description of the product and the conditions of its envisaged use
- (b) Any information to demonstrate that the requirements under Section 10.1.1 are satisfied

TABLE I - SUBSTANCES FOR USE IN CROP PRODUCTION

COMBINED TABLE WHICH INCLUDES FERTILISERS AND CROP PROTECTANTS

ALLOWED (A) Organic certified products/inputs are allowed. These do not require permission before use and this is sometimes referred to as “permitted”. Evidence of current certification when purchased, or used, must be retained for the audit. Uncertified products/inputs require approval in writing from AsureQuality before use, as some forms may not be acceptable.

RESTRICTED (R) Inputs which are allowed with restrictions. All restricted inputs require approval in writing by AsureQuality before use. Approval may be granted if no alternatives are available, and approval will be subject to certain conditions. The use of these materials is discouraged.

PROHIBITED (P) These materials may not be used on certified land.

INPUT CLASS KEY:

CF: Crop Fertilisers and Soil Amendments

CP: Crop Pest, Weed and Disease Control

CT: Crop Management Tools and Production Aids

NL: Not Listed

Factory Farming refers to livestock management systems that rely heavily on veterinary inputs, and the confinement of animals such that normal animal behaviour is restricted. Typically this includes the use of cages.

AsureQuality Standard (AQS) listing covers all non-regulated markets (including domestic), but does not include regulated markets such as those covered by: USA, & Canada (COR). Reference to these standards is indicative only and are not in lieu of those standards.

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
CF, CT	Acetic acid – non- synthetic	A	A	A	Also see vinegar. Used as a drip irrigation cleaner; an equipment cleaner and adjuvant to adjust pH. COR – weed management.
CF	Aluminium calcium phosphate	R	P	P	Cadmium content less than or equal to 90mg/kg of P2O5. Use limited to basic soils (pH > 7.5). USDA/COR : Prohibited.
CF	Animal by-products <i>blood meal, hoof meal, horn meal, meat meal, feather, hair and “chiquette” meal, wool, fur, hair, dairy products</i>	R	R/P	R	Derived without chemical treatment other than oil extraction using organic solvent Maximum concentration in mg/kg of dry matter of Chromium (VI): 0 (limit of determination). COR the specific input must be listed. (e.g. meat/ hoof/horn/hair meal are all prohibited. Restrictions are tighter than EU Regulations.
CP	Antibiotics - Synthetic	P	P	P	USDA : prohibited unless specifically listed.
CP	Antibiotics - Streptomycin or Tetracycline	AQ R EU P	P	R	USDA : Permitted for use as fireblight control in apple and pears only until October 21, 2014. MPI/COR : PROHIBITED.
CP	Avermectin	P	P	P	Synthetic antibiotic PROHIBITED.
CP	<i>Bacillus thuringensis</i>	A	A	A	Biological - Use certified forms.
CT	Baits for rodent traps	R	R	R	Must not be synthetic if in certified crop area.
CP	Beneficial organisms	A	A	A	Including: bacteria, protoza, viruses, fungi, insects, nematodes, plants & animals. Must be GM-free.
CF CT	Bentonite	A	A	R	From natural sources and untreated. USDA : must meet 205.206 (e) if used as pesticide. Justify why alternatives not used and OMP updated to state conditions for using this substance.
CT	Biodynamic preparations	A	A	R	USDA : may only be used to control disease problems.
CP	Biological controls	A	A	A	Predators and parasites.
CP	Biological organisms	R	R	R	Must be non-GMO. USDA : 205.206(e) must be met.
CP	Bordeaux mixture	R	R	R	Inorganic copper compounds. Maximum of 3kg/ha/ year. Must be used in a manner that minimises copper accumulation in soil.
CF	Calcium carbonate of natural origin	A	A	A	(e.g. chalk, marl, maerl, limestone, phosphate chalk.)
CF, CT	Calcium chloride solution – non- synthetic	R	R	R	Restricted to use as a foliar spray to treat calcium disorders of apple trees, after identification of deficit of calcium.
CF	Calcium nitrate	P	P	P	PROHIBITED.
CF	Chilean nitrate	P	P	P	PROHIBITED.
CT	Citric acid	A	A	A	Non-synthetic forms COR : chelating agent & pH Adjuster.
CF	Clay	A	A	A	(e.g. bentonite, perlite, zeolite). Not chemically treated.
CF	Cobalt sulphate <i>synthetic</i>	R	P	R	May be used to correct documented soil deficiency. COR : PROHIBITED. Cobalt sulphate produced using sulphuric acid.

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
CF	Composts from spent mushroom	A	A	A	The initial composition of the substrate must be limited to products of the present list.USDA. Must meet composting requirements of USDA NOP 205.203 (c).
CF	Composts from organic household refuse	R	R	R	Compost of source separated household waste. Only vegetable and animal waste. Produced in a closed and monitored collection system. Maximum concentrations in mg/kg of dry matter: USDA: Must meet composting requirements if applied to crop for human consumption.
CF	Composted animal excrements, <i>including poultry manure and composted farmyard manure included</i>	R	R	R	Indication of animal species. Factory farming sources not permitted. USDA/COR: Must meet composting requirements if applied to crop for human consumption.
CF	Composts from plant residues	A	R	R	USDA: Must meet composting requirements if applied to crop for human consumption.
CP	Copper hydroxide	R	R	R	Inorganic copper compounds. Maximum of 3kg/ha/year. Fungicide.
CP	Copper oxychloride	R	R	R	Inorganic copper compounds. Maximum of 3kg/ha/year. Fungicide.
CF CP	Copper sulphate	R	R	R	May be used to correct documented soil deficiency. For plant pest control, must be used in manner that prevents Cu build-up in soil.Prohibited for use as defoliant, herbicide or desiccant.
CF	Epsom salt (magnesium-sulphate)	A	A	A	Obtained by physical procedures but not enriched by chemical processes to increase its solubility.
CP	Ethylene	R	P	R	See table 3 for post harvest use. USDA/AQ/EU: For floral induction of pineapples only. COR: PROHIBITED.
CP	Ferric phosphate	R	R	R	Use as molluscicide only. Also known as Iron phosphate. USDA: may be used as a slug and snail bait if requirements of 205.206(e) are met. Justify why alternatives not used and OMP updated to state conditions for using this substance. COR: To be used in a way as to prevent run-off into water bodies. Shall not be used in contact with crops. JAS: granular formulation.
CF	Fish meal	R	R	R	From sustainable sources. Due for phase out by EU As per animal by-products. COR: More restrictive than EU. May be pH adjusted with organic vinegar.
CP	Gelatine	A	P	P	Insecticide USDA/COR: PROHIBITED.
CT	Grafting Wax	R	R	R	Plants must be maintained under organic product for at least 12 months following use and before harvesting as organic USDA NOP: Only substances listed in the National List. COR: Only substances listed in COR.
CP	Granulosis virus	A	A	A	See Biological organisms.USDA – 205.206(e) must be met. Allowed for codling moth control.
CF	Guano	R	R	R	Certified or from sources with low heavy metal content.
CF	Gypsum (calcium sulphate)	R	R	R	From natural sources only. For correcting documented deficiencies.
CP	Herbicides – non- synthetic	R	R	R	USDA: OMP must explain justification for not using alternatives: cultural, preventative, mechanical and physical methods.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
CF CT	Homeopathic preparations	A	?	A	JAS: PROHIBITED.
CF	Humates	R	R	R	Acceptable if from lignite, leonardite, or coal. Must not be fortified.
CP	Hydrated lime	R	R	R	As plant disease control only.
CT	Hydrolysed proteins	A	P	?	Attractant (used in traps and dispensers) "Derived without chemical treatment other than oil extraction using organic solvent". COR: PROHIBITED.
CP	Iron phosphate				See Ferric Sulphate.
CF CP	Iron products - salts	R	R	R	To correct documented deficiency: ferric sulphate, ferrous sulphate, iron citrate, or iron titrate.
CF CP	Iron products	P	P	P	USDA: PROHIBITED. Ferrous ammonium sulphate, ferric chloride, & iron nitrate.
CF	Iron sulphate	R	P	R	To correct documented deficiency COR/JAS: PROHIBITED if produced using sulphuric acid.
CF	Kainite	R	R	R	Same restrictions as Potassium chloride.
CF	Kieserite	A	A	A	See mined minerals.
CF CT	Lecithin	A	?	A	Fungicide. USDA: natural or synthetic lecithins may be used as both adjuvants or inert ingredients in combination with active pesticidal ingredients.
CP CF	Lime sulphur (Calcium polysulphide)	R	R	R	Fungicide, insecticide, acaricide. USDA: restricted to use as a miticide and for disease control.
CF CF	Magnesium carbonate	A	A	A	From natural sources (e.g. dolomite & magnesite).
CF CT	Magnesium chloride	A	A	A	USDA/COR: Non-synthetic sources only.
CF	Magnesium rock	A	A	A	USDA: Non-synthetic sources only.
CF	Magnesium oxide	P	P	P	Synthetic - prohibited as soil amendment.
CF	Magnesium sulphate	A	A	A	From natural sources. Kieserite or Epsom salts.
CF	Manganese products	P	P	P	PROHIBITED. Manganese chloride, manganese nitrate and potassium permanganate.
CF	Manganous oxide	R	R	R	To correct deficiencies.
CF	Manganese sulphate	R	R	R	To correct deficiencies.
CF	Manure - farmyard	R	R	R	"Factory" farming sources and human excrement (including urine) is prohibited. Product comprising a mixture of animal excrements and vegetable matter (animal bedding). Indication of animal species. Shall not constitute the main source of nitrogen in the absence of complementary & additional nitrogen generating practices on farm. USDA: See USDA-NOP 205.203 (c)
CP	Micro-organisms	A	R	R	Bacteria, viruses, fungi - e.g. <i>Bacillus thuringiensis</i> , Granulosis virus etc. Not genetically modified.
CF CF	Milk products	A	R	R	USDA/COR: shall not contain prohibited substances.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
CF CT	Mined minerals - unprocessed	A	A	A	Acceptable if unprocessed or unfortified. Considered as supplements to soil building programme.
CP	Mineral oils – Light(paraffin)	R P	R	R	Insecticide, fungicide. Only in fruit trees, olive trees, other subtropical fruit crops, (e.g. Kiwifruit, tamarillos, feijoas) and tropical crops (e.g. Bananas). OOAP: Restricted Use only certified inputs. EU Recognition: PROHIBITED USDA: Use certified inputs approved for NOP
CF	Molasses	R	R	R	May be from non-organic sources. Must be from non- GMO sources May require residue testing. COR: plant by-product. Must use organic product if available.
CF CP	Mulches	R	R	R	Chemical free only.
CF	Natural phosphate rock	R	R	R	(e.g.Rock phosphate, colloidal phosphate, apatite). Cadmium must not exceed 90mg/kg P205.
CP	Natural plants preparations, excluding tobacco	R	R	R	COR/USDA NOP: Shall not be the primary method of pest control.
CP	Neem	R	P	R	Insecticide. Preparations of Neem from <i>Azadirachta indica</i> COR: PROHIBITED.
CP	Nicotine	P	P	P	PROHIBITED.
CF CT	Peat	R	R	R	Permitted for inclusion in potting mixes provided no synthetic additives or chemical treatments. Use limited to horticulture (market gardening, floriculture, arboriculture, nursery). Prohibited for soil conditioning.
CP	Peracetic acid	R	R	R	USDA: For use to control fireblight if requirements of205.206(e) are met. Justify why alternatives not used and OMP updated to state conditions for using this substance. COR: fireblight control.
CF	Perlite	A	A	A	From natural sources and untreated.
CT	pH buffers	A	A	A	From natural source such as citric acid or vinegar: Sulphuric acid prohibited.
CT	Pheromone preparations	R	R	R	Attractant: sexual behavior disrupter: Only in traps and dispensers.General conditions:- The traps and/or dispensers must prevent the penetration 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. USDA: must meet 205.206 (e) Justify why alternatives not used and OMP updated to state conditions.
CP	Plant oils (e.g. mint oil, pine oil, caraway oil)	R	R	R	Insecticide, acaricide, fungicide and sprout inhibitor (targeted application only for foliage suppressant). Note: targeted application is considered as spot spraying only (e.g. spraying the structure posts of kiwifruit frames where physically/mechanically suppressing the foliage is not possible) and is to be used on established plants only. It does not include band or strip spraying of boundaries, walk ways etc. USDA: must meet 205.206 (e) if used as pesticide.
CF	Plant by-products	A	A	A	(For instance, oilseed cake meal, cocoa husks, malt culms, etc.) Derived without chemical treatment other than oil extraction using organic solvent. Non-GMO. Free of significant contaminants, or composted before bringing onto organic land, & confirmed free of significant contaminants.
CF	Potassium chloride	R	R	R	From mined sources (e.g. sylvinites & kainite). Must be used in manner that prevents build-up of chloride in soil. COR: Must be less than 60% chorine.

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
CF	Potassium rock powders	A	A	A	Includes basalt, biotite, mica, feldspars, granite and greensand.
CF	Potassium sulphate	R	R	R	Langbeinite or other natural sources.
CP CF	Potassium permanganate – <i>Non-synthetic</i>	R P	P	R	AQ: CP: Fungicide, bactericide. Only in fruit trees, olive trees and vines. USDA: CF: synthetic forms are prohibited. EU/COR: PROHIBITED.
CT	Potting Soil – non- synthetic	A	A	A	Must not contain synthetic wetting agents or synthetic fertilisers.
CF CF	Pumice	A	A	A	
CP	Pyrethrins (Pyrethrum) <i>Non-synthetic</i>	R	R	R	Preparations on basis of pyrethrins extracted from <i>Chrysanthemum cinerariaefolium</i> Insecticide. The synergist Piperonyl butoxide is PROHIBITED. Synthetic forms are PROHIBITED.
CP	Quassia	R	R	R	Preparations from <i>Quassia amara</i> . Insecticide, repellent.
CF CT	Rhizobium bacteria	A	A	A	Symbiotic bacteria found in nodules on legumes. Must be GM – free.
CP	Ryania	R	R	R	Preparations from <i>Ryania speciosa</i> . Precautions must be taken to safeguard consumers and workers.
CF CP	Sand	A	A	A	Quartz sand - repellent. Must not contain prohibited substances.
CF	Sawdust, bark and wood waste	R	R	R	From wood not chemically treated after felling.
CF CT	Seaweed, seaweed meal, seaweed extracts, sea salts and salty water	A	A	A	As far as directly obtained by: - physical processes including dehydration, freezing and grinding. - extraction with water or aqueous acid and /or alkaline solution fermentation, provided that the min amount of solvent necessary is used for extraction. - fermentation. Must not contain preservatives.
CT	Seed treatments –non-synthetic	A	A	A	Must be non-synthetic. Includes such things as gypsum, kelp, microbial products and various clays.
CP	Sodium chloride - salt	A	P	R	Mined salt or solar salt obtained from seawater by non-synthetic process. USDA NOP: Salt may be used where mechanical or physical methods have proved to be inadequate, provided the OMP has been updated with the conditions under which salt will be used. COR: PROHIBITED.
CF	Sodium molybdate	R	?	R	To correct documented deficiencies only.
CF	Sodium nitrate	P	P	R	Chilean nitrate PROHIBITED.
CF CT	Silicates, clay (Bentonite)	A	A	R	USDA: must meet 205.206 (e) if used as pesticide. Justify why alternatives not used and OMP updated to state conditions for using this substance.
CP	Spinosad	R	R	R	Use certified forms. There may be market restrictions, check with exporter before use.
CT	Spreader <i>non-synthetic</i>	R	R	R	JAS: Limited to compounds containing casein and paraffin as active ingredient.
CT	Spreader <i>synthetic</i>	P	P	P	PROHIBITED - If treatments or inert ingredients are not approved inputs.
CF	Stillage and stillage extract	A	A	A	Ammonium stillage excluded.

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
CF	Stone meal	A	A	A	
CF CP	Straw	A	A	A	Mulch – must be free of pesticides or other contaminates if from non-organic sources.
CF	Sulphate of potash	R	R	R	(e.g. patenkali). Obtained by physical procedures but not enriched by chemical processes to increase its solubility.
CF	Sulphur - elemental	R	R	R	Fungicide, insecticide, acaricide. From natural sources. COR: Foliar only.
CF	Trace elements	R	R	R	To correct documented deficiencies (e.g. boron, copper, iron, manganese, molybdenum, zinc) see table. 1.2. Use restricted to cases where soil/plant nutrient deficiency is documented by soil or tissue testing or diagnosed by an independent expert. Micronutrients in either chloride or nitrate forms are prohibited. Micronutrients may not be used as a defoliant, herbicide, or desiccant.
CP	Trichoderma spp.	R	R	R	USDA: must meet 205.206 (e) is used as pesticide. Justify why alternatives not used and OMP updated to state conditions for using this substance.
CT	Vegetable oils <i>non-synthetic</i>	A	A	A	Spreader stickers, surfactants and carriers. Plant oils must not contain pesticides or be from GMO sources.
CF	Vermicompost	R	R	R	Humus from earthworms and insects.
CF	Vermiculture	R	R	R	Dejecta of worms. Worm rum. COR: allowed if made from organic manure. Compost made from non-organic manure by shall be demonstrated to be free of antibiotics.
CF CT	Vinegars <i>non-synthetic</i>	A	R	A	From natural sources. COR: weed management or adjuvant & pH regulator.
CP	Viruses	A	R	R	E.g. Granulosis virus. Must be non-GMO.
CT	Wetting agents <i>Non-synthetic</i>	A	A	A	Natural wetting agents only: including soaps, saponins and microbial wetting agents. JAS: Limited to compounds containing casein and paraffin as active ingredient.
CF	Urea (and other nitrogenous fertilisers)	P	P	P	PROHIBITED.
CF	Wood ash	R	R	R	Must be made from untreated, unpainted wood.
CF	Wood charcoal	R	R	R	Must be made from untreated, unpainted wood.
CF CT	Zeolites	A	A	A	Mined mineral.
CF	Zinc oxide	R	R	R	To correct documented deficiency.
CF	Zinc sulphate	R	P	R	To correct documented deficiency. COR: PROHIBITED Zinc sulphate produced using sulphuric acid.

1.2 TRACE ELEMENTS

ONLY THE FOLLOWING FORMS INCLUDED IN THIS TABLE MAY BE USED

<p>BORON: Boric acid Sodium borate Calcium borate Boron ethanol amine Borated fertiliser in solution Borated fertiliser in suspension</p>
<p>COBALT: Cobalt salt Cobalt chelate Cobalt fertiliser solution</p>
<p>COPPER: Copper salt Copper oxide Copper hydroxide Copper chelate Copper oxychloride Copper oxychloride suspension</p>
<p>IRON: Iron salt Iron chelate Iron fertiliser solution</p>
<p>MANGANESE: Manganese salt Manganese chelate Manganese oxide Manganese-based fertiliser Manganese-based fertiliser solution</p>
<p>MOLYBDENUM: Sodium molybdate Ammonium molybdate Molybdenum-based fertiliser Molybdenum-based fertiliser solution</p>
<p>ZINC: Zinc salt Zinc chelate Zinc oxide Zinc-based fertiliser Zinc-based fertiliser solution</p>

Use restricted to cases where soil/plant nutrient deficiency is documented by soil or tissue testing or diagnosed by an independent expert. Micronutrients in either chloride or nitrate forms are prohibited. Micronutrients may not be used as a defoliant, herbicide, or desiccant.

TABLE 2 - SUBSTANCES FOR USE IN LIVESTOCK PRODUCTION

2.1 GENERIC SUBSTANCES

ALLOWED (A)

Approval required from AsureQuality prior to first use. Complete and submit an **INPUT APPROVAL FORM**. The Input then needs to be listed in OMP update prior to next audit. Refer **LIVESTOCK INPUT DECISION TREE**. Record amounts used.

RESTRICTED (R)

Approval required from AsureQuality prior to first use. Complete and submit an **INPUT APPROVAL FORM**. The Input then needs to be listed in **OMP** update prior to next audit with applicable conditions of use specified if it is a restricted product. Save on file evidence that conditions have been met if a restricted product. Record amounts used. Refer **LIVESTOCK INPUT DECISION TREE**.

PROHIBITED (P)

These materials may not be used on certified organic animals or land. Animals or land would be removed from certification should these products be used.

JAS

At the time of writing there is no list of inputs for livestock under the JAS Standard apart from feed ingredients. Therefore in the interim JAS inputs will default to the AsureQuality Standard (AQS). References below relate to AQS unless otherwise stated. AQS covers EU requirements. JAS certification does not cover bee products, so the list of apiary inputs does not refer to JAS.

ALL VETERINARIAN DRUGS (VM)

Products noted with a **VM** show the products that fall under this category and must be used by, or on order of, a vet.

INPUT CLASS KEY:

LF: Livestock Feed Ingredients

LH: Livestock Health

LP: Livestock External Parasiticides and Pesticides

LT: Livestock Management Tools and Production Aides

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
LF	Acetic acid	A	A	A	Feed additive AQ/EU: E260 Acetic acid. For silage only when weather conditions do not allow for adequate fermentation. COR: Anti-oxidant. Non-synthetic sources only. USDA NOP: must be USDA NOP certified .
LF	Alcohol (ethanol)	P	P	P	PROHIBITED for use as an appetiser, feed additive or feeding stimulant.
LF	Aluminium calcium silicate	P	P	P	PROHIBITED. Feed additive/synthetic anti-caking agent.
LF	Amino acids	R	R	R	Pure forms are not allowed. AQ/EU: Plant protein extracts – solely for young animals. USDA NOP/COR: Non-synthetic forms only. (exception see methionine).
LF	Animal or poultry by-products	AQ-R EU-P	P	P	PROHIBITED AQ: Approval for appropriate inputs for poultry (& other non-herbivores) may be granted on a case by case basis.
LF	Antioxidants	R	R	R	Feed additive. Non-synthetic form. See tocopherol. EU: E306 only;
LH (VM)	Antibiotics	R	P	P	AQS/EU: May be used to treat specific disease in emergency situations, but must not be used routinely. Not allowed as a preventative treatment such as dry cow therapy on whole herd or flock. With AQ approval individual animals may be treated if no other treatment is suitable. Double withholding periods required (see 5.9.1). USDA NOP: Full status and C2 organic animals for meat and milk treated with antibiotics will permanently lose organic status. Refer NOP rules 205.238(c)(1) & (7) for specific criteria. Dairy animals in C0 & C1 require double with-holding periods (see 5.9.1). COR: Refer section 6.7 of Canadian Std for specific conditions. Taiwan OMAR: PROHIBITED.
LH (VM)	Anaesthetics	R	R	R	AQS: Requires twice the legal withholding period of the substance in question, or a minimum of 48 hours, whichever is longer, prior to sale or killing. COR: 90 days with-holding slaughter stock, 7 days dairy stock. USDA NOP: 205.603 (B, 3 & 6) for the restricted use of an approved form of Lidocaine only and their withholding periods.
LH (VM)	Anthelmintics <i>synthetic parasiticides, wormers for internal parasites</i>	R	R	R MILK P MEAT	AQS/EU: Only if preventative measures fail. Restrictions on the number of applications an animal may receive. Subject to 5.6.6 (records), 5.6.7 (double with-holding periods), & 5.6.8 (max number of applications). Based on faecal counts. COR: Requires written instructions from Vet. Max 1 treatment under 1yr and max 2/yr for older stock USDA NOP: Emergency treatment only, with 90 day with-holding period required for milk & milk products. See USDA 205.603 (A, 18) for restricted use detail. Must use approved form only. Prohibited for use on slaughter stock Fenbendole - (CAS#43210-67-9). Ivermectin – (CAS #70288-86-7). Moxidectin – CAS#113507-06-5).
LF	Artificial colouring agents	P	P	P	PROHIBITED IFOAM: Artificial colouring agents must not be used. Natural colouring agents should not be used.
LT	Artificial insemination	A	A	A	If certified antibiotic free is unsuitable due to limited gene pool then conventional can be used. Since this is a routine input needs to be detailed in OMP.
LF	Ascorbic acid	R	R	R	Feed additive. Vitamin C. Non-synthetic form & feed grade.
LH (VM)	Atropine CAS # 51-55-8	R	R	R	USDA NOP/COR: Emergency treatment only. Must use approved form only. Use by vet, or under written vet order. Meat min. withdrawal period of 56 days. Milk min. discard period of 12 days for dairy animals.
LF	Biotin	R	R	R	Feed additive. Vitamin B7. Non-synthetic & feed grade.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
LF	Blood meal and bone meal	AQ-R EU-P	P	P	AQ: Poultry only for domestic supply. Organic if available. Not from same species and must be untreated, uncontaminated. Other Stds: PROHIBITED .
LH	Botanical insecticides	A	A	A	Plant based natural phytotherapeutic products garlic, neem, pyrethrum & homeopathics. NB: Pure nicotine and strychnine prohibited & neem is due to be phased out for EU.
LF	Brewers yeast	A	P	R	USDA NOP: Non- synthetic only. COR: PROHIBITED .
LH (VM)	Butorphanol CAS # 42408-82-2	R	R	R	USDA NOP/COR: Emergency treatment only. Must use approved form only. Use by Vet, or under written Vet order. Meat min. withdrawal period of 42 days. Milk min. discard period of 8 days for dairy animals.
LH (VM)	Calcium borogluconate	R	R	R	AQS/EU/COR: injection for milk fever. No withdrawal period required USDA NOP: Only use products which have been assessed and approved by AsureQuality.
LF	Calciferol	R	R	R	Feed additive. Vitamin D2 & D3. Non-synthetic & feed grade. Must not be from slaughter by-products. Synthetic forms may be approved if non-synthetic form are not commercially available.
LF	Cholecalciferol	R	R	R	Feed additive. Vitamin D3. Non-synthetic & feed grade. Must not be from slaughter by-products. Synthetic forms may be approved if non-synthetic form are not commercially available.
LF	Choline	R	R	R	Feed additive. Vitamin. Non-synthetic & feed grade.
LF	Cobalt	R	R	R	Feed additive. EU: Cobaltous sulphate or cobaltous carbonate USDA NOP & COR: in addition to above - cobalt acetate, cobalt chloride, or cobalt oxide.
LF LH	Copper	R	R	R	EU: Copper oxide, copper carbonate, or copper sulphate. USDA & COR: in addition to above – copper chloride, copper gluconate, copper hydroxide, copper orthophosphate, copper pyrophosphate and cuprous iodide.
LH	Copper sulphate	A	A	A	As a topical treatment only (E.g. hoof treatment).
LT	Dehorning chemical <i>caustic substances</i>	P	P	P	PROHIBITED. E.g. Hornex paste.
LF	Diatomaceous earth	R	R	R	Feed additive - anti-caking agent in feed. Max 2% of total diet. AQ: Must be ACVM compliant e. g Kieselgur 55 I.c.
LF	DL-methionine				See methionine.
LF	Egg & egg products	R	R	R	AQ/EU: For feeding poultry only. Prohibited for herbivores. COR/USDA NOP: See amino acids.
LH (VM)	Electrolytes <i>Synthetic</i>	R	R	R	Oral and intravenous electrolytes are considered as veterinary emergency treatments. COR & USDA NOP: as above plus may not contain antibiotics and must use an approved form only.
LF LH LP LT	Essential oils	A	A	A	To control external parasites. Must be 100% natural ingredients and not extracted using a chemical process. If used for feed additives must be certified organic.
LF	Ethylenediamine dihydriodide E.D.D.I.	P	P	R	PROHIBITED: Synthetic feed additive. USDA NOP: max 50mg/head/day.
LH	Extinosad <i>External parasiticide</i>	R	P	P	AQS: For treatment of flystrike and lice control when you have identified a disease risk which prevents you from keeping your animals healthy through management alone. Not to be used as a preventative treatment, use alternative methods such as herbal repellants for this purpose. Three month withholding period before fleece can be sold as organic. 48 hour meat withholding period. GMO Free Manufacturer Declaration Required. COR & USA: PROHIBITED .

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
LF	Feed – Herbivores	A	A	A	100% Organic Certified Feed to the nominated std. For additional options for Dairy Conversion see Dairy Feed Rules Document.
LF	Feed – Non-herbivores	A	A	A	AQS: If organic feed unavailable 5% may be conventional until 31 Dec 11 from CI onwards. USDA NOP: 100% organic.
LF	Feed <i>Suckling animals</i>	A	A	A	Maternal milk, or from females of same species. Milk replacers (powder or liquid) must be 100% organic. COR: as above and for emergency use only and free of animal fats.
LF	Fish meal	AQ-R EU-P			Non-synthetic. EU: For feeding poultry only. Prohibited for herbivores.
LH LT	Glycerine	A	A	A	Livestock teat dip - must be produced through the hydrolysis of fats or oils.
LH LP	Herbal preparations	A		A	Must be 100% natural ingredients. Feed additives must be certified organically grown and prepared.
LH	Homeopathic preparations	A	A	A	Livestock health care. COR: must be registered for use.
LH	Honey	A	A	A	Certified organic for internal oral use to applicable standards. Non-synthetic if for external use.
LH (VM)	Hormones	R	P or R	P or R	AQS: PROHIBITED for growth promotion purposes, or to control reproduction. However individual animals may be treated as a therapeutic veterinary treatment. USDA NOP & COR: PROHIBITED unless explicitly listed as allowed by USDA or Canada. (see oxytocin)
LH LT	Hydrogen peroxide	A	A	A	Disinfectant, sanitiser and medical treatments - Food grade only: for external use as a disinfectant. May be added to livestock drinking water.
LH LF LP LT	Iodine <i>Feed ingredient</i>	R	R	R	Feed additive. Is currently available certified. AQS: calcium iodate, potassium iodide & sodium iodide. USDA NOP: Allowed as a medical treatment.
LH	Iodine <i>Topical treatment</i>	A	A	A	As a topical treatment only. Potassium Iodide or Elemental Iodine. USDA NOP & COR: Use approved form only.
LF LH	Iron products	R	R	R	Feed additive. EU: Ferrous carbonate, ferrous sulphate & ferric oxide only. COR & USDA NOP: in addition to above ferric phosphate, ferric pyrophosphate, ferrous lactate, iron carbonate, iron chloride, iron gluconate, iron oxide, iron phosphate, iron pyrophosphate, iron sulphate or reduced iron.
LH LP LT	Lime hydrated	R	R	R	For topical disinfectant and external pest control. Not permitted to cauterise physical alterations or deodorise wastes.
LH	Limeflour <i>Finely ground CaCO3</i>	R	R	R	Restricted as a livestock healthcare product subject to a herbage or blood test showing low levels. Must be supported by a vet recommendation. Not to be given in amounts above those needed for adequate nutrition and health maintenance.
LH LF	Manganese	R	R	R	Feed additive. All stds: manganese sulphate, & manganous oxide EU: above plus manganese carbonate, and manganic oxide. USDA & COR: top two plus manganese acetate, manganese chloride, manganese citrate, manganese gluconate, manganese glycerophosphate, manganese hypophosphate, manganese orthophosphate, manganese phosphate.
LH LF	Magnesium oxide <i>Causemag</i>	R	R	R	Feed additive. Restricted as a livestock healthcare product subject to a herbage or blood test showing low levels. See minerals for conditions of approval. PROHIBITED as a soil fertiliser therefore if intended for dusting, must be directly onto a supplement i.e. , hay or silage.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTON, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
LF	Magnesium sulphate	R	P	R	Epsom salts. Use a certified source if available. See minerals for conditions of approval. COR: Mag sulphate prohibited as feed ingredient USDANOP: Use an approved form only.
LF	Methionine	AQ-R EU-P	P	R	Feed additive for poultry only. AQ (non-IFOAM)/USDA NOP: From 2 Oct 2012 – 1 Oct 2015 the maximum level per ton is as follows. Laying chickens - 1kg/1000kg. Broiler chickens - 1kg/1000kg. Methionine used must be of the correct form and from non-GMO sources. Acceptable forms DL-Methionine (CAS 59-51-8). DL- Methionine-hydroxy analog(CAS 583-91-5). DL- Methionine-hydroxy analog calcium (CAS 63-68-3). Prohibited forms D- Methionine (CAS 348-67-4). L- Methionine (CAS 63-68-3). EU/COR/AQ (IFOAM): PROHIBITED: Synthetic feed additive.
LF	Micro-organisms	R	A	R	Feed additive Non-synthetic forms. Non GMO. USDA NOP: All carriers must be organic, or have allowed status. Feed ingredients and supplements must not be used in amounts above those needed for nutrition and health.
LH	Micro-organisms	R	A	R	Non-synthetic forms. Non GMO. USDA NOP: Carriers may be from non-organic sources if is used for healthcare only.
LF	Milk products	R	R	R	EU: Limited to specific products listed in EU Regulations(see 2. 3. 1 below). JAS/COR/USDA: Must be organic.
LH LF	Mineral licks	R	R	R	Feed additive. Must not contain prohibited products such as urea, GMOs, or non-organic molasses. Not to be given in amounts above those needed for adequate nutrition and health maintenance.
LH (VM)	Minerals <i>Synthetic</i> (e.g. selenium)	R	R	R	Synthetic forms can only be used where there is a documented deficiency and natural forms are unavailable. Specific form of mineral must be specified in input request (E.g. selenium selenate). CONDITIONS: Restricted as a livestock healthcare product subject to a herbage or blood test showing low levels. Must be supported by a vet recommendation. Not to be given in amounts above those needed for adequate nutrition and health maintenance. USDA NOP: must meet excipient rule.
LF	Molasses	A	A	A	Feed supplement. Must be GMO-free. Use certified molasses only.This includes use of molasses as a binding agent in compound feeding stuffs. NB For non-herbivores refer to feed.
LP	Neem	A	A	A	Botanical insecticide with no additives. NB. Due to be phased out under EU Regulations. COR: must be registered for this use.
LH	Oxytocin	R	R	R	Hormone. Use by Vet, or under written Vet order. USDA NOP: only for after-birth treatment of cows (post- parturition therapeutic applications only). No routine or long-term use. 48 hour withholding period. Only use approved products.
LH LP	Parasiticides <i>Non-synthetic external</i>	A	A	A	E.g. Plant based oils, or herbal extract.
LH LP	Parasiticides <i>Non-synthetic internal</i>	A	R	A	E.g. Garlic, plant based oils COR: excludes plant oils.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
LH LP	Parasiticides <i>Synthetic external</i>	R	R or P meat	P	AQS: Each treatment counts as a veterinary application. Subject to compliance sections 5.9 (records & identification of treated stock), (double with-holding periods), and (max. number of applications). COR: Requires written instructions from Vet. Max 1 treatment under 1yr and max 2/yr for older stock. USDA: must be explicitly listed for USDA NOP.
LH LP (VM)	Parasiticides <i>Synthetic internal</i>	R	R	P	See also anthelmintics. AQS: Each treatment counts as a veterinary application. Restrictions on the number of applications an animal may receive. Subject to compliance sections 5.9 (records & identification of treated stock), (double with-holding periods), and (max. number of applications). COR: Requires written instructions from Vet. Max 1 treatment under 1yr and max 2/yr for older stock. Comprehensive written plan for prevention required. USDA NOP: must be explicitly listed for USDA NOP (E.g. ivermectin approved form only).
LF	Palm kernel extract	P	P	P	PROHIBITED: All imported product is fumigated PKE must not be fed to animals that have been born or converted to organics.
LH (VM)	Poloxalene <i>CAS # 9003-11-6</i>	R	R	R	Only for the emergency treatment of bloat. USDA NOP: Only an approved form can be used.
LF	Preservatives – Synthetic	P	P	P	Feed additive. PROHIBITED unless expressly listed.
LF	Probiotics - Non-synthetic	A	A	A	Feed additive. Must be from non-GMO sources. COR/USDA NOP: must be free of additives.
LP	Pyrethrins	P	R	R	Botanical compound – fat absorbed. Prohibited from use on livestock under ACVM.
LP	Rodenticides	R	R	R	Must be used in a manner that prevents contamination of organic animals or feed. Not to be used in organic food processing areas or food storage areas. USDA NOP: Only substances listed in the National List may be used in production areas. COR: Only substances listed in COR may be used in production areas
LF LH	Salt	A	A	A	Feed additive. Contains not less than 95% salt and the other 5% of natural inert minerals. Need to check for additives.
LF	Seaweed, seaweed meal, & seaweed extracts	A	A	A	Natural or organic sources only. Not chemically treated. If used as a feed must be from certified sources or from wild collection areas. Further detail in Table 2.2.7. USDA NOP: Must be certified USDA NOP for addition to tonics.
LH LF	Selenium <i>non-synthetic</i>	A	A	A	Feed additive. Where documented deficiency exists. See minerals. May be derived from sodium selenate or sodium selenite. See minerals for conditions.
LH (VM)	Selenium synthetic	R	R	R	Where documented deficiency exists. See minerals for conditions. COR: Minerals from any source are allowed for medical use.
LF LH LT	Sodium chloride - Salt	A	A	A	Feed supplement. See salt.
LH LP	Spinosad	R	P	P	External parasiticide (<i>see Extinosad</i>). COR & USDA: PROHIBITED .
LH	Sulfa Drugs <i>synthetic</i>	P	P	P	PROHIBITED. <i>Example - dry cow therapy.</i>
LF LH	Sulphur	R		R	Feed ingredient, or health care. Acceptable forms derived from: calcium sulphate, cobalt sulphate, copper sulphate, ferrous sulphate, iron sulphate, magnesium sulphate, potassium sulphate, sodium sulphate, or zinc sulphate. Also see Minerals.
LT	TB testing	A	A	A	Compulsory under National Legislation.
LF	Tocopherol	R	R	P	Feed additive. E306 Anti-oxidant. Non-synthetic source only. COR: PROHIBITED.

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INPUT CLASS	SUBSTANCE	AQ/EU	COR	USDA NOP	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
LH (VM)	Tolazoline CAS # 59-98-3	R	R	R	Use by Vet, or under written Vet order. Only use is to reverse the effects of sedation and analgesia caused by Xylazine & meat min. withdrawal period of 8 days. Milk min. discard period of 4 days for dairy animals. USDA NOP: emergency treatment only approved form may be used.
LF	Trace elements	R	R	R	Feed additive. Refer to table 5. 2. Require justification for need and must not be given in excess of needs. USDA NOP: additional elements are listed in OMRI.
LF LH LP LT	Urea	P	P	P	PROHIBITED
LH	Vaccines vm	A	A	R	May be used for problems known to exist on the farm. Use simplest forms available. GMO-free declaration required. USDA NOP: must meet excipient rule.
LH	Vegetable oils	A	A	A	For external treatments. Internal use as part of feed ration requires certified product.
LT LF	Vinegar	A	A	A	Feed additive /supplement it must be from organic sources if administered internally.
LH LF	Vitamins	R	R	R	Feed additive. Vitamins can only be used where there is a documented deficiency as recommended by a vet. Form and source of the vitamin to be administered will be reviewed on a case by case basis. COR: vitamins from any source may be used for medical use.
LH LF	Vitamins A, D & E	R	R	R	Feed additive. Used for enrichment or fortification of feed. Approval may be granted for synthetic forms if non-synthetic forms are not available. EU: The condition above applies to monogastric and aquaculture animals.
LF LH (VM)	Vitamin B12	R	R	R	Feed additive. Use cyanocobalamin, or derivative of. USDA NOP: Approved form must be used.
LH (VM)	Xylazine CAS # 7361-61-7	R	R	R	Use by Vet, or under written Vet order. Only use is in emergency situation & meat min. withdrawal period of 8 days. Milk min. discard period of 4 days for dairy animals. USDA NOP: approved form must be used.
LF	Yeast - natural	A	A	R	Non-agricultural non-synthetic feed supplement. Use organic forms if available. AQ/EU: Calculate as organic ingredient (provision expires 31 Dec 2013). USDA NOP/COR: calculate as non-organic ingredient unless certified. Must not be from GMO sources.
LH	Yeast - natural	A	A	R	Non-agricultural non-synthetic ingredient. Use organic forms if available. Must not be from GMO sources.
LF	Zeolite	A	R	R	Max 2% of total diet. COR/USDA NOP: restricted to use as anti-caking agent in feed.
LH LF	Zinc	R	R	R	Feed additive. Zinc carbonate, zinc oxide or zinc sulphate for feed. Any form for medical use. USDA NOP: above forms plus zinc acetate, zinc chloride, zinc gluconate, or zinc stearate.
LH	Zinc sulphate	R	R	R	External use. Footbath ingredient for prevention of foot diseases.

2.2 FEED MATERIALS FROM PLANT ORIGIN

2.2.1 CEREALS, GRAINS, THEIR PRODUCTS AND BY-PRODUCTS. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY:

Oats as grains, flakes, middlings, hulls and bran
Barley as grains, protein and middlings
Rice germ expeller
Millet as grains
Rye as grains and middlings
Sorghum as grains
Wheat as grains, middlings, bran, gluten feed, gluten and germ
Spelt as grains
Triticale as grains
Maize as grains, bran, middlings, germ expeller and gluten
Malt culms
Brewers' grains

2.2.2 OIL SEEDS, OIL FRUITS, THEIR PRODUCTS AND BY-PRODUCTS. THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY:

Rape seed, expeller, and hulls
Soya bean as bean, toasted, expeller and hulls
Sunflower seed as seed and expeller
Cotton as seed and seed expeller
Linseed as seed and expeller
Sesame seed as expeller
Palm kernels as expeller
Pumpkin seed as expeller
Olives, olive pulp
Vegetable oils (from physical extraction)

2.2.3 LEGUME SEEDS, THEIR PRODUCT AND BY-PRODUCTS. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY:

Chick peas as seeds, middlings and bran
Ervil as seeds, middlings and bran
Chickling vetch as seeds submitted to heat treatment, middlings and bran
Peas as seeds, middlings, and bran
Broad beans as seeds, middlings and bran
Horse beans as seeds middlings and bran
Vetches as seeds, middlings and bran
Lupin as seeds, middlings and bran

2.2.4 TUBER ROOTS, THEIR PRODUCTS AND BY-PRODUCTS. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY:

Sugar beet pulp
Potato
Sweet potato as tuber
Potato pulp (by-product of the extraction of potato starch)
Potato starch
Potato protein
Manioc

2.2.5 OTHER SEEDS AND FRUITS, THEIR PRODUCTS AND BY-PRODUCTS. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY

Carob
Carob pods and meals thereof
Pumpkins
Citrus pulp
Apples, quinces, pears, peaches, figs, grapes and pulps thereof
Hazelnut expeller
Cocoa husks and expeller
Acorns
Walnut expeller
Chestnuts

2.2.6 FORAGES AND ROUGHAGES. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY:

Lucerne
Lucerne meal
Clover
Clover meal
Grass (obtained from forage plants)
Grass meal
Hay silage
Straw of cereals
Root vegetables for foraging

2.2.7 OTHER PLANTS, THEIR PRODUCTS AND BY-PRODUCTS. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THIS CATEGORY:

Molasses
Seaweed meal (obtained by drying and crushing seaweed and washed to reduce iodine content)
Powders and extracts of plants
Plant protein extracts (solely provided to young animals)
Spices
Herbs

2.3 FEED MATERIALS FROM ANIMAL ORIGIN

2.3.1 MILK AND MILK PRODUCTS. ONLY THE FOLLOWING SUBSTANCES ARE INCLUDED IN THE CATEGORY:

Raw milk
Milk powder
Skim milk, skim-milk powder
Buttermilk, buttermilk powder
Whey, whey powder; whey powder low in sugar; whey protein powder (extracted by physical treatment)
Casein powder
Lactose powder
Curd and sour milk

2.3.2 FISH, OTHER MARINE ANIMALS, THEIR PRODUCTS AND BY-PRODUCTS. NON- HERBIVORES ONLY:

Only the following substances are included in the category under the following restrictions: Products originate only from sustainable fisheries and to be used only for species other than herbivores:

Fish
Fish oil and cod-liver oil not refined
Fish molluscan or crustacean autolysates
Crustacean meal
Fish meal
Hydrolysate and proteolysates obtained by an enzyme action, whether or not in soluble form, solely provided to young aquaculture animals and young livestock

2.3.3 EGGS AND EGG PRODUCTS FOR USE AS POULTRY FEED, PRIMARILY FROM THE SAME HOUSING.

2.4 FEED MATERIALS FROM MINERAL ORIGIN

Only the following substances are included in this category:

<p>PHOSPHORUS:</p> <p>Defluorinated dicalcium phosphate Defluorinated monocalcium phosphate Monosodium phosphate Calcium-magnesium phosphate Calcium-sodium phosphate</p>
<p>MAGNESIUM:</p> <p>Magnesium sulphate Magnesium chloride Magnesium carbonate Magnesium oxide (anhydrous magnesia) Magnesium phosphate</p>
<p>POTASSIUM:</p> <p>Potassium chloride Potassium iodate*</p>
<p>SULPHUR:</p> <p>Sodium sulphate</p>
<p>SODIUM:</p> <p>Unrefined Sea salt coarse rock Salt sodium sulphate Sodium carbonate Sodium bicarbonate Sodium chloride</p>
<p>CALCIUM:</p> <p>Lithotamnion and maerl Shells of aquatic animals (including cuttlefish bones) Calcium carbonate Calcium lactate Calcium gluconate</p>

* Note poultry only (non-EU non-Taiwan)

2.5 TRACE ELEMENTS

Only the following substances included in this table may be used:

E1	IRON: Ferrous (ii) carbonate Ferrous (ii) sulphate <i>monohydrate</i> and/or <i>heptahydrate</i> Ferric (iii) oxide
E2	IODINE: Calcium iodate, <i>anhydrous</i> Calcium iodate, <i>hexahydrate</i> Sodium iodide
E3	COBALT: Cobaltous (ii) sulphate <i>monohydrate</i> and/or <i>heptahydrate</i> Basic cobaltous (ii) carbonate, <i>monohydrate</i>
E4	COPPER: Copper (ii) oxide Basic copper (ii) carbonate, <i>monohydrate</i> Copper (ii) sulphate, <i>pentahydrate</i>
E5	MANGANESE: Manganous (ii) carbonate* manganous oxide manganic oxide* Manganous (ii) sulphate, <i>mono</i> and/or <i>tetrahydrate</i>
E6	ZINC: Zinc carbonate zinc oxide Zinc sulphate <i>mono</i> and/or <i>heptahydrate</i>
E7	MOLYBDENUM*: Ammonium molybdate sodium molybdate
E8	SELENIUM: Sodium selenate sodium selenite

2.6 APIARY INPUTS

SUBSTANCE	AQ/ EU	COR	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
Acetic acid	A	P	Varroa control in apiaries. COR: PROHIBITED.
Antibiotics, oxytetracycline	P	P	For emergency use only. Hive must be taken out of organic production before treatment.
Botanical compounds	A	R	Used as per label specifications. COR: must not be used within 30 days of honey flow or when supers on hive.
Formic acid	R	R	AQS & CAN: Varroa control in apiaries. May be used after the last honey harvest and 30 days before addition of supers.
Homeopathic preparations	A	A	Varroa control in apiaries. Non-synthetic forms.
Icing sugar	R	R	AQS & EU: if icing sugar is used as a Varroa control then the sugar must be organic, the timing and approval process is the same as for sugar used for feed.
Lactic acid	A	P	Must not be from GM sources. COR: PROHIBITED.
Oxalic acid	A	A	AQS & CAN: Varroa control in apiaries.
Plant oils	A	A	Varroa control in apiaries. Menthol, thymol, eucalyptol or camphor oil. Must be 100% natural ingredients and not extracted using a chemical process. Examples in this category:Thymovar (thymol). Proprietary products in this category must be used as per label claim. Evidence of suitability for use in organic production required. If certified, retain a copy of the input certification for audit purposes.
Synthetic miticides	P	P	PROHIBITED. Emergency varroa control. Hive must be taken out of organic production before treatment and would require 12 month re-conversion and replacement of wax with organic wax.This would also cause a parallel production situation resulting in a loss of IFOAM status. Examples in this category:Apistan (fluvalinate), Apitol (cymiazole), Apivar (amitrax), Bayvarol (flumethrin), Checkmite+ (coumaphos), and Folbex (bromopropylate).
Supplementary feeding - sugar or honey	R	R	Must be organic. AQ & CAN: exceptional conditions only and requires sugar dispensation. Conditions apply to timing.

2.7 AQUACULTURE INPUTS

Substances for cleaning and disinfection of equipment and facilities, in the absence of aquaculture animals.

SUBSTANCE	AQ/ EU	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
Alcohol	A	
Calcium hypochlorite	A	
Caustic soda	A	
Copper sulphate	A	Only until 31 December 2015
Hydrogen peroxide	A	
Humic acid	A	
Iodophores	A	
Lime	A	Calcium oxide CaO
Organic acids	A	Acetic acid, lactic acid, citric acid
Ozone	A	
Peroxyacetic acids	A	
Peracetic & peroctanoic acids	A	
Potassium permanganate	A	
Sodium chloride	A	
Sodium hypochlorite	A	
Tea seed cake	R	Made of natural camellia seed. Shrimp production only.

Substances **allowed** for use in the presence of aquaculture animals.

SUBSTANCE	AQ/ EU	DESCRIPTION, COMPOSITIONAL REQUIREMENTS, CONDITIONS OF USE
Limestone CaCO ₃	R	For pH control
Dolomite	R	For pH correction in shrimp production only

2.8 CLEANING AIDS AND DISINFECTANTS FOR LIVESTOCK PRODUCTION

SUBSTANCE
Acetic Acid
Alcohol
Caustic Potash
Caustic soda
Citric Acid
Cleaning and disinfection products for teats and milking
Formic Acid
Hydrogen peroxide
Lime – hydrated (milk of lime, calcium hydroxide)
Natural essences of plants
Nitric acid (dairy equipment)
Peracetic acid
Phosphoric acid (dairy equipment)
Potassium and sodium soap
Sodium carbonate
Sodium hypochlorite (e.g. as liquid bleach)

TABLE 3 - SUBSTANCES FOR USE IN PROCESSING

PART A - COMBINED TABLE OF INGREDIENTS, ADDITIVES AND SANITISERS

Where the substances listed in Tables 3 can be found in nature, natural sources are preferred. Substances of certified organic origin are preferred.

This section covers the ingredients, processing aids and sanitisers, which may be used in the preparation of food for human consumption, composed essentially of one or more ingredients of plant and/or animal origin.

Notwithstanding reference to any ingredient or processing aid in this section, any processing practice such as smoking, shall be carried out, and any ingredient or such processing aid shall be used only in accordance with relevant New Zealand legislation and, in the absence thereof, in accordance with good manufacturing practice for foodstuffs.

Some inputs are restricted to use for the preparation of either/or plant products and/or livestock products Acceptable use is indicated by (Y). These restrictions aren't applicable to sanitisers (PS).

Non-IFOAM: Any product containing non-IFOAM ingredients cannot be certified under the IFOAM accredited programme. Food additives marked with an asterisk in the additive code column shall be calculated as ingredients of agricultural origin, for the purposes of calculating whether 95% of its ingredients of agricultural origin. Other non-agricultural additives are excluded from the organic calculation for non-IFOAM products.

GM Risk: Materials marked with have a high GM risk are identified as high GM risk or may have been standardised using GM materials and are identified as GM risk (standardised).

ALLOWED (A) **Organic certified** products/inputs are allowed. These do not require permission before use and this is sometimes referred to as "permitted". Evidence of current certification when purchased, or used, must be retained for the audit.

Uncertified products/inputs require approval in writing from AsureQuality before use, as some forms may not be acceptable.

RESTRICTED (R) Inputs which are allowed with restrictions. All restricted inputs require approval in writing by AsureQuality before use. Approval may be granted if no alternatives are available, and approval will be subject to certain conditions.

PROHIBITED (P) These materials may not be used on certified land.

INPUT CLASS KEY:

PA: Processing Agricultural Ingredients and Processing Aids

PN: Processing Non-agricultural Ingredients and Processing Aids

PS: Processing Sanitisers and Cleaners

AsureQuality Standard (AQS) listing covers all non-regulated markets (including domestic), but does not include regulated markets such as those covered by: USA, & Canada (COR). Reference to these standards is indicative only and is not in lieu of those standards.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	INS	SUBSTANCE	PLANT PRODUCTS	LIVESTOCK	PRODUCTS AQ/EU	CANADA COR	USDA NOP	SPECIFIC CONDITIONS / RESTRICTIONS
PS		Acetic acid			A	R	R	As a cleaner or sanitiser.
PN		Activated carbon (charcoal)	Y		R	R	R	USDA NOP: restricted to use as a filtering aid and must be from vegetative sources only. Only for use in products labelled "Made with Organic Ingredients".
PN	406	Agar	Y	Y	A	R	A	Generally unrestricted NB. GM Risk(if standardied).
PS		Alcohol			A	R	R	Ethanol/ Isopropanol. See ethanol. COR: restricted to ethanol.
PA PN		Alcohol						See ethanol.
PN	400	Alginic acid	Y		R	R	R	Limited to processed food of plant origin.
PN	503	Ammonium carbonates	Y		R	R	R	Only for cereal products, confectionery, cakes and biscuits. USDA NOP: For use only as a leavening agent.
PA		Ammonium hydroxide		Y	R	P	P	Use restricted to gelatine production only USDA NOP: PROHIBITED.
PA	160b*	Annatto, Bixin and Norbixin		Y	R	P	P	For the colouring of Cheddar cheese only. NON-IFOAM. USDA NOP/COR: PROHIBITED.
PN	414*	Arabic gum	Y	Y	R	R	R	Only for milk products, fat products, confectionery, sweets, Eggs. NB. GM Risk(if standardised). USDA NOP: Non-organic gums may be used in processed products labelled as "Made with Organic Ingredients".
PA	938	Argon	Y	Y	R	A	P	AQ/EU: permitted as food additives not food processing aids. USDA NOP: PROHIBITED.
PN PS	300	Ascorbic acid	Y	Y	R	A	A	Ascorbic acid (L-) if not available in natural form. NB. High GM Risk.
PA	901	Beeswax	Y		R	R	R	Releasing agent. USDA NOP: Non organic forms may only be used in processed products labelled as "Made with Organic Ingredients".
PA	558	Bentonite	Y	Y	R	A	A	Processing Aid for fruit and vegetable products only. AQ/EU: For plant products limited to use as sticking agent for mead. Must meet specific EU purity Stds for E558.
PA	170	Calcium carbonate	Y	Y	R	A	A	All authorised functions except colouring.
PA	509	Calcium chloride	Y	Y	R	R	A	Coagulation agent. AQ/EU, USDA NOP Must be non-synthetic.
PN	333	Calcium citrates		Y	A	A	A	Generally unrestricted. NB. High GM risk.
PN	526	Calcium hydroxide (Slaked lime)	Y		R	A	A	Milk of lime/slaked lime. Food additive for maize tortilla flour. Processing aid for sugar.
PS		Calcium oxide (Quicklime)			A	P	P	Used as a sanitiser and cleaner. USDA NOP/COR: PROHIBITED.
PA	516	Calcium sulphate	Y		R	R	A	Coagulation agent. For soybean products, confectionery and in bakers' yeast. USDA NOP: must be from natural sources.
PA	290	Carbon dioxide	Y		A	A	A	Generally unrestricted.
PN	407	Carageenan		Y	A	R	A	AQ/EU: Limited to dairy products. NB. GM Risk (if standardised).

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	INS	SUBSTANCE	PLANT PRODUCTS	LIVESTOCK	PRODUCTS AQ/EU	CANADA COR	USDA NOP	SPECIFIC CONDITIONS / RESTRICTIONS
PA	903	Carnauba wax	Y		R	R	A	Releasing agent. NB. GM Risk (if standardised).
PA		Casein	Y		R	R	R	Only for wine. NB. High GM risk. USDA NOP: Non organic casein may only be used in processed products labelled as Made with Organic Ingredients.
PS		Caustic potash			A	R	R	As for Potassium hydroxide. Must not come in direct contact with organic products.
PA		Cellulose	Y	Y	R	R	R	For livestock products limited to gelatine production. USDA NOP: May be used only in regenerative casings, as anti-caking agent.
PS		Chlorine dioxide			A EU P	R	R	AQ/COR/USDA NOP: Only used as a disinfectant and sanitiser. Must not come in direct contact with organic products. EU: PROHIBITED.
PA PS	330	Citric acid	Y	Y	A	R	A	AQ/EU: Oil production and hydrolysis of starch. For plant products generally unrestricted. For livestock products restricted to the processing of crustaceans and mollusks. NB. High GM risk . USDA NOP: Must be produced by microbial fermentation of carbohydrate substrates. COR: for processing plant products only.
PA		Diatomaceous earth	Y	Y	R	R	R	Only for sweeteners and wine. For livestock products use limited to gelatine production. USDA NOP: For Food filtering only.
PA		Egg white albumen	Y		R	R	R	Only for wine. USDA NOP: Non organic egg white may only be used in processed products labeled as 'Made with Organic Ingredients'.
PA PN		Ethanol	Y		R	A	R	Solvent. Synthetic ethanol must not be used to extract agricultural ingredients in products labelled "organic". NB. High GM risk. USDA NOP: Organic ethanol is required for organic products. Non-organic ethanol is permitted as a non organic ingredient in products labelled 'Made with Organic Ingredients'.
PN		Ethylene	Y		R	R	R	AQ/EU: Post harvest ripening of bananas, kiwifruit, kakis & degreening of citrus only as part of a strategy for the prevention of fruit fly damage. Sprouting inhibition of potatoes and onions. USDA NOP/COR: Post harvest ripening of tropical fruit & degreening of citrus. JAPAN OMAR: Limited to post-harvest ripening of bananas and kiwifruit.
PS		Formic acid			A	P	P	USDA NOP/COR/JAPAN OMAR: PROHIBITED.
PA	428	Gelatine	Y		R	R	R	Only for wine, fruit and vegetable. USDA NOP: must be organic if the product is labelled as organic NB. Gelatine from non- organic sources is currently being phased out by EU.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	INS	SUBSTANCE	PLANT PRODUCTS	LIVESTOCK	PRODUCTS AQ/EU	CANADA COR	USDA NOP	SPECIFIC CONDITIONS / RESTRICTIONS
PA	422	Glycerine	Y	Y	R	R	R	Must be from vegetable or animal fats and/or oils. Must be produced using fermentation or by hydrolysis. USDA NOP: Must be NOP certified
PA		Guar gum	Y	Y	A	R	R	Generally unrestricted. NB. GM risk (if standardised) USDA NOP: Non organic guar gum may be used in processed products labelled as 'Made with Organic Ingredients'.
422		Hydrochloric acid		Y	R	P	P	For the regulation of pH in the manufacture of certain hard cheeses. USDA NOP/COR/JAPAN OMAR: PROHIBITED.
	Y	Y	R	R	R	A	A	EU: Gelatine production only.
PN	464	Hydroxy-propyl-methylcellulose (HPMC)	Y		R	P	P	For film coating tablets and vegetarian capsules. USDA NOP/COR/JAS: PROHIBITED. Non-IFOAM. NB. High GM risk.
PA		Isinglass	Y		R	R	P	Only for wine. USDA NOP/COR: PROHIBITED.
PA		Kaolin	Y	Y	A	R	A	Must meet EU purity Stds for E559.
PN	416	Karaya gum	Y	Y	AQ A EU P	P	P	EU/USDA NOP/COR: PROHIBITED. AQ/OOAP Tech Rules: Unrestricted. Non-IFOAM.
PA	322*	Lecithin	Y	Y	A	R	R	Must be obtained without any bleaching or organic solvent treatment. Generally unrestricted. NB. High GM risk . USDA NOP: Fluid lecithin must be organic. Non-organic or organic de-oiled forms may be used. However the non-organic form may only be used if organic de-oiled forms are not commercially available. De-oiled forms may be either bleached or unbleached.
PA PS	270	Lactic acid		Y	R	R	A	Milk product: coagulation agent, pH regulation of salt bath for cheeses. NB. High GM risk.
PN	296	L-malic acid	Y		A	A	A	Generally unrestricted. NB. High GM risk.
PS		Lime			A	A	P	Must not come in direct contact with organic products. USDA NOP: PROHIBITED.
PA	410*	Locust bean gum	Y	Y	A	R	R	Generally unrestricted. NB. GM risk (if standardised) USDA NOP: Non-organic locust bean gum may be used in processed products labelled as 'Made with Organic Ingredients'.
PA	511	Magnesium chloride (nigari)	Y		R	R	A	Only for soybean products. Coagulation agent. USDA NOP: If derived from seawater.
PN	504	Magnesium carbonates	Y		A	R	R	COR: Only used as anti-caking agent. USDA NOP: Allowed in products labelled 'Made with Organic Ingredients'.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	INS	SUBSTANCE	PLANT PRODUCTS	LIVESTOCK	PRODUCTS AQ/EU	CANADA COR	USDA NOP	SPECIFIC CONDITIONS / RESTRICTIONS
PN		Magnesium stearate	Y		R AQ P EU	P	R	USDA NOP & AQ: Must be non-GMO Only for nutritional supplements, binding agents and anti-caking agent. Allowed in products labelled "made with organic ingredients", but PROHIBITED in products labelled "organic". EU & COR: PROHIBITED. Non-IFOAM.
PN	341	Mono calcium phosphate	Y		R	A	A	Only for raising flour.
PS		Natural essences of plants			A	A	A	Used as sanitisers and cleaners.
PS		Nitric acid			A	P	P	Only for dairy equipment. Non-IFOAM. USDA NOP/COR: PROHIBITED.
PA	941	Nitrogen	Y		A	R	A	USDA NOP: oil free grades only. If used end product may not be declared 100% organic.
PS		Oxalic acid			A	P	P	Used as sanitiser/cleaner. USDA NOP/COR: PROHIBITED.
PA	948	Oxygen			A	A	A	USDA NOP: oil free grades only.
PA	440*	Pectins (unmodified)	Y	Y	R	A	R	Unmodified. NB. GM Risk (if standardised). USDA NOP: Non-amidated forms only.
PS		Peracetic acid			A	R	R	Used as sanitisers and cleaners.
PA		Perlite	Y	Y	A	R	R	For livestock products use limited to gelatine production. USDA NOP: restricted to use as a filtering aid.
PS		Phosphoric acid			A	R	R	Used as sanitiser/ cleaner: Only for dairy equipment.
PN	402	Potassium alginate	Y		A	A	A	Generally unrestricted.
PA	501	Potassium carbonates	Y		A	A	A	Plant products only.
PA	332	Potassium citrate			AQ A EU P	A	A	Buffering Agent.
PN	508	Potassium chloride	Y		R EU P	A	A	Frozen fruit, vegetables/canned fruit and vegetables, vegetable sauces/ketchup and mustard. EU: PROHIBITED.
PN	224	Potassium metabisulphite	Y		R	R	P	Wine only - same conditions as sulphur dioxide. USDA NOP: PROHIBITED.
PA	252	Potassium nitrate		Y	R	P	P	AQ/EU: For meat products only. IFOAM/USDA NOP/COR: PROHIBITED.
PS		Potassium and sodium soap			A	NL	NL	Used as sanitisers and cleaners. Must not come in direct contact with organic products.
PN	336	Potassium tartrate	Y		A	A	A	Generally unrestricted. NB. High GM risk.
PS		Sanitisers for milking facilities		Y	R	R	R	Must be fit for purpose (i.e. dairy maintenance products). Must not come in direct contact with organic products. COR: restricted to those listed in tables 7.3 or 7.4 of 32.311 & conditions met.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	INS	SUBSTANCE	PLANT PRODUCTS	LIVESTOCK	PRODUCTS AQ/EU	CANADA COR	USDA NOP	SPECIFIC CONDITIONS / RESTRICTIONS
PS		Sanitisers, disinfectants and cleaners	Y	Y	R	R	R	Must be fit for purpose & require an intervening step to ensure they do not come in direct contact with organic products. COR: restricted to those listed in tables 7.3 or 7.4 of 32.31 I & conditions met.
PA	551	Silicon dioxide (amorphous)	Y		R	A	A	For wine, fruit and vegetable processing. As a gel or colloidal solution.
PN	401	Sodium alginate	Y		A	A	A	Generally unrestricted. Used for processed foods of plant origin.
PN	331	Sodium citrate		Y	R	R	A	Sausages/pasteurisation of egg whites/milk products. NB. High GM risk.
PA PS	500	Sodium carbonates	Y	Y	R	R	R	Sugar production, anti-caking agent, milk products: neutralising substance. For livestock products restricted to sour milk cheese production. USDA NOP: Restricted to products labelled 'Made with Organic Ingredients'.
PA PS	524	Sodium hydroxide (Caustic soda)	Y		R	R	R	- sugar production. - oil production from rape seed (<i>Brassica</i> spp). For sugar processing and for the surface treatment of traditional bakery products (Laugengebäck). USDA NOP: Not allowed for lye peeling of fruit and vegetables.
PS		Sodium hypochlorite			A	R	R	(e. g. as liquid bleach). Must not come in direct contact with organic products. JAS: disinfecting intestines and washing eggs.
PA	223	Sodium metabisulphite		Y	R	P	P	AQ/EU: For the processing of crustaceans only. IFOAM/USDA NOP/COR: PROHIBITED.
PA	250	Sodium nitrate		Y	R	P	P	AQ/EU: For meat products only. IFOAM/USDA NOP/COR: PROHIBITED.
PN	335	Sodium tartrate	Y		R	P	P	NB. High GM risk USDA NOP: PROHIBITED.
PN	220	Sulphur dioxide	Y	Y	R	R	R	AQ: see 6. 12. 3 USDA NOP/COR/EU: Allowed in products labelled "Made with Organic Ingredients", but PROHIBITED in products labelled "Organic". USDA NOP: Wine only. EU: Should be below 150 mg in grape wine In fruit wines (including cider and perry) or in mead: - without added sugar: 50mg*. - with sugar or juice conc added after fermentation: 100mg* *Max levels available from all sources, expressed as SO in mg/l. 2.
PA	513	Sulphuric acid	Y	Y	R	R	P	pH adjustment of water during sugar processing or gelatine production. As an additive for wine and cider production. USDA NOP: PROHIBITED.
PA	553b	Talc	Y		R	R	P	Must meet specific EU purity Stds for E553b. USDA NOP: PROHIBITED.
PA	184	Tannic acid	Y		R	P	P	Filtration aid for wine. USDA NOP: PROHIBITED.

Section 10. Restricted Permitted Substances for the Production of Organic Foods

INPUT CLASS	INS	SUBSTANCE	PLANT PRODUCTS	LIVESTOCK	PRODUCTS AQ/EU	CANADA COR	USDA NOP	SPECIFIC CONDITIONS / RESTRICTIONS
PN	306	Tocopherols, mixed natural concentrates	Y		R	R	A	Anti-oxidant in fats and oils. Must meet Codex purity Stds for E306NB. High GM risk.
PN	413	Tragacanth gum	Y	Y	R	R	R	USDA NOP: Non organic tragacanth gum may only be used in processed products labelled as 'Made with Organic Ingredients'. Labelling refer NOP: 205. 105.
PN	334	Tartaric acid (L (+) -)	Y		R	R	R	Only for wine. USDA NOP: must be derived from grape wine COR: also for cider and several dairy products.
PA		Vegetable oils	Y		A	R	R	Greasing or releasing agent. NB. High GM risk. Not made using synthetic solvents.
		Vitamins						See part 4 of following section. NB. High GM risk.
PA PS		Water and steam	Y		A	A	A	Potable water only.
PN	153	Wood ash (vegetable carbon)		Y	R	P	P	Traditional cheeses. Non IFOAM. USDA NOP/COR: PROHIBITED.
PN	415	Xanthan gum	Y		R	R	R	Only fat, fruit and vegetable products and cakes and biscuits. NB. High GM risk. USDA NOP: Must not be products of recombinant DNA technology.
PN		Yeast natural*	Y	Y	A	A	R	Use organic forms if available. AQ/EU: from 1 Jan 2014, calculate as non-organic ingredient unless certified as with advent of Organic Standards for yeast it becomes an agricultural ingredient. USDA NOP/COR: When used as food or a fermentation agent in products labelled as organic, yeast must be organic if its end use is for human consumption. Non-organic yeast may be used when organic yeast is not commercially available. Must not be grown on petrochemical substrate or sulfite waste liquor or using GMO technology.

PART B - THE FOLLOWING INFORMATION RELATES TO THE ASUREQUALITY STANDARD ONLY

For other standards refer directly to the respective Standard

1. FLAVOURING AGENTS

Substances and products labelled as natural flavouring substances or natural flavouring preparations.

- Sources must either plant, animal or mineral
- Production process is in accordance with a recognised organic standard
- Produced by means of solvents such as oil, water, ethanol, carbon dioxide and mechanical and physical processes as per section 6.3
 - Organic flavouring extracts (including volatile oils)
 - Volatile (essential) oils
 - Natural smoke flavour
 - Natural flavouring preparations are only to be approved based on the criteria in Section 10

2. WATER AND SALT

Potable drinking water:

Salt (with sodium chloride or potassium chloride as basic components), generally used in food processing.

NB: Salt not being of agricultural origin may not be "certified organic" however, it may be registered as an approved product for use in organic processing. Such approved products are recommended for use in certified processed organic products.

To be registered as an approved product the salt must be produced without:

- Any contact with prohibited through the supply chain
- The use of anti-caking agents (e.g. aluminium silicate or magnesium silicate)

3. PREPARATIONS OF MICRO-ORGANISMS AND ENZYMES FOR USE IN FOOD PROCESSING

These may be used as ingredient or processing aids with approval based on the criteria in Section 10

- Organic certified micro-organisms
- Any preparations of micro-organisms normally used in food processing, with the exception of genetically modified organisms
- Enzymes and enzyme preparations NB. High GM Risk

4. MINERALS (TRACE ELEMENTS INCLUDED), VITAMINS, AMINO ACIDS AND OTHER NITROGEN COMPOUNDS

Minerals (trace elements included), vitamins (high GM risk), amino acids and other nitrogen compounds, only authorised as far as their use is legally required in the foodstuffs in which they are incorporated.

5. COLOURS FOR STAMPING MEAT AND EGGSHELLS

These must meet the requirements of article 2 (point 8. meat) & (point 9. Eggs) of European Parliament and Council Directive 94/36/EC. The colours used must meet local legislation. (For example in New Zealand, meat marking inks are listed in the Approved Maintenance Compounds (Non-Dairy) Manual and mirror those listed in EC94/36).

6. OTHER ADDITIVES FOR NON-FOOD PRODUCTS

Substances and products used in non-food products (unregulated commodities), but prohibited in IFOAM products. Only those produced using processes and solvents acceptable under this Standard including section 6.2 and 6.3. They are included in the percentage calculation as non-organic components.

Approval of substances is based on the following order of preference with regard to availability:

1. "Organic"
 2. "Made with organic ingredients", otherwise
 3. "Made using only processes and solvents acceptable to this Standard"
- Natural preparations are only to be approved based on the criteria in Section 10 and includes sodium tetraborate
 - Animal derivatives must be certified organic and this includes beeswax
 - Natural fragrances (NB. synthetic fragrances are prohibited)

The following general substances and anti-microbial agents derived from agricultural products are allowed:

- Caprylic triglyceride (e.g. from coconut oil)
- Cetearyl glycoside (e.g. wheat straw or wheat bran)
- Cetearyl olivate & sorbitan olivate (e.g. from olive oil)
- Flavonoids – flavanone glycoside (e.g. hesperidin & naringin from grapefruit)
- Glyceryl stearate (e.g. from vegetable oil)
- Potassium cocoate & potassium olivate – certified forms only
- Sclerotium gum (permission required based on justifications why this ingredient is needed rather than other gums listed in Table 3)

You may use the following anti-microbial agents:

- Alcohols: benzl alcohol, cetearyl alcohol (from natural sources)
- Benzoic acid (may be used with gluconic acid derivatives: glucono-delta-lactone & or calcium gluconate)
- Dehydroacetic acid
- Sorbic acid and its salts
- Agricultural raw materials or extracts which may be modified by simple physical or chemical processes that do not change the active ingredients

TABLE 4 - MAXIMUM NUMBER OF ANIMALS PER HECTARE

Maximum number of animals per ha Class or species	Maximum number of animals per ha equivalent to 170kg N/ha/year *
Equines over six months old	2
Calves for fattening	5
Other bovine animals less than one year old	5
Male bovine animals from 1 to less than 2 years old	3.3
Female bovine animals from 1 to less than 2 years	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
Ewes	13.3
Goats	13.3
Piglets	74
Breeding sows	6.5
Pigs for fattening	14
Other pigs	14
Table chickens	580
Laying hens	230

* More animals per hectare can be carried if the producer can show that less than 170 Kg N/ha/year is being produced.

TABLE 5 - MINIMUM SURFACE AREAS

	Indoors area (net area available to animals)		Outdoor area (Exercise area, excluding pasturage)
	Live weight minimum (kg)	M2/head	M2/head
Breeding and fattening bovine and equidae	up to 100	1.5	1.1
	up to 200	2.5	1.9
	up to 350	4.0	3
	over 350	5 with minimum of 1m ² /100kg	3.7 with minimum of 0.75m ² /100kg
Dairy cows		6	4.5
Bulls for breeding		10	30
Sheep and goats		1.5 sheep/goat 0.35 lamb/kid	2.5 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	8.0



References

REFERENCES

Below are references to International Standards that have an impact on the AsureQuality Organic Standard:

The current AsureQuality Organic Certification Standards (AQ Std) are available on our website:

www.organiccertification.co.nz

The IFOAM Norms for Organic Production and Processing –Version 2014

The OOAP Technical Rules for the Official Organics Assurance Programme for exported product is available from:

<http://www.foodsafety.govt.nz/industry/sectors/organics/documents/>

United States Department of Agriculture National Organic Standard (USDA NOP) (Part 205- National Organic program) this is available from a link on the AsureQuality website. Go to:

www.organiccertification.co.nz

and click on the USDA NOP link on the home page.

The Canadian Std (COR) this is available from:

CAN/CGSB-32.310 <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/programme-program/normes-standards/internet/bio-org/documents/pgng-gpms-eng.pdf>

and:

CAN/CGSB-32.311 <http://www.tpsgc-pwgsc.gc.ca/ongc-cgsb/programme-program/normes-standards/internet/bio-org/documents/lsp-psl-eng.pdf>

The EU Regulations are currently covered by several main documents plus amendments

- 85/37/EEC - Annex IV (Guidelines for preparing an environmental report)
- 834/2007 Repeal of 2092/91
- 889/2008 Detailed Rules
- 1235/2008 Third Country Rules (plus amendments 590/2011, 1267/2011, 126/2012, 125/2013 & 586/2013)
- 967/2008 Labeling with EU Logo
- 1254/2008 Yeast & labelling eggs
- 710/2009 Aquaculture & seaweed
- 271/2010 EU Logo
- 505/2012 Feed
- 392/2013 Control Systems

